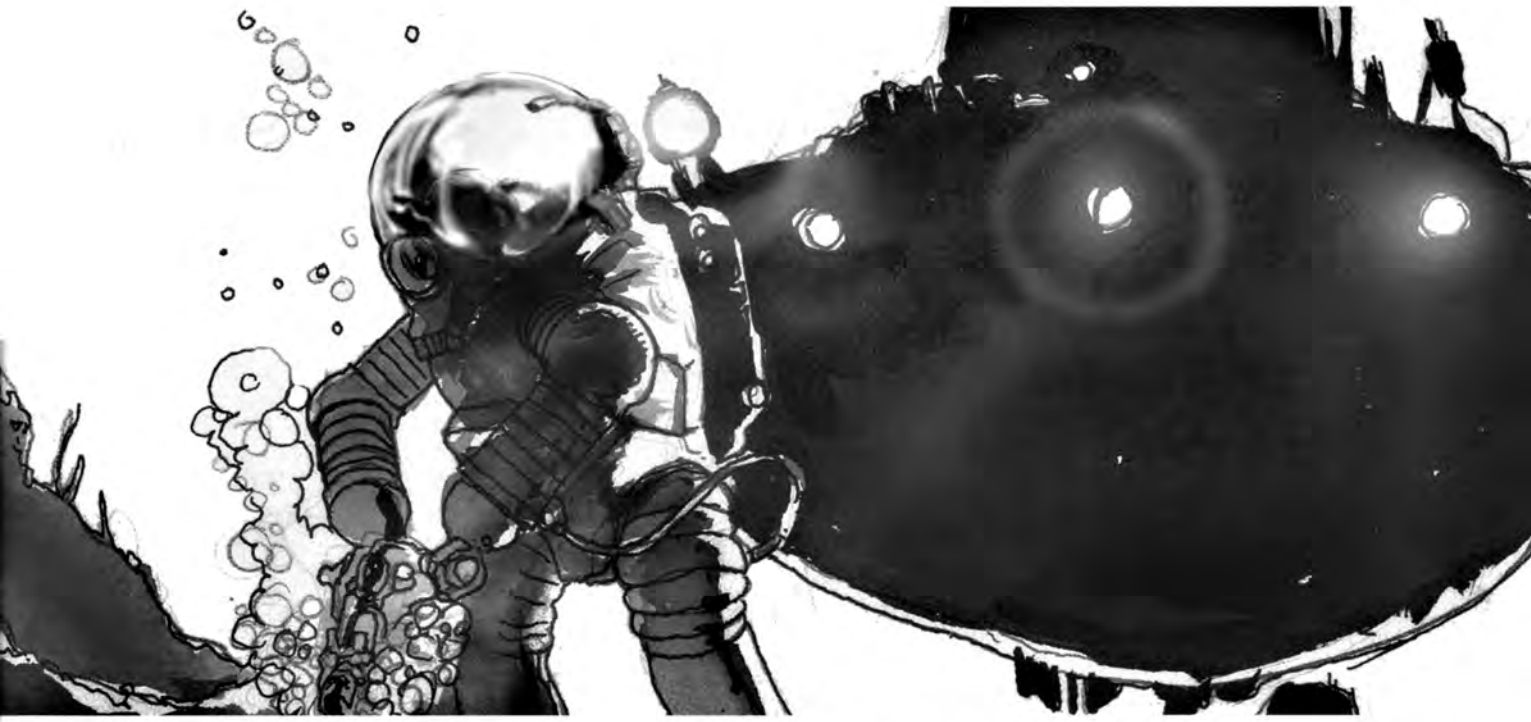
PLAYER'S GUIDE

blue planet V2™

SCIENCE FICTION ROLEPLAYING
ON THE NEW FRONTIER



blue planet v2

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A debt of gratitude is owed the countless playtesters who helped us breathe life into Blue Planet and refine the new rules for v2. Your paper lives and mind's eye adventures have helped to create this new world, and now we hope they will inspire others to follow you into the frontier...

In Tribute
As the first edition of Blue Planet went to press in June of 1997, the world mourned the death of Captain Jacques-Yves Cousteau. In his passing, the Earth's oceans lost one of their greatest champions and humanity lost one of its most noble men. Please honor his memory by honoring the oceans.

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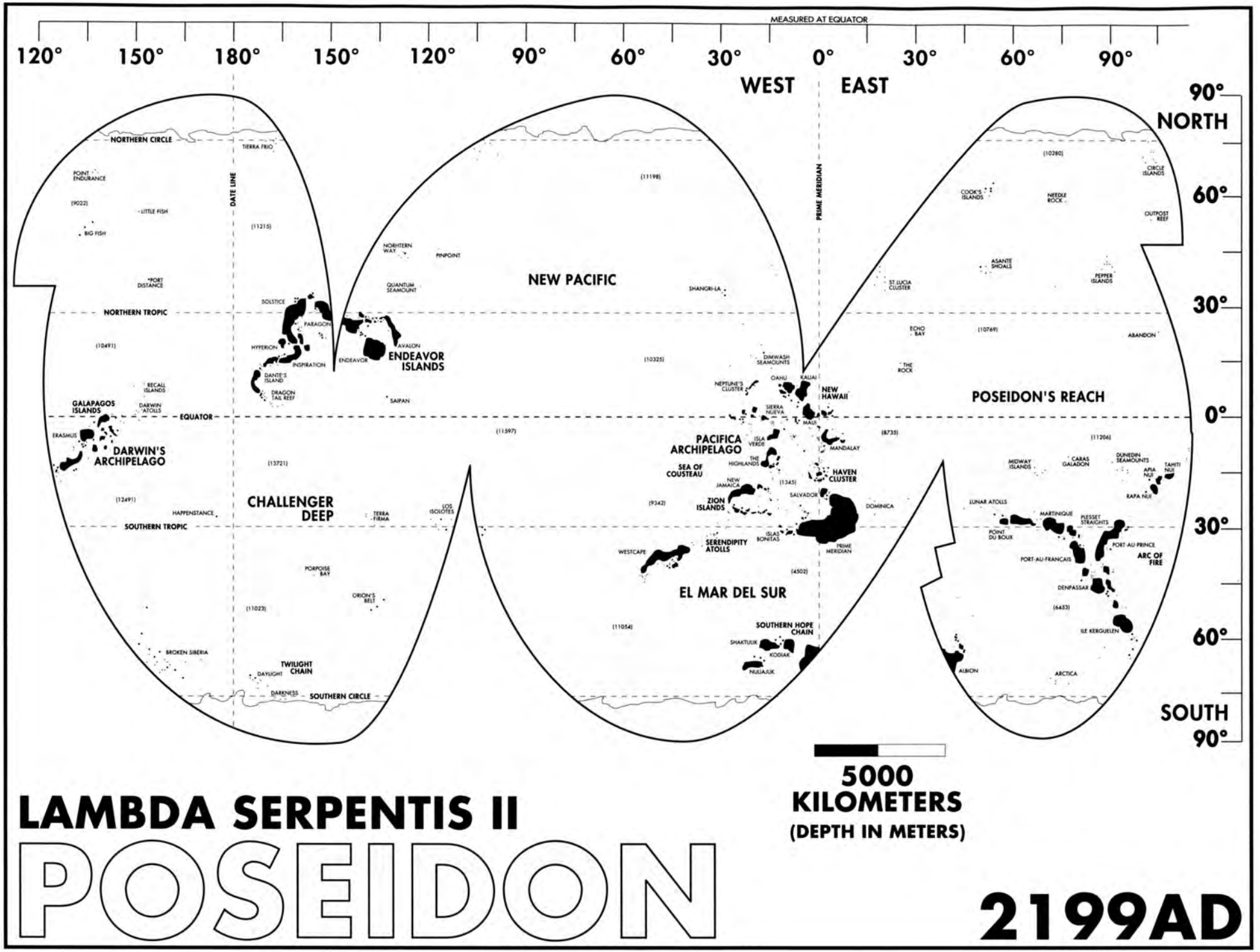


LAMBDA SERPENTIS II

POSEIDON

2199AD

WELCOME TO BLUE PLANET

CHAPTER 01

2199 AD

The year is 2199 and life on Earth is a hopeless struggle with economic chaos and social decay. Incorporated city-states dominate the political landscape and natural resources are virtually exhausted. Civilization has barely survived a 75-year dark age known simply as the Blight. For more than three decades, an engineered virus ravaged the world's agricultural crops while social panic reigned and billions died of starvation. Once-great cities lie in ruin and anarchistic, famine-ravaged Free Zones have claimed whole regions of the globe.

The resulting chaos has only recently been stabilized, due primarily to the heroic efforts of the Global Ecology Organization (GEO). This organization was created by the United Nations in reaction to the Blight and is all that still remains of most of Earth's original world governments. Conceived of desperation and the threat of human extinction, the GEO was viewed as a powerful and benign champion, the protector of human rights and ecological integrity. During the darkest days of the Blight, the GEO was humanity's last hope for salvation.

Forty years after the Blight was finally eradicated, the memory of the GEO's heroism and its champion's mantle are beginning to fade. Many believe this world government is a powerful and dangerous relic, one that has outlived its usefulness and now threatens the ideals of liberty and justice on which it was founded. The United Nations has been reinstated and has emerged as a new challenge to the GEO's political authority throughout Earth and the Colonies. The GEO has become an unpleasant reminder of a horrific past, as humanity's attention turns to a new world and a new future.

In 2078, long before the outbreak of the Blight, astronomers discovered an anomalous body beyond the orbit of Pluto. During the following years, a series of probes revealed the anomaly to be a rift in space, an example of the hypothetical, astronomical construct known as a wormhole. Further exploration eventually demonstrated that this phenomenon was, in fact, a traversable passage to another region of space. Humanity looked to the stars with collective awe when it was discovered that an Earth-like planet waited beyond the wormhole: a planet covered by blue oceans and teeming with life; a pristine world, unexplored and unravaged; a waterworld that would become known as Poseidon.

As part of a long-term plan to ease the heavy burden on the Earth's vanishing resources, the UN member nations began an intensive colony effort, seeding Poseidon with genetically altered human colonists. The Athena Project did much to aid the Earth's failing economies and social morale. Unfortunately, the Blight struck soon after the colony ships were launched but before the planned resupply ships could be built. Desperate for resources to fight the Blight, the UN was forced to abandon the project and the colonists. This was the first in a long series of harsh decisions the UN would be forced to make in the years that followed.

THE LESEAR EFFECT

It was the third day of the fourth week after the orbiter's splashdown, and Neilson and the crew had finally checked and re-checked the incoming data long enough to pronounce the atmosphere and water safe for the dive team. I was out of my environmental shell and already pulling off my thermalsuit when McLaren came in from sonar to tell us we could all go for a swim. He glared at me; I smiled at him and headed for the topside hatch. The airlock had only cycled half open when I climbed out on deck and into the alien sunlight and air of Poseidon. I could hear Neilson over the intercom, yelling at me to come back and put on a bio-monitor. I turned around, gave the intercom camera my sweetest "screw you" smile (you've probably seen the clip), and jumped over the side.

It's that first moment I'll never forget. I'm no poet, but by God, I'll tell you, sliding into that water felt like coming home. No lie. It was as real as I'm sitting here talking to you. A kind of dreamy, half deja-vu. It lasted for maybe five minutes, maybe more, while that crystal blue water worked its way into every pore. I just hung there about two meters under, grinning like an idiot (you've probably seen that clip, too). Strangest thing I've ever felt.

The bioengineers tell me it was some kind of hormone induced euphoria. All the modies get it on their first dive, apparently. But I don't buy that crap. It was more than that. It was the Planet. No, I'm not crazy. It was the Planet. It reached out and took hold of me and held on—as if I'd been gone a long time and had just come back home.

Anyway, I was the first and am proud of it. And now you know why they call that "hormone induced euphoria" the Lesear Effect.

Nathaniel Lesear, *Argos 12* crew member
— from *Tidal Forces*, interviews by Ashri Khenera

In spite of the failure of the resupply effort and the lack of contact with Earth, the colonists on Poseidon survived. As their technology wore out and failed, they learned to rely on pioneer ingenuity and their genetically engineered bodies. Spreading across the planet's surface in small villages and family groups, the colonists adopted a life much like the ancient Polynesians, settling the planet's countless island archipelagos.

One of the many discoveries made by the colonists was that they were not the only sentient lifeforms on Poseidon. Frustratingly alien in their actions and motivation, these aborigines became a source of fear and mystery for the colonists. Encounters often ended in bloodshed, and superstition grew as evidence of strange empathic abilities was discovered. The true origin and motivations of these beings lies in the ancient history of the planet and is a mystery as dark as the planet's deepest waters.

As the GEO slowly salvaged the future of the human race, it looked again to the stars. In 2164, a small science vessel was built and sent through the wormhole in hopes of initiating a second colonial effort. No one had anticipated the survival of the original colonists, and those on Earth were stunned to discover the colony had not only survived, but had grown from the 5,000 original colonists to over 40,000 souls.

The recontact mission met with mixed reactions from the original settlers—many were excited and relieved, others were bitter and retreated into uninhabited regions; the majority were calmly indifferent. Poseidon had become their world, and they had become its natives. Contact was welcome but essentially unimportant. They had made their peace with the planet and had no intention of giving up the lives they had built.

Traffic between Earth and Poseidon was minimal at first and consisted mainly of scientific missions and Incorporate research and development teams. At first they had little impact on the natives or the planet, but as Poseidon began to give up its secrets, that quickly changed. The nature of the wormhole and its connection to Poseidon became a source of endless debate. The intelligence of the aborigines became a compelling mystery, as all efforts at contact or capture ultimately failed. The planet's biological diversity and ecological intricacy defied understanding, and the commonality of DNA remained inexplicable. And, in the planet's exposed crust, Incorporate geologists found a substance that would eventually motivate a colonial frenzy that not only threatened to change the colonists' new way of life, but threatened to plunge humanity into a war of survival with an ancient alien legacy.

Xenosilicates, commonly called Longevity Ore or Long John, were first discovered during an Incorporate mineral survey. Though initially a closely guarded secret, word soon leaked about the fantastic potential of the substance. These minerals could be processed to yield biochemical tools of such awesome power that nothing in the realm of genetics remained beyond the control of gene engineers. Humanity had discovered the key to immortality!

On Earth, a world still foul with the smell of the dead, the human race exploded into a colonial gold rush the likes of which history has never known. Almost overnight, company towns began springing up across the waterworld as the Incorporate states imported research scientists and deep-ocean miners by the thousands. Human desperation sent millions rushing to Poseidon to stake their claims and to feed a market driven by humanity's primal fear of death.

In 2199, Poseidon is a planet of company boomtowns and corporate mining facilities, native settlements and orbiting factories. Life is hard, fast, and amphibious. Frontier law prevails as GEO Marshals try to protect native rights and enforce Incorporate regulations. The aborigines remain a mystery, yet are blamed for increasingly frequent acts of sabotage and carnage. Squadrons of fighter subs guard sea-floor installations, and corporate takeovers often involve marine assault teams. The natives have grown to hate the Incorporate and fear for their new world as environmental extremists incite ecological warfare in defense of the planet. New colonists continue to flood in, hoping for a better life, as ruthless opportunists scavenge what they can. And, lost in the background, scientists preach caution, claiming there is something wrong, something strange going on below the water's surface.

BLUE PLANET V2

Welcome to **Blue Planet v2**, the second edition of the critically acclaimed science fiction roleplaying game. This edition is published in two volumes and includes nearly all the material from the first edition of **Blue Planet** and its first supplement, *Archipelago*. **Blue Planet v2** also offers a completely redesigned game system, as well as characters, places, technology, and background information never before published.

This volume is the **Blue Planet v2** *Player's Guide*. It includes all the rules players need to create and equip their characters, resolve tasks, and roleplay combats and other action sequences. The *Player's Guide* also provides enough background detail to introduce players to this incredibly rich setting, including a comprehensive timeline and historical summary of the **Blue Planet** universe. The *Moderator's Guide* is packed cover-to-cover with additional details, backgrounds, and secrets of the

people, places, and alien lifeforms characters will encounter in the course of their adventures on Poseidon.

WHAT IS BLUE PLANET?

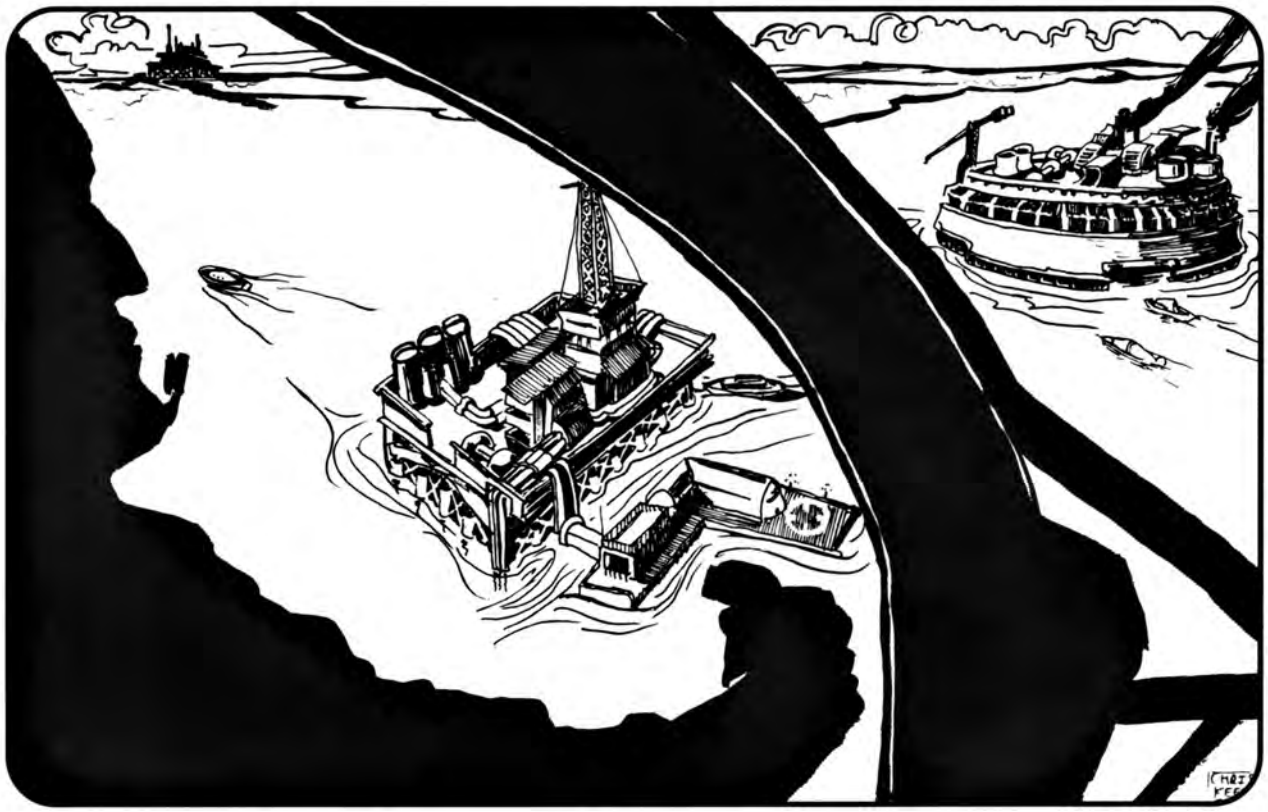
Blue Planet is a science fiction roleplaying game. The setting allows players to participate in an epic human struggle to colonize an alien planet, a waterworld known as Poseidon. Unlike novels and movies, roleplaying games are interactive. Players will not just read about or watch the adventures of someone else's characters. They will create their own characters and have the chance to guide them through exciting adventures set on this challenging and mysterious frontier.

For those players new to the hobby, an introduction to roleplaying is in order. In a roleplaying game, most of the players will create and control unique personas, called player characters. Each player will design his character from the ground up, detailing his physical and mental characteristics, personality, background, and professional aptitudes. Once the characters have been created, the players will verbally act out their characters' adventures, in a way similar to actors in a movie or play.

In **Blue Planet**, the characters players can create and roleplay are limited only by their imaginations. GEO Marshals, heavily modified lawmen, are charged with keeping the peace on an often-violent frontier world. Native insurgents, the aquaformed descendants of the original human colonists on Poseidon, battle insurmountable odds to defend their homes and way of life from the encroachment of the newcomers. Incorporate operatives, highly trained and equipped with cutting-edge technology, wage a secret war against both the colonial government and each other. Cold-blooded gangsters in the service of shadowy crime syndicates run guns, drugs, and other contraband for a profit. Professional soldiers—from GEO Peacekeepers to hard-edged mercenaries—earn their livings on the frontlines of the colonial war that is spreading across the waterworld. Deep-ocean miners and prospectors navigate the abyss in search of Long John, the priceless ore that has unlocked the power of human DNA. Frontiersmen and explorers venture into Poseidon's wilderness and confront its savage ecology head-on. And ordinary colonists —pioneers, bush pilots, free traders, and many others— brave alien lifeforms, brutal cyclonic storms, and frontier lawlessness to build a civilization under a new sun.

THE GAME MODERATOR

In **Blue Planet**, one person will serve as the game moderator. The game moderator's job combines elements of both writer and director in a film production, as well as some of the duties associated with a referee in sports competitions. The game moderator will have a guiding hand in creating adventures for the player characters, and in creating and acting out the roles of the non-player characters. The non-player characters populate the imaginary world surrounding the player characters and usually play some part in their continuing adventures.



The game moderator will also be the final judge of what the characters can and can't do within the scope of the game mechanics or rules. Does the Marshal spot the smuggler lurking in the shadows of the waterfront warehouse? Can the hacker defeat the network's security routines and crack the system? Does the three-round burst the Peacekeeper fires from his assault rifle hit the terrorist, and if so, does he live or die?

THE SYNERGY GAME SYSTEM

The rules system used in **Blue Planet** is called the SYNERGY Game System. Synergy is fast and easy to learn while still being robust and fun to play. The Synergy rules are described in detail in Chapters 2–4. This section is simply intended to familiarize players and game moderators with Synergy's basic rules.

THE DICE

Any time a character tries to do something that has an uncertain outcome, dice are rolled to determine the character's success or failure. Synergy uses 10-sided dice (abbreviated D10) for all rolls made in the game. The numbers on a D10 range between 0 and 9. A result of 0 is read as 10, so the dice produce a range of numbers between 1 and 10. Ten-sided dice can be purchased at any hobby games store.

DICE POOLS

When a character tries to perform some task in the game, the player will roll a number of D10s to check for success or failure. The number of dice the player rolls for a task is the dice pool. In general, the greater the character's aptitude for a task, the larger the dice pool will be. Aptitudes represent the character's natural talent and proficiency in fairly broad fields, like Firearms, Tech, and Communication (see page 37). In Synergy, dice pools range between one and three dice.

TARGET NUMBERS

Any task a character tries to perform has a target number. The target number for a task will usually be based on two characteristics. Skills—like Handguns, Computers, and Persuasion—are rated between 1 and 10 and represent a character's relevant training and experience (see page 38). Attributes—like Dexterity, Intellect, and Presence—measure the character's basic mental and physical traits. The human norm for all attributes is zero, so above-average attributes are indicated by a positive number, and below-average attributes by a negative number (see page 28). The relevant attribute is added to the character's skill and so either increases or decreases the target number.

TASK ROLLS

To attempt a task, the player rolls a number of dice determined by the character's aptitude and takes the lowest result. If this result is equal to or lower than the target number, the character succeeds. If the result is higher than the target number, the character fails. The difference between the number rolled and the target number represents the character's degree of success or failure, called the action value.

That's it! That's the basic system Synergy uses to resolve any task in the game, whether a character is trying to jump across a chasm, shoot a gun, or out-swim a dolphin. Chapters 2–4 offer more detailed rules that will help players create characters, resolve tasks, and adjudicate combat.

MAKING THE GAME YOUR OWN

Just about every roleplaying game published these days includes a disclaimer, one to the effect that "any rule can be broken," and that in fact the game rules should be viewed as "guidelines and not rules." Many veteran gamers have come to view such a disclaimer as a simple matter of tradition, and one that is neither useful nor necessary.

The fact is, though, this disclaimer is at the heart of what makes roleplaying games unique. Unlike most video games, board games, or card games, there are no winners or losers in a roleplaying game. The only rewards to be had from playing are the stories the players take home with them, the experiences they share with their friends, and the chance to explore a new world built of their own imaginations. The only point is to have fun and to make the game fun for all those who share it.

As such, players and moderators are free to do whatever they want with **Blue Planet**, as long as everyone is having fun. Rather than rulebooks or doctrinal tomes, every book published in this product line should be considered a literary toolbox or set of guidelines. If a moderator finds some aspect of the setting as presented in these books unsatisfactory, he should rewrite it to suit his own vision. If a rule gets in the way of adventure and fun, the gaming group should feel free to revise it or ignore it completely. The game is flexible and robust enough that it can take a lot of revision, expansion, tweaking, fiddling, and independent creative development and still be **Blue Planet**.

As soon as you dive into your first adventure on Poseidon, **Blue Planet** is yours. Do with it what you will...

POSEIDON: A SURVIVAL GUIDE

The makeshift studio has been set up in a run-down warehouse on Haven's waterfront. A young man sits alone atop an industrial drum in front of a tripod-mounted holocamera, scanning the pages of his script from the holographic display of a bodycomp. The door of the warehouse supervisor's office slams as the director walks to the cameraman and slaps him on the back of the head, waking him from a bored slumber.

"Let's do it," the director says, pointing to the production's only actor. The narrator offers his boss a rude gesture and tosses the bodycomp to the cameraman. At a battered plastic desk, the computer technician jacks into a powerful maincomp and its holodisplay flares to life. The tech is responsible for loading and integrating background holos and sound during the recording.

The director gives his crew a five-count, and the holocamera sprays emerald laser-light across the narrator and modest set. The narrator squints into the holographic prompter.

"Welcome to New World Underground's multimedia production, *Poseidon: A Survival Guide*. Dump those lame-assed commercial programs and get ready to learn what it's really like on humanity's newest and bluest playground.

"Chances are, you're running this program back on Earth, the once green dirtball we converted into a landfill over the last couple centuries."

A stunning image of Earth from orbit forms on the holodisplay and fades to a major industrial city. The brown-orange inversion layer hangs over the city like a burial shroud, and a disharmonic industrial rhythm begins driving in the background. The image shifts to a scene from a Free Zone in the North American Midwest. The land is a barren, dusty waste stretching to the horizon, the legacy of the Blight. Scattered across this wasteland, robotic seeders scurry about feeding water, nutrients, and microbes to the hungry sand, struggling to resurrect the soil of what was once fertile farmland.

"First thing you're going to need to do is pack your bags, forward your e-mail, and do the 35 light-year road trip to the Serpentis System. Seems like a long haul, huh? Well, it is, but don't sweat it. Someone was nice enough to leave us a turnpike. Yeah, I know the scientists say it might be a 'naturally occurring phenomenon,' but you and I know somebody with some big-ass bulldozers built that wormhole. We don't know who and we don't know why, but it was mighty neighborly of them, because it lets us do the Sol-Serpentis gig in as little as six months instead of a few thousand years. You want to know how it works, you got the wrong program. But I can tell you it does work, because I made the trip myself a few years back. Real smooth ride...I slept through the whole thing."

An image of the wormhole recorded from an approaching spacecraft replaces the barren wastes of Kansas. The thematic overture from a 20th Century sci-fi classic keys in and builds to a crescendo of thrumming timpani and powerful brass. The massive, utterly dark sphere grows steadily, and the starscape beyond it is slowly eclipsed as the ship draws near. The image fades to black as the wormhole engulfs the horizon.

"That's right, Dave. They're going to dope you and stick you in a freezer for six months to a year so you don't go psychotic and jeopardize the mission. Don't worry, though...they have real smart computers to make sure everything is under control.

"But we're getting ahead of ourselves. You need to know how to hitch a ride before you start worrying about the cooler. So, who the hell are you, anyway? See, Chief, how you get to Poseidon really depends on who you are. You can either make the trip in all the comfort, luxury, and safety that money can buy, or you can do it the way I did—in an obsolete coffin that couldn't keep your turkey frozen until Thanksgiving.

"Ships making the run between Earth and Poseidon fall into one of three categories. First, there are your GEO vessels. This is probably the best way to go, all things

considered. The easiest way to get yourself on a government ship is to work for 'em and get reassigned to the Serpentis System. If you can't swing that, you could apply for a position in a GEO-sponsored colonization effort. You can find the application you need on CommCore at the GEO Office of Colonial Affairs datastore. Your computer can help you find it if you're an idiot. Your chances will be vastly improved if you have something to offer, like scientific, military, medical, or technical training, teaching experience, or a background in deep-sea industry. You'll probably be at least two years toward the bottom of the waiting list for one of these programs...seems a lot of folks are pretty eager to bid Earth their fond farewells these days. Go figure.

"Your next option is to hitch a ride with an Incorporate ship. Again, your best bet here is to have a job and get yourself transferred. This may not be as tough as it sounds, assuming you don't mind waging for the corp a few years once you get here. I hate to break it to you, but it probably won't be a great job. If there were a terrific job for you with the Incorporate, you'd be working for 'em already. You damn sure wouldn't be sucking down a cheap beer and asking me for advice. If you have some skills, you might get lucky and land yourself a job with a deep-sea mining operation. Nothing better than slaving away at 500 meters, digging that priceless ore out of the rock...knowing you can't keep a milligram for yourself. Well, your boss would definitely frown on the idea, at least.

"Of course, even if you don't have any useful skills, you may have some money. Maybe you're a lawyer. Well, every once in a while one of these GEO and Incorporate ships has a spare coffin available, and they'll be happy to rent it to you for half a year or so. This happens pretty frequently, when someone on the passenger manifest dies, or backs out, or whatever. Those lists are public information, so tell your computer to let you know if something becomes available and have your cash ready. It'll cost you about 10,000 scrip.

"Now, I mentioned the GEO and Incorporate ships first, because they're most likely to get you here alive. Well, okay, being dead is a drag, but you may not consider sticking around on Earth the rest of your life a favorable alternative. And, if you happen to be that lawyer I was talking to a minute ago, yeah, things really are that bad for some folks back home.

> "Us losers that can't get a GEO or Incorporate ticket but haven't had the common decency to die off yet, we've got some options, too. Before you look anywhere else, try to hook up with a private organization or Independent national government that's running a ship to Poseidon. The odds aren't good, but after the crap you've been through, you're due for some luck. Many private groups, from religious cults to political organizations, occasionally put together the funds to charter a ship, even if it does look like it took a wrong turn on its way to the salvage yard. Now, you may have to offer a demonstration of your commitment to the cause with anything from a donation, to being Born Again, to an act of political terrorism—but it beats a life of soy burgers and seed-busting on some collective farm in Iowa.

"Okay, like I said: private flights by more-or-less legitimate organizations like the above are few and far between, so you may strike out again. No sweat, you're probably used to it by now. Your last chance is to scrape the bottom of the gravity well and pull out a spot on a ship that wouldn't be licensed if the GEO ever bothered to inspect it. There are ships doing the Earth-Poseidon run that are more than a hundred years old. The one I came over on hauled the first scientific expedition to Jupiter, back before things went down the tubes. Now, the crew of that old heap had no business sailing a rubber ducky in the bathtub, and the ship was in bad enough shape that no museum in Earth orbit would go near it, but I got here, almost in one piece."

The narrator rolls up his sleeve and peels back the flesh on the inside of his right arm. He thumbs open a tiny panel, about a centimeter square, and displays the complex electronics to the holocamera.

"It seems the ship's coolers were about as old and well-maintained as it was. When I got here to Poseidon, my arm was deader than Nebraska farmland. The dental school dropout who claimed to be my medtech just shrugged and said I was lucky it was my arm and not my head. I'd have decked him, but I never could lead with my left.

"I guess I can go ahead and tell you all about the cooler now...if you haven't found a ship at this point, you're probably not going to. Tough luck, pal. You have my sympathies.

"Induced Hypothermic Metabolic Suppression. That's what some Poindexter decided to call it, and I guarandamn-tee you, it'll be one of the least pleasant experiences of your life. Here's how it's gonna go. Once you've booked passage, you'll go through a planet-side training and education program the quality, length, and intensity of which will vary depending on how concerned your carrier is with your health. This is also when they'll start dosing you with god-awful chemicals to burn all the critters off your skin and flush all the bugs out of your system, and this process will continue once they've run you up the 'Hook to the pre-flight facilities in one of the many stations in orbit. They'll give you a bedpan and barf-bucket to handle some of the flushing.

"Speaking of chemicals, let me offer a little word to the wise: kick the recreational pharmaceuticals before you

show up for your orientation program. Again, depending on your carrier, you'll be put through a series of rigorous medical tests, and if you're dosed with something that will cause complications, you'll lose your ticket.

"None of this flushing and such will be any fun, but remember that you won't be near a bathroom for the next six months or so, and you may enjoy it a little more. They'll put a tube in you to handle that kind of thing once you're ready for the cooler. Oh, yeah, to get ready for that tube, you're gonna have to do 48 hours without solid food. That seems to help with the flushing quite a bit, too.

"In the final stages of pre-flight, you're gonna lose every hair on your body and get dunked in a chem bath so caustic it'll bleach your skin. They'll dress you in a hospital gown that even I couldn't look cool in and send you to a quarantine room to wait for your coffin.

"Now, if all of this sounds a little dehumanizing...well, you're not as dumb as you look. And don't think of it as a short stay at a lousy hospital, either. In a hospital, no matter how bad it is, there will be a few people who probably give half-a-lump about you. Otherwise, they'd be making more money in an Incorporate medical center somewhere. No, don't go asking any of the losers pretending to be medtechs to hold your hand. I didn't meet one of 'em who showed me any more kindness or sympathy than they would a wilted cabbage in the produce section. To them, they're processing cargo.

"Your cooler is going to be a canister three meters long, tangled with fiber optics, cooling lines, and electronic gadgetry. Even the older ones are surprisingly comfortable inside. There's a little viewport in the lid so you can watch the medtechs bet on your chances of coming out on the other side at a reasonable temperature. Before they seal you up, though, they'll catheterize you and hook you up with all the IV tubes you'll need. They're also going to glue electrodes all over your body so they can pump current into your muscles...wouldn't want your body turning to mush on the ride over.

"Once they've done all this, they'll seal you up, and the computer will initiate the refrigeration and drug therapy systems. Here's where the panic really starts to work its way deep into your bones. They're pumping sedatives into you now to put you under, but that immeasurable time before you lose consciousness will probably stay with you the rest of your life. It's gotta be a lot like laying on the table in an old lethal injection chamber, except you'll have to deal with some secondary claustrophobia. The condemned know they're gonna die, and I figure there's a kind of comfort in that certainty. You won't know one way or the other in those final seconds before the world goes dark."

A first-person image recorded from an implanted sensory recorder fades in. The view jerks wildly as "your" eyes flit back and forth, looking down at your naked body bristling with IV tubes, now at the fogging viewport centimeters from your face. Along the left periphery of your vision, biomedical data scrolls through recordings of your elevated heart rate and adrenaline. The sedatives kick in and your eyes close. The view fades as you lose consciousness, but the sleepless internal biomonitor continues to flash unending data across the backs of your retinas.

"You'll wake up in post-flight on *Prosperity Station* feeling like warmed-over manure. Your body will be feeling all those chemicals and engineered viruses they put into you to hold your cells together while you were frozen and thawed. Well, being a centimeter this side of death for as long as a year takes a certain toll on a person. They make sure the lights are dimmed, but when you open your eyes, it'll feel like your head is going to explode. You'll be so weak it'll be hard to sit up. You'll most likely puke all over yourself. Well, not really...it'll be the worst case of the dry heaves you ever had, though.

"After these preliminary unpleasantries, the itching will start. Those electrodes they stuck on you will leave little red welts all over your body, and these welts are going to itch like all hell for about a week after they unplug you. We Poseidoners call it the Spots, and it'll be a convenient signal to us that you just got off the boat and haven't a clue what you're doing. It should remind you of the same.

"You'll spend a few days in recovery facilities, either on *Prosperity Station* or planetside, under the close supervision of the OCA's computers and a few medtechs who don't have time to bother with you. Believe it or not, you'll wish you could sleep. You'll feel so bone-tired that you wouldn't mind going under for another six months. You won't be able to, though—they've got you so pumped full of stimulants that you'll do well to stop shaking long enough to scratch your Spots. Oh, and you'll be on a liquid diet again, even though you'll be hungry enough to think about eating one of the medtechs.

"The days you spend in recovery are likely to be the most unpleasant of the trip. See, what they do to you to get you over here really ought to kill you...hell, it might kill you, and if it doesn't, it'll come damn close. You're going to be a twitching, helpless, gelatinous mess for 48 to 72 hours, at least. All this makes the GEO's task of unloading all the passengers from a ship and shuttling them down to Poseidon all the more difficult. Chronic understaffing and an inevitable contempt for the truly disgusting and pathetic pretty much guarantees that the medtechs at *Prosperity Station* will treat

you with even less respect than those on the other side of the wormhole. They'll laugh in your face when you make a mess in your bed and curse you as they're cleaning it up. Look around, though—would you want their job?

"When they release you from post-flight, you'll be directed to OCA Customs and Immigration. They'll put you through much the same routine you got before leaving Earth orbit, but this time there'll be an edge on it. They'll ask you why you left Earth, why you want to immigrate to Poseidon, what your plans are, why you packed a box of condoms...the whole bit. Don't give them any lip—these guys have the attitude that they're the planet's last line of defense, and they'd be more than happy to make your life miserable.

"Once you're passed through Customs and Immigration, you'll want to find a monitor and find out when you're registered to shuttle down to the planet. *Prosperity Station* is crowded, and they'll try to get rid of you as soon as they can.

"Enjoy the flight. Try to get a window seat. Look out at the blue globe with white swirls hanging in space and think about the fact that you're one of only a few million human beings who have ever seen it. Hell, most of the natives haven't even seen it like this. Poseidon is a new world. There'll be danger and hardship, but if you have a quick mind, a bit of courage, and a strong body, you can start a new life here. This planet is a second chance that most of us probably don't deserve."

An image of Poseidon from orbit appears on the holodisplay, the planet's two moons visible in the background. The image fades to a high-speed motion shot, the camera racing just over the surface of the ocean toward a small volcanic island, as manic techno-pop rises from the maincomp's speakers. The display goes dark again and shifts to a dimly lit underwater scene, where a team of Incorporate miners, supported by a variety of heavy equipment, are blasting away at the planet's exposed crust.

"Your shuttle will most likely touch down at a spaceport in Haven, Second Try, or Kingston. I'd recommend one of the latter two—Haven is the largest city on Poseidon, and it's easy to get a shuttle there, but it's also overcrowded and damned expensive. You're probably going to need to do some serious shopping, and there's no reason to pay the Haven premium unless you have to."

The holodisplay clears and is filled with the image of a narrow, dirty city street in a commercial district choked with pedestrians and civilian vehicles. Buildings demonstrating a chaotic variety of architectural styles squeeze the street, and holographic billboards light the scene with an unpleasant multicolored glow. Overhead, jumpcraft move through the city in layered traffic lanes stacked 10 high.

"Stepping off of that shuttle and into one of the major spaceports is likely to be the most bizarre experience in your life. You never really notice it at the time, but mass-culture and the global village have turned much of Earth into an anonymous purgatory of conformity. Everywhere, things are the same. You can travel thousands of kilometers between cities and never feel like you've even left home. You're in for a shock.

"Freedom and individuality rule on Poseidon in a way that hasn't been true of Earth for centuries, except maybe in the Free Zones. In a lot of cases, this is exactly why folks come here. You're going to see, hear, and smell some things that you never even imagined. Clothes, languages, customs, it's all going to seem more than foreign...it's gonna seem alien. And guess what, ace? You're on your own. You're going to feel lost, confused, and more disoriented than you've ever felt in your life. Vendors will be approaching you and trying to sell you stuff you've never even heard of. People so modied-out you can't determine their sex will offer companionship for a price. You'll be haggled, molested, and maybe even mugged your first hour off the shuttle. And don't expect any caring folks who get paid to help you out and make the transition easier. Nobody cares. Like I said, you're on your own. You're gonna be homesick. Don't laugh, wiseguy...wait and see if I'm not right.

"When you leave the spaceport and step onto Poseidon for the first time, you may think you've made a terrible mistake."

A middle-aged man with white hair, a scraggly beard, and a weathered face peers into the camera, his suspicion and irritation clearly translated in the detailed hologram. "What do I think?" he asks in a gravely voice. "Poseidon stinks, that's what I think. It's the first thing you notice when you get off the shuttle and breathe that alien air. They say it's because the atmosphere is a little different from Earth's...whatever, it smells...heavy, organic...like a living thing. When I caught my first whiff, I seriously thought about getting back on board and heading home. 'Course, home doesn't smell a hell of a lot better these days. Besides, you really do get used to it after a while. After a few days, it stops stinking and starts smelling like freedom."

"I've known James Colby for two years, folks, and he knows what he's talking about. He's an independent prospector who's been operating on Poseidon since before I even came over. That little bit of advice was the most I've ever heard him say at one time when he wasn't stone drunk. Don't let the trace compounds in Poseidon's atmosphere fool you, though: with its healthy ozone and lack of pollutants, it's better suited to sustaining human life than Earth's. Of course, the Incorporate will remedy that before long.

"Whatever your plans, you're going to be spending some money your first few days on Poseidon. The colony is still partly autonomous from the GEO, and that autonomy has its price. For one thing, commerce on Poseidon is a nightmare of confusion. For whatever reasons, a standard currency hasn't yet been instituted. I figure a lot of the natives and a good portion of the newcomers are worried about the GEO hanging the economic chains on them. Unfortunately, the alternative that's in place right now is even less appealing.

"The only thing vaguely approaching a standard currency on Poseidon is a little commercial disaster called corporate scrip. Those of you from Incorporated city-states back on Earth may already be familiar with it. Scrip is something like common stock, I guess, except it doesn't represent any equity in the corporation. Instead, it's a legal tender that's loosely pegged to the issuing corporation's quarterly earnings, just like the currencies of some developing nations were pegged to the US dollar in the 20th Century. When the value of the US dollar increased, the value of these pegged currencies would increase, and vice-versa.

"So, corporate scrip works pretty much the same way, but it's pegged to the corporation's earnings. For example, when Biogene's earnings increase relative to GenDiver's, the value of its corporate scrip increases relative to GenDiver's. When Biogene's earnings decline relative to GenDiver's, the value of its scrip declines as well. Of course, while the value of Biogene scrip has declined relative to GenDiver scrip, it might have increased relative to Atlas scrip.

"It gets worse. There's a supply and demand for corporate scrip, just like there's a supply and demand for any commodity. It was the same for the national currencies back in the 20th Century. The value of the scrip pegged to earnings acts like a kind of baseline, but there's a hell of a lot of fluctuation beyond this value. Supply and demand: as supply increases, value tends to decrease; as demand increases, value tends to increase. All of this is just to say that there is a market for corporate scrip on Poseidon that contributes as much to the determination of its value as corporate earnings. If a lot of people think Biogene scrip will get stronger relative to the other scrips, a lot of people will want Biogene scrip. The more demand for Biogene scrip there is, the higher its value will rise. That is, the more of another corporation's scrip you'll have to give up to acquire a given sum of Biogene scrip, or the more goods you can buy in a local market with a given sum of Biogene scrip.

"Of course, expert traders who are familiar with the market can make a fortune in scrip speculation. All of the Incorporate powerhouses on Poseidon have a team of experts and computers to manage their scrip trading. Fortunately, there are a few scrip analysis programs available on CommCore that will help average Joes like us survive in the corporate scrip market. So where do you go to find corporate scrip? Well, scrip comes in two forms: paper and electronic.

"That's right, you're actually going to get a chance to use cold, hard cash. Paper scrip is available at all major financial institutions on Poseidon. The big banks have branches in all of the larger settlements and quite a few small ones. Cash is important, because there are still some holes in the GEO's global communications network, and there are countless settlements where the natives won't have anything to do with electronic scrip. And, of course, if you're interested in privacy in your commercial dealings, paper scrip has the advantage of not having your name written all over it.

"You'll also want to set up an account with a bank, of course. Electronic scrip is a lot more convenient than cash, and you'll have access to your account, in most places, through your bodycomp.

"Hopefully, you transferred the majority of your funds to Poseidon ahead of you. If that's the case, just go to your bank's local office and request that they convert your funds to scrip. If you haven't downloaded a scrip analysis program, you can access a bank terminal for a nominal fee. Exchange rates between Earth's surviving currencies and the various scrips are way too frigging

complicated for us to explain here. However, assuming you've accessed a good analysis program, the purchasing power of your net worth shouldn't suffer much. If you had enough cash to buy a nice jumpcraft back on Earth, you'll probably have enough scrip to buy one on Poseidon...well, so it might be a little older and not so nice. Quit whining.

"Okay, so explaining corporate scrip is one thing; when you actually try to buy something with it, things can get real confusing, real fast. How much Biogene scrip does it take to buy a fish burger in Cliffside? How, the hell should I know? Well, seriously, this currency system pretty much rules out slapping an absolute value on a commodity. It'll be around five scrip. You'll always get good value for a corporation's scrip in one of its company towns...Cliffside is a Biogene company town, so the demand for Biogene scrip will always be pretty high there. If you're trying to buy the burger with GenDiver scrip, and GenDiver is weak against Biogene, you could pay ten scrip or more for that burger. You get the idea. Or maybe you don't, but I'm tired of trying to explain it.

"For obvious reasons, commerce on Poseidon tries to find as many ways as possible to avoid corporate scrip. In many native villages, for example, the barter system dominates trade. If you ask me, though, native barter is as arcane a practice as corporate scrip.

"The most popular substitute currency on Poseidon is Long John. Long John, in either pure or refined form, serves as an informal common currency in most of Poseidon's settlements. Long John is accepted by Poseidoners, even when scrip isn't, because it has tended to be hyper-inflationary—that is, its value on both Earth and Poseidon continues to increase daily. Okay, so maybe a stable currency would be nice, but if you're going to have fluctuation, it might as well move in the right direction. Long John makes a good substitute because it eliminates much of the risk and uncertainty of corporate scrip—if you're holding Long John, it's pretty likely that its value will increase over the near-term, and very unlikely that it'll decrease. Currently, one gram of Long John is worth about 1,000 scrip, standard. The one-milligram wafer is the most common unit of exchange for modest purchases.

"Even in the major cities, the retail industry hasn't quite caught up to the booming commercial expansion that's taking place on Poseidon. The Incorporate have mainly focused on industrial enterprises, especially mining, and most business-minded folks didn't come to Poseidon to run a grocery store or restaurant. There are grocery stores and restaurants on Poseidon, of course, but they're typically small-time mom-and-pop enterprises, rather than corporate-owned chains and conglomerate franchises. For the most part, the retail industry is dominated by retired government and military folks, failed miners and prospectors, 'civilized' natives, or the descendants of the above.

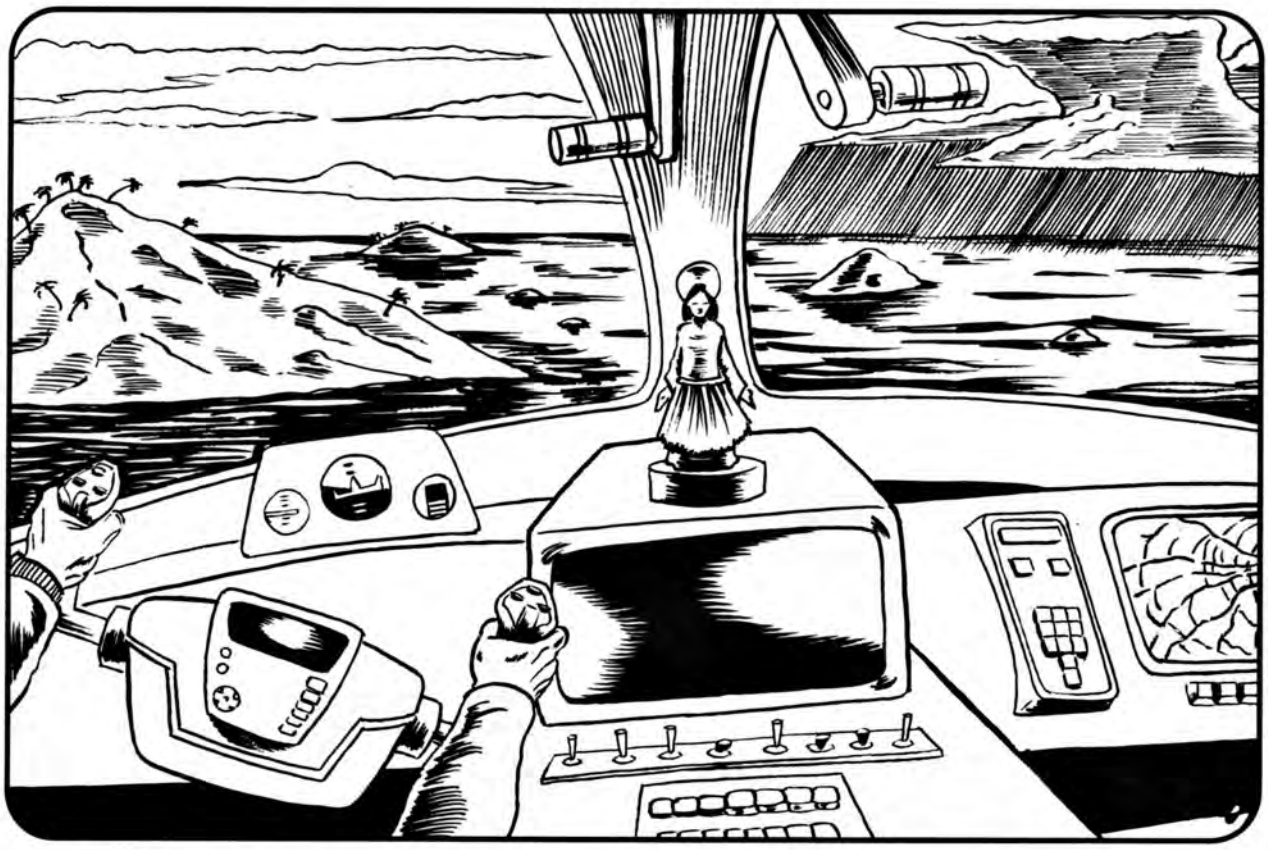
"The limited resources of these entrepreneurs leads to market specialization and the classic decentralized economy. Even in larger settlements like Haven where you can find a Hypermart or two, there are independently owned and operated fish markets, produce markets, street vendors, medical clinics, machine shops, and so forth. If you want to do the pioneer thing and build your own house, you'll buy your tools and nails at a hardware store and your materials from a lumberyard...even if you're not really getting wood. In some very small and isolated settlements, you'll see a bit more centralization out of necessity. These towns and hamlets might have a single trading post where just about anything can be bought, sold, or bartered."

An image of a bustling open-air market in a small but prosperous community lights up the holodisplay. Traders and vendors offer their wares to shoppers who have traveled from countless outlying settlements to visit the market. The air is thick with the smoke from open cook-fires, and scrip changes hands amidst the haggling and gossip.

"Of course, the consumer goods manufacturing industry is as decentralized and underdeveloped as retail service. The clothes you buy will often come from a favorite tailor, rather than a major clothing manufacturer. If you're in a small town in the middle of nowhere, second-hand clothes from the local trading post might be the best you can do. I've done this not a few times. One jacket even sported the bullet hole that explained its return to the retail market.

"What about things like vehicles, machinery, and computers? Well, it's been slow coming, but heavy manufacturing of durable goods has begun to accelerate over the last several years. It's a simple matter of expense: shipping anything through the wormhole is ungodly expensive, and the Incorporate like to avoid ungodly expensive. As a result, several major manufacturing corporations have operations running on Poseidon, though the scale of most is still small compared to Earth. These manufacturing operations are clustered around the major cities and company towns, and this is always the best place to make major purchases, whether it's a vehicle, a bodycomp, a firearm, or a hard suit you're shopping for.

"Again, retail service for this stuff is a little backward. For example, there are a few factory jumpcraft dealerships in the major cities, but the corporations will give just about anyone a license to distribute and retail these goods, so you're likely to find a lot of independent tech dealers in other locations. Like anything else, these guys vary widely in honesty and reliability. Just remember the guiding principle of commerce on Poseidon: C.O.D.



The dealer doesn't see your cash until you see your jumpcraft. Anyone who tries to do it another way is trying to rip you off. Count on it.

"Of course, there's going to be a waiting list for most durable goods, but you're gonna get used to that kind of thing around here. You can usually speed things up by working with an independent dealer and slipping him some extra cash to move you to the top of the list. This will usually cost you a 20% premium or more, but a lot of times, it's worth it not to have to wait.

"Unless you plan to live your life in one of the big cities, and you probably wouldn't bother making the trip to Poseidon if that was your goal, the first thing you'll want to arrange is transportation. Yeah, you want to do this even before you book yourself a room at a local hotel or boarding house. Reliable transportation is one of the most important things in the life of a colonist on Poseidon. Ninety-seven percent of this planet is covered by water. You've got ocean and little islands. Between all of those little islands is a lot of ocean. If you get separated from your ride, you could literally be stranded on a deserted island for the rest of your life. Or worse, stuck in a tin can on the ocean floor with your oxygen supply running low.

"Colonists and natives alike are real serious about their transportation, whether it's a beat-up '82 SeaStrider or a catamaran with patchwork sails. Vehicles on Poseidon are usually well protected by sophisticated security systems and closely watched by suspicious owners. Vehicle theft is punished pretty harshly on the colony. Most colonists are likely to shoot any thief caught taking so much as a headlight off their vehicle. Still, the black market trade in vehicles and spare parts is so lucrative that there are always freelance and organized criminals who are willing to run the risk."

A crime scene in a small settlement materializes on the holodisplay. Two Patrol jumpcraft have landed near a beat-up SeaStrider and a light transport hover. An outraged, but defensive, motorist speaks with the four Patrol officers circled around a sheet-covered body. "Yeah, officer, I came out of the bar and saw him loadin' my hopper onto a cargo-hauler! I didn't even think about it...I just put a bullet in him and started unhooking my rig. Would you wanna be stuck in Wetland for the rest of your life? No offense, if you are stuck here. I was only a month behind...how was I supposed to know that rat-bastard I bought the piece of junk from would send a repo man after me?"

"The recovery of lost or abandoned vehicles is protected under the treasure statutes of the GEO property code. For those of adventurous spirit, this can be one of the most profitable, legitimate enterprises on Poseidon. I'd think about taking it up if I weren't a famous actor with a cult following numbering well into the 10s. Many salvage teams follow in the wakes of cyclonic storms or

dive to undersea mining facilities that have suffered a major accident or catastrophe. These teams usually race the Emergency Response Teams, who are authorized to claim salvage rights for the GEO. Now, the relevant statutes dictate that the owner of any salvage will have first rights to the equipment at a fixed percentage of its recorded value. Of course, the value of salvaged technology in both legitimate and illegitimate markets greatly exceeds this standard commission. You and I both know which markets see the most traffic.

"Just as important as your vehicle is the fuel that keeps it running. Most of the larger settlements on Poseidon offer both commercial and government stations where you can get your tanks topped off. The cost of hydrogen at these facilities averages half-a-scrip per liter. Even the smallest of settlements will often have a solar unit that can crack hydrogen, and the locals are usually willing to negotiate a fill-up. I've found that a stranger in an outlying settlement can expect to pay as much as two scrip per liter. In many of these settlements, of course, barter goods or Long John will greatly facilitate the negotiations.

"Finally, your rig will eventually break down, and you're going to need to know how to get it fixed. The already mentioned salvage teams point to the scarcity of spare parts on Poseidon. Fortunately, independent mechanics and machinists are the blacksmiths of this frontier colony, and you should be able to find some kind of repair services in all but the smallest settlements. Most small-time mechanics and machinists won't have the facilities to replicate advanced, high-tech components, especially electronic systems. You'll probably need to go to a salvage auction or the black market for this stuff, as a local shop usually won't have access to a reliable supply. If you don't want to deal with the auctions or the black market, you'll want to stock an ample supply of parts from your local manufacturer, well in advance of any trouble. Remember, there can be some serious delays with this kind of stuff, and having a vehicle that won't run is no better than having it stolen.

"There's no centralized public transportation system on Poseidon, though the GEO claims to be working on it. Like every other area of the retail market, commercial transportation is dominated by small, private concerns. Several small-time carriers offer regular commercial service between the major towns and cities. These carriers usually charge around a scrip per 10 kilometers for the scheduled flights. If you need to make a trip to an isolated settlement, you'll want to find an independent bush pilot who will charter a private jumpcraft or VTOL flight to just about anywhere on Poseidon. A private charter will typically run you five to 10 scrip per 10 kilometers, depending upon distance and travel hazards. Charters to the Storm Belt are notoriously expensive, but often quite exciting. If you want to spend less money and aren't in a hurry, you can charter an independently owned and operated hydrofoil in just about any settlement on Poseidon."

The holodisplay shows a young, athletic man in aviator's glasses and a flight suit reclining in the cockpit of an aging civilian VTOL. "Like damn-near everybody else, I came to Poseidon thinking I'd make a fortune prospecting for Long John. Only problem is, I don't know much about prospecting, or diving either, for that matter. I was a pilot in the GEO Aerospace Command back on Earth. So, a couple years ago, I sold my hardsuit and mining gear, bought this broken-down Raven, and started running charters, mail, and cargo back and forth to settlements in the Storm Belt. There's nothing like the thrill of pulling eight Gs to climb topside of a microburst. It pays well, too."

"The GEO maintains an extensive communications network on the colony world. Satellite access is surprisingly good, and you should find that the availability of advanced communications is much the same on Poseidon as it is on Earth. It's certainly more important—on Earth, communications technology was a convenience for most people and one that was taken for granted. On Poseidon, it can save your life. You probably brought a bodycomp or two with you, and you'll want to register for a CommCore account, ASAP. The account will cost you about 50 scrip a month.

"The GEO also sponsors public access to its Global Positioning Satellite network, and you'll want to register for GPS service immediately. It's real easy to get lost on Poseidon, and most newcomers are almost obsessive about GPS. You can pick up a reliable receiver for around 100 scrip at any electronics store in the cities. Most modern computers can receive GPS signals, too. Monthly service will run you about 20 scrip.

"Okay, you've got some scrip in your pocket, and you've set yourself up with transportation. You've done a little shopping. Now get the hell out of the city and take a few days to experience your new home!

"I'm serious. When you step out of that spaceport, you'll be feeling a sort of awe and wonder. You won't be able to stop thinking about where you are: a new world, a new frontier, so far from Earth that you can't really get your head around it. A world without oak trees, or roses, or cockroaches, or pigeons. A world without humans, until a hundred years ago. Poseidon is a world that has yet to be smothered in concrete and steel, a place where you can breathe air that isn't toxic or choked with the smell of billions of people.

"After you've dealt with the banks, and the shopping, and all the rest, though, it'll start to feel as if you've just traveled to a somewhat backward country or Free Zone on Earth. You need to get that feeling back, see

Poseidon as it should be seen. Take a hydrofoil or, better yet, a sailboat—you can't experience anything but noise and nausea in a jumpcraft or VTOL.

"Don't leave just yet, though. You're gonna want to make sure you're ready for Poseidon. The best thing you can do is hire a local guide. A native is best, but they tend to be few and far between in the cities. A skilled veteran colonist will do, and she'll greatly improve your chances of returning from your sightseeing tour. Do a little asking around, and you should be able to find somebody qualified. If you're in Kingston, look for Pathfinder on the waterfront. She's not a native, but she is a genlifted Fin who's real friendly with 'em. Pathfinder's about as comfortable with this planet as you can be without being born here.

"You don't think you need a guide? Well, that's because you're a clueless newcomer, ace. Hell, you're not even a newcomer yet...you're still back on Earth, glued to your holotank, thinking about coming to Poseidon. This ain't Earth. There are so many ways this planet can kill you they won't be catalogued for years. You're going through a hell of an ordeal to get here, you owe it to yourself to not get dead on your first weekend.

"It really doesn't matter where you go. Just pick a direction and head for that blue horizon. If you're really adventurous, turn off your GPS system. Head down to an isolated beach—there are a billion or so to choose from. Turn off the engine and listen. Look out at the sea. You'll expect to hear seagulls, I guarantee it. Something about our modern human minds just associate seagulls with the beach. You won't hear any seagulls, though, because there aren't any seagulls on Poseidon. Wrong world, man.

"Take off across the ocean. If you're lucky, you'll see a caneopoise migration. Most folks call them sunbursts, and you'll quickly see why. Sunbursts are silver-skinned marine mammals, a bit like dolphins or seals, I guess. They have this strange buddy system going with these birds that constantly migrate from archipelago to archipelago. The birds seem to dig the sunbursts' reflective skin, and Poseidon only knows why the sunbursts like the birds. They say the caneopoise population in Poseidon's equatorial waters is huge. They organize into groups of thousands, followed by those birds. A large migration will stretch for kilometers, the sunbursts breaching and blowing spray at the sky as they swim from island to island.

"If Pathfinder's your guide, maybe she'll sing with 'em and record it for you. She's got an implant that tapes the sound-pictures she experiences, digitizes them, and converts them for viewing on a standard holoviewer. It's unreal. Those sunbursts sound to you and me like fingernails dragging on a chalkboard (look it up if you have to). Once you see those images, though, you'll know why the genlifted think of them as more gifted than Mozart, Beethoven, or even Elvis."

An aerial shot on a clear day fades in on the holodisplay. Below, a huge caneopoise migration stretches from horizon to horizon. Poseidon's sun is reflected blindingly by the magnificent silver creatures and refracted a billion times in the spray above them. The migration looks like a brilliant band of light winding slowly across the ocean.

"Of course, the sunbursts are being butchered by the millions. It seems their hides are highly prized back on Earth. Even though it can be synthesized cheaply and easily, I guess the genuine article is priceless in a synthetic world. You owe it to yourself to see the sunbursts before they're gone. If you have any thoughts about bagging a few for yourself, think twice. The natives, especially dolphins, are likely to speargun any sunburst hunter they find, and there are damn scary bounty-hunters out there called Wardens who do nothing but track down suspects wanted for ecological crimes. There have even been rumors of aborigine attacks on poacher ships. You don't want trouble from any of 'em."

The migration scene is replaced by the image of a beach littered with the skinned and rotting carcasses of dozens of sunbursts. The grisly scene fades to a gorgeous female Incorporate flaunting a sunburst-skin jacket at a posh cocktail party on Earth.

"Maybe you'll even stumble across a traditional native village on your little tour. Now, some folks will tell you that the natives live like primitive savages. It ain't true. They can get a bit savage if you do something to piss them off, mind you, but they're more free and more at peace with themselves and this world than you or I will ever be. They don't have the tech we do, because they were forced to live without it and found out they kinda like it that way. The folks who call native Poseidoners savages behind their backs are usually the ones who are most scared of 'em. Spend some time with them, if they'll have you, and you'll see—the natives aren't primitive humans...they aren't really humans at all."

Laser-light flares, and an image of a quiet beach on a moonlit night appears above the computer's holoprojector. Six native divers—three aquaforms and three dolphins—perform a ritual aquatic dance in the surf around a circle of softly glowing candles floating in hand-woven baskets. The dancers are accompanied by the slow, rhythmic cadence of a single drum and the haunting melody of a reed pipe. At a distance, phosphorescent tracers glide through the waves, betraying the presence of unknown, silent spectators.

"The natives can be trouble, though. Most of them aren't too pleased with the results of Recontact, and many are willing to express that displeasure with violence against those perceived as a threat to their planet. For the more sensible ones, that just includes the Incorporate, poachers, and others who are busy trashing the place. For others, it includes anyone without gills and a First Generation ancestor. In this latter category, the tribes of the Sierra Nueva Cluster are probably the worst. Their territory encompasses countless little islands that lie between Santa Elena, the GenDiver company town, and the major settlements of New Hawaii.

"These natives are led by a transient orca and seem to have developed a quaint little warrior culture. They keep themselves busy working over any Incorporate traffic that comes their way. Both GenDiver and the GEO have sent military forces to the Sierra Nueva to 'pacify' the natives, and they've both had a lot of openings for new recruits as a result. Many of the native villages are underwater, and when they retreat below the surface, no one's going to go in and root them out.

"If for some reason you're headed their way, turn around and go back. If you can't do that, you'd better either be flying or prepared to fight. The warpods of the Sierra Nueva must have some tech of their own, because they can stop a ship dead in the water. They're fond of treating their spears, and even their fingernails, with the venom of some god-forsaken fish, and if they poke you with one, you're not likely to have enough time to kiss your ass goodbye. Most of them have guns, too. I guess killing newcomers like you and me is an important enough job to warrant a little helpful technology, from time to time.

"The tribes of the Sierra Nueva aren't the only band of hostile natives, either. When they were abandoned, the First Generation scattered all over Poseidon, and I expect there are some unfriendly sorts out there in the big blue that we've never even heard of. They might just figure that sending some unwary travelers floating back to Haven with holes in them will keep the tourists out of their water for a while.

"Now, after all this, you may be a little scared of our distant cousins. There's nothing wrong with that, because the fear will keep you on your toes. But, when folks start being afraid of something, they usually start hating whatever it is they're afraid of. There's a lot of that on Poseidon, and it goes both ways. Native or newcomer, it doesn't much matter—the fear and hate get hot, and not long after, the shooting starts. Thing is, even the violent natives are pretty easy to get along with. Stay out of their way, and you have nothing to fear—they're not going to come looking for you, unless you really screwed up.

"You've done some sightseeing and hopefully avoided any undiplomatic contact with the natives. Assuming

you're not some clueless tourist with unlimited funds or an Incorporate wager with a company-scheduled future, at some point it's going to be time to begin the search for gainful employment.

"There's a world of opportunity waiting for you on Poseidon. Sound like a bad PR cliché? It isn't. This planet is wide open, and there's ample opportunity for the clued-in and daring to get ahead. If you've got a nest-egg and don't mind doing the store clerk thing, you can open a retail shop in most any settlement and be guaranteed to make a nice living. If that sounds a bit too tame, don't worry—on Poseidon, the more danger in your job description, the fatter the paycheck.

"For the ultimate in risk and danger, you can forget the rest and cut straight to Long John prospecting. If you know your geology and have some skills in deep-sea mining, you're good to go. If you're as clueless as most of the wannabe prospectors who wash up on the beach in their brand-new hardsuits, you'd better apprentice yourself to someone who knows what he's doing. Forget the CommCore correspondence programs—apprenticeship is the way to go. If you could learn to be a prospector by watching an interactive holo, there wouldn't be so many deceased rookies on the books. With a bit of luck, you'll be able to find a competent mentor to teach you the ropes in any mining town on the planet. You may have to buy him some new gear or fix up his sub, but he'll have you in the water and practicing your new trade in no time. He'll also be able to show you how to avoid getting dead.

"If prospecting's not your gig, you can join up with a salvage team and make a small fortune on lost tech—on the legitimate or not-so-legitimate markets. You could open a trading post or maybe even take your goods to sea, trading between several small settlements. If you're really adventurous, you could even do some trading with the more isolated native settlements. It's not unheard of. If you're a professional, like a doctor or lawyer or massage therapist, you can hang your shingle in a mining town. It'll be wild living, but you'll get plenty of business. If you're a scientist-type, you could sign up with the GEO, the Incorporate, the universities and research foundations. Or you could strike out on your own and try to make a name for yourself with some monumental discovery. If you're in the military or law enforcement fields, there are ample opportunities with the GEO, Incorporate, and Independent governments.

"Of course, if the law never concerned you much and you know how to dodge GEO Marshals and surveillance satellites, you could run guns or drugs or even raid commercial shipping. It'll probably be a short career, but you won't get bored. If you're a social malcontent like me, you might want to pursue a career in freelance anarchy or ecoterrorism. The pay is lousy, but it offers unparalleled job satisfaction. I suppose, if you don't mind being lower than the scum a bottom-feeder won't touch, you could try your hand as a sunburst poacher. Say hello to the Wardens for me.

"While we're on the subject of illegal activities, the Poseidon frontier may be wild and woolly, but it ain't entirely lawless, at least in most places. The GEO Marshals are the Law-with-a-capital-L on Poseidon. I guess our benevolent government lost its patience with the traditional criminal justice system and decided to get back to basics on the colony world. Judge, Jury, and Executioner—that's exactly what the silver badge is pinned to. The Marshals are wired, modified, and deadly serious. You really gotta love 'em. It's probably a real good thing there's only a couple dozen of them on the planet. Of course, they're supported by a bunch of edgy Patrol officers, all looking to get that badge themselves. In isolated native settlements, you're more likely to run into the Native Patrol, a bunch of locals with badges and backup, and an inbred dislike for ornery newcomers. When the law comes for you, the best thing to do is cut and run. If you fight them, the best you can hope for is momentary freedom while you wait for an obsessed Marshal to hunt you down.

"If you think of yourself as a goodly, law-abiding citizen, you may be more interested in how you can find the law if something illegit is going down. Assuming you're somewhere not too far removed from civilization, you can access the GEO-Justice/Emergency site on CommCore. It works just like it did on Earth—you make your report, and the system prioritizes and transmits it. If you're out on the fringes and don't have access to either CommCore or a local Patrol office...well, you probably have no business trying to call in the law. You're likely to have local vigilante groups that may, or may not, be preferable to the criminals, and the Native Patrol may be around. You can also try to get your message back to civilization by word of mouth. If you can't do it yourself, give it to the mail carrier when he flies in, or maybe a traveling trader. You won't get any kind of quick response, but if the crime is serious enough, justice will have her day when the Marshal comes to town."

The holoprojector sprays an image into the air, a close-up shot of a GEO Marshal entering a run-down bar in a mining town. The man scans the room and grips the handle of the Peacemaker holstered at his side. The camera zooms to the silver badge pinned to black fatigues over the Marshal's heart. The man turns toward the camera. A gloved hand reaches out, and the image fades to black.

"Despite the Marshals, the GEO's political grip on the colony world is far from exclusive and some would say it's as limp as the kelp you'll be having for breakfast every morning. Several major factions have a growing presence on

Poseidon, and each is driven by a vision of the colony's future that is incompatible with the rest.

"First, you've got the Incorporate, hybrid multinational corporations and traditional nation-states born during the social chaos of the Blight Years. It's easy enough to paint the Incorporate with broad strokes, labeling them impersonal juggernauts bent on capitalistic domination through greed, exploitation, and when necessary, outright violence. One man's stereotype is another man's useful rule of thumb, but I'm told there are exceptions.

"Really, the Incorporate states are like any other government—they each have their own histories, goals, and motivations, and no two are exactly alike. Hydrospan is a massive collective founded and managed by cetaceans, industry leaders in environmental engineering and marine research and exploration. They've developed close ties with the GEO and give every Hydrospan citizen-employee a stake in the enterprise's success. On the other hand, you've got GenDiver, a state ruled by power-drunk cowboys who would mug their own grandmothers for a half-percent of market share. You've heard about the Stone Bridge Massacre and Sierra Nueva War? That's the thugs at GenDiver staking their claim to what the Incorporate bean-counters consider prime Long John fields. Too bad a few thousand natives have been living there for the last hundred years.

The holodisplay flashes again as the tech loads bootleg footage from the Sierra Nueva War into the maincomp. A GenDiver Security combat team stalks relentlessly through a cluster of burning native dwellings, firing controlled bursts from their assault weapons at unseen victims. Three VTOL strike-fighters scream overhead followed moments later by a deafening barrage of explosions. Smoke obscures the combat team and the image fades out.

"Hydrospan and GenDiver, Atlas and Hanover, Dundalk and the NIS—for every responsible and progressive Incorporate state you can name another that still does business like it's the darkest days of the Blight and the world is coming to an end. One thing is sure, though: the Incorporate states dominate the economies of Earth and the Colonies and drive the colonization of Poseidon. It's real simple—if not for the Incorporate, none of us would be here. In one of history's greatest ironies, even the natives are indebted to GenDiver for the genetic adaptations that allowed them to survive their Abandonment.

Dundalk built the ship that established Recontact with the Poseidon colony. Atlas discovered the extraordinary potential of Long John. The Incorporate account for most of the economic and scientific activity on the colony world. Without the Incorporate states' role in the development of the colony, it would be at most a small government research outpost. Of course, some would say that's a good thing.

"Others, though, believe the Incorporate are the forerunners of a new form of social and political organization. They argue that the old nation-states and political-military alliances are obsolete and that new social groups must evolve to take their place. They claim the Incorporate city-states, organized around a shared economic enterprise, are an early prototype of such a new-world social group. Personally, I'm not so sure—they look to me a lot like the mercantile city-states of Italy in the 13th Century, complete with their own hired armies. The more things stay the same, the more the right-wing blowhards will tell you they've changed. I'm all for the gradual extinction of nation-states and the emergence of new, dynamic forms of social and political organization—I'm just not ready to embrace the corporatist vision and take my place on the assembly line.

"As the level of Incorporate economic and industrial activity on the planet has increased, so too has the native resistance to it. This is the aspect of life on Poseidon that is most romanticized and least understood in the media. After all, no self-respecting journalist will let the truth get in the way of a good story. The natives' conflicts with the Incorporate states are as varied as the Incorporate themselves. In the Sierra Nueva, you've got two aggressive, almost xenophobic groups—GenDiver and the orca Bataku's insurgents—going head-to-head in a bloody turf war that covers a good-size chunk of the Northwest Territories. Nobody asked me, but I figure this little war stopped being about land rights a long time ago. Somewhere along the line, it became a cultural war of attrition in which the objective of both sides is to simply hurt the other badly enough that they'll go away. In Westcape, Hanover is making a straightforward land-grab at the natives' expense. This escalating conflict isn't about political ideology or economics; it's all about territory. Hanover believes it has to expand its colonial holdings to protect its future as a sovereign state, and the natives of Westcape are simply trying to protect their homes.

"The GEO, as usual, is doing just enough to get in the way and not enough to actually improve the situation. Fort Solitude, a Peacekeeper base in the Sierra Nueva, has suffered thousands of casualties but has yet to accomplish so much as a temporary cease-fire. The primary GEO Armed Forces base at Fort Pacifica has more than doubled in size in the last year, and a string of military outposts have begun popping up all along the southern coast of Westcape. Problem is, the GEO leadership in Geneva back on Earth refuses to take sides. This policy indecision leaves the grunts on the front lines with two cheeks to the wind and they've done nothing but escalate the conflict and violence as a result.

"Of course, not everyone believes the GEO should have a policy on these issues. In fact, a lot of folks don't think the GEO should exist at all, let alone exert any claims to governance of the colony world. Unless you're from

Luna, or Mars Colony, or the Belt, you're probably pretty familiar with the GEO's history and current political status. The reality is that, like the Incorporate states, the GEO wouldn't exist today if it weren't for the social and political chaos the Blight left in its wake. The GEO was created for the sole purpose of defeating the Blight, and it was pretty damned effective in completing that task. It's just that a lot of folks figure it outlived its usefulness about half a century ago. With the threat of the Blight safely behind us and a new frontier opening up in another star system, an oligarchic world government controlling the most powerful military machine ever assembled by human beings is going to be in for its share of public criticism.

"There is no shortage of vocal opposition to the GEO. On Poseidon, the loudest comes from the Incorporate, various native groups, and most recently, the newcomer colonists themselves. The Incorporate political resistance to the GEO is led by a powerful few, notably GenDiver, Biogene, Hanover, and the Nippon Industrial State. These hostile states run espionage and intelligence operations against the GEO, refuse to recognize it as a legitimate authority, and deny its personnel access to Incorporate company towns and facilities. GenDiver officials will not even call the GEO by its proper name, referring to it instead as the "Geneva Regime." Other Incorporate states like Atlas Materials, Hydrospan, and Lavender Organics are close political and economic partners with the GEO. While they often disagree on specific issues and policies, they lend quiet support while remaining officially neutral in the propaganda wars between the GEO and its Incorporate enemies.

"There's been native resistance to the GEO and its presence on Poseidon ever since the *Adm. Robert Perry* showed up in orbit in 2165. Plain and simple, many natives just didn't want any contact with Earth, and their attitudes didn't warm up any when they realized the GEO was a world government that planned to claim all of Poseidon as its colony. Most of these natives hadn't dealt with much in the way of government beyond a council of elders for 50 years, so you can understand their reluctance to welcome Big Brother with open arms. Native attitudes toward the GEO have steadily worsened over the ensuing years. The GEO's refusal to recognize native land claims and its inability or unwillingness to protect them from Incorporate aggression have led many natives to lump the GEO in with the Incorporate, poachers, gangsters, tourists, and other undesirable elements Recontact has brought to their world. Activists speak out publicly against the GEO in the Haven Council, the city of Kingston has refused to recognize GEO authority, and insurgent groups like Blue Water Circle have targeted GEO personnel almost as often as Incorporate.

"Even newcomer groups—some of them part of GEO-sponsored colonization efforts—have started protesting GEO policies on the waterworld. Most of these are simply opposed to the GEO taxes that tap their bank accounts and the regulations that restrict their autonomy, but it's a growing problem for the GEO in the arena of public opinion. When its own citizens start challenging its authority, it raises serious questions about its continued legitimacy as a government. We newcomers have also brought our share of political extremism to Poseidon, and there are a few groups on the planet whose opposition to the GEO is violent. The most famous of these is Zero Nation, an ecoterrorist organization whose history dates back almost two centuries. While there are some who might suggest the *GEO* is just an ecoterrorist organization, it is definitely not friendly with Zero Nation. Opposed to any human colonization, development, or exploitation of Poseidon, Zero Nation cells routinely target GEO personnel and facilities with terrorist acts intended to publicize its agenda.

"While there's plenty of political turmoil on Poseidon, the real battleground is the GEO General Assembly in Geneva. Each of the GEO member-states, the Independent nations like China, India, and the United States, and the major Incorporate states are represented in the General Assembly. This institution is a political jungle of shifting factions, temporary alliances, and divided loyalties, and the most ironic part is, it doesn't even have any real power. Like I said before, the GEO is an oligarchy—the Executive Council wields all the real power, makes all the laws, and executes all the policies. All the General Assembly can do is reject legisla-

tion drafted by the Executive Council if it manages to come up with a two-thirds majority, something it almost never does. Still, the General Assembly has the attention of the media, and it's used by all interested factions as a sounding board to air their grievances, propaganda, and official lies. This posturing is picked up by the major media conglomerates and distributed through CommCore to the six billion citizens of Earth and the Colonies, so the Assembly remains a spawning ground for public opinion.

"In the years to come, I'm betting the GEO's biggest challenge will come from the United Nations. The GEO was originally a UN agency formed during the early years of the Blight, and the UN effectively abdicated its position of world leadership to the GEO when human civilization was teetering on the brink of extinction. The original GEO Charter called for the UN to be reinstated and the GEO abolished once the Blight was defeated. Backed by the Independent nations and several Incorporate states, the UN was reestablished in 2156 against strong opposition from the GEO Executive Council. For the GEO to be officially abolished, though, the UN requires a resolution to be passed by a two-thirds majority of its original, pre-Blight member-nations. Problem is, more than a third of those governments no longer exist as sovereign nations. In the aftermath of the Blight, they've become Incorporated city-states, Federal Districts of the GEO, or lost completely to Earth's lawless Free Zones.

"Of course, it irritates a lot of powerful people to no end that the GEO can continue to exist on what amounts to a technicality, but no one has figured out exactly what to do about it short of a full-scale war. And no one has the military muscle to challenge the GEO Armed Forces on its own turf unless the situation changes dramatically. That's why some of us figure a colonial civil war is on the horizon, one that will decide the future not only of the waterworld, but of Earth and her other colonies as well. No one can challenge the GEO on Earth, but despite the recent military buildups, its position on Poseidon remains far more tenuous.

An image of an isolated GEO Peackeeper outpost appears in the holodisplay. A large, angry crowd shouts protest slogans outside the cyclone fencing and an assault hopper is burning in the background. Soldiers and support crew battle the fire while MPs in riot gear move in formation toward the crowd of activists.

"If all Poseidon had to offer were dangerous jobs with long hours and short pay, hostile natives, and dirty politics, you might just as well go to New York. You can have your share of fun on this frontier colony world, though. The entertainment options on Poseidon are as varied as the genetic code of its colonists. What follows are some of the more popular pursuits, depending on geography and demographics.

"The big cities all have several holoplexes where you can catch the 'latest' major holo productions from Earth. They'll be a year old or more, but you won't know the difference. A ticket will run you maybe five to 10 scrip.

"You can find virtual arcades as advanced, and popular, as those in the cities of Earth. You'll know you're on the frontier when you experience some of the bootleg 'alternative' programs offered by less reputable arcades—the Justice Commission's vice goons would be crawling all over these places in some of Earth's cities. An hour in the Tank will cost you about 50 scrip.

"Smaller, isolated settlements that lack access to these entertainment luxuries often turn to traveling theater companies. There are less than half a dozen currently touring on Poseidon, and most of them are quite amateur, but the New Orleans Burlesque Company offers both sophisticated dramatic satire and outrageously ribald dancing and striptease. It's definitely worth checking out, and the Company will probably make the big-time and head back to Earth before long. Give Lola a kiss for me, she's a hell of a guy.

"Recreational drugs of all kinds, some legal, some not, are freely available in Poseidon's cities. Most are synthetic, and the most popular tend to be endorphin or narcotic-analogs. A notable exception is pharium, a powerful narcotic harvested from indigenous flora by the natives.

"Many native traditionalists use pharium in their community rituals and ceremonies, and this practice doesn't seem to cause them any harm. Newcomers find that it's highly addictive, and pharium dens scattered across the planet are usually filled to capacity with the dregs who have lost all care for anything but the drug. You do pharium the old-fashioned way: burn it in a pipe and inhale. Pharium sells for around 100 scrip a gram in the cities, a bit less in the smaller settlements. Some of the classier dens sell hand-blown glass pipes of native craftsmanship that are nice knickknacks, even if you're not a pharium user. The Justice Commission makes an occasional noise about cracking-down on the pharium trade, but they're usually more concerned with the harvesters and smugglers than the local peddlers and dens.

"Prostitution—male, female, and other—is rampant, from the largest city to the smallest town. In fact, there are probably more prostitutes in the latter, where there isn't any competition from the virtual arcades. Brothels are the most common vendor of professional companionship, though hotel and nightclub call-girls also do a thriving business. Most professional prostitutes offer their customers bodycomp access to legitimate health records, though this custom suffers in the smaller settlements and mining towns. Price varies by location and 'market value,' but 20 to 500 scrip, or more, is a good rule-of-thumb. The GEO hasn't much concerned itself with the indigenous sex trade to this point, but they are getting serious about the 'flesh merchants' who prey upon the poor and disadvantaged of Earth, importing them to Poseidon as 'entertainers.'

"Bars and nightclubs are as popular as they ever were, from the posh hang-outs of Haven, to the dirty, cramped boom-town saloons. Gambling is big on Poseidon, and drinking establishments are a common forum for this pastime. Traditional card games like poker, bridge, and gin rummy are the most popular, followed closely by craps and other dice games. Kingston is currently Poseidon's only true gambling town, and the waterfront casinos there offer many games of chance, including blackjack, bacarat, roulette, and old-fashioned slots.

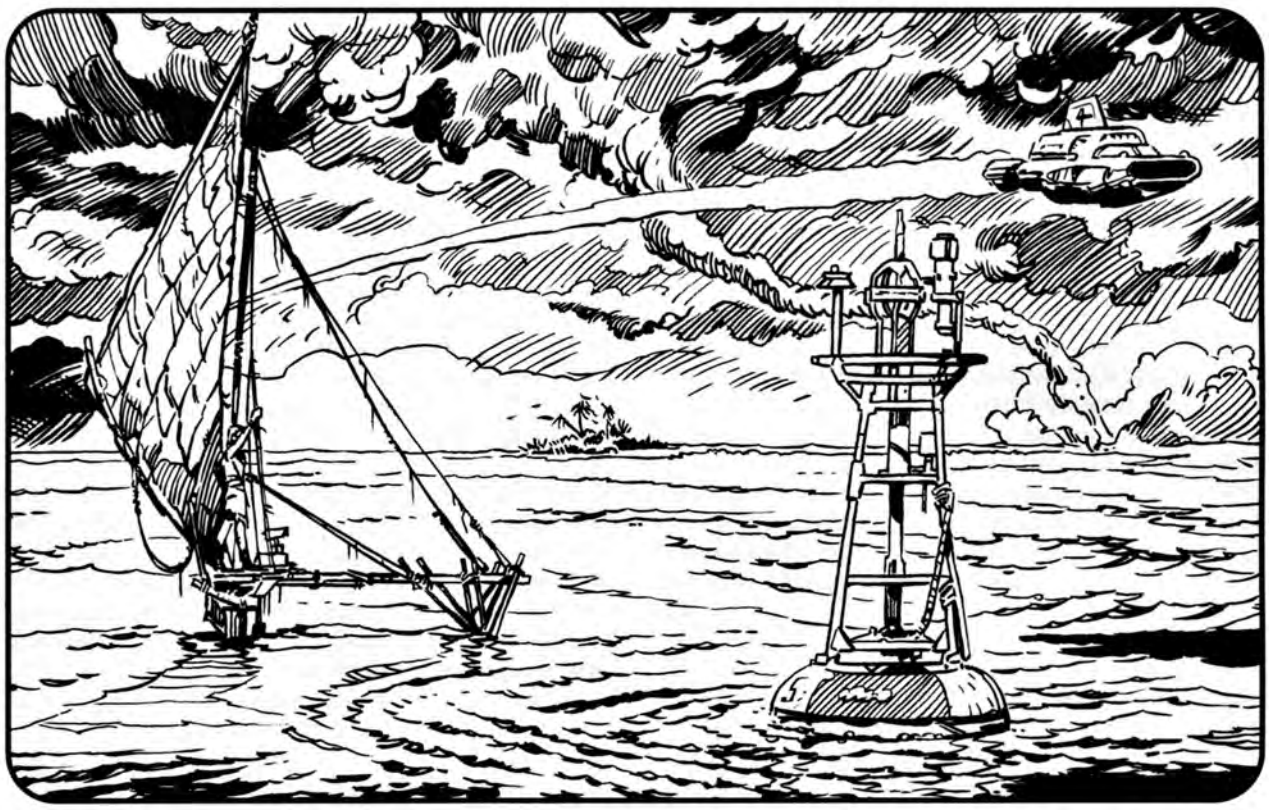
"Travel costs have obviously prevented Earth's professional sports leagues from taking root on Poseidon, but we have some nice alternatives. The dominant spectator sports on the planet are hydroshot and the annual Storm Belt 10,000.

"You've probably heard of hydroshot, as it seems to have grabbed the imaginations of the media and sports fans back on Earth. Hydroshot is a competitive team sport played between three six-person teams on a triangular, aquatic field. Players use a tubular 'launcher' to shoot the spherical puck, called a squirt, to teammates, eventually trying to score on one of the other teams' goal. A goal scored against a team earns that team a point, and the team with the lowest score at the end of the game wins. While one team has possession of the squirt, the other two are trying to get it away from them before they can score. The game moves very fast, and it's difficult to determine at any point which goal the offense will try to score against. This makes for some interesting defensive strategy: while a team doesn't want the offense to score on their goal, they do want the offense to score against the other defensive team.

"There's not a sport on Earth as action-packed and fast-paced. The rules on physical contact are more lenient than rugby or ice hockey, so it's a rough game that often degenerates into some very entertaining three-way brawls. There are 24 professional hydroshot teams on Poseidon, including six dolphin teams. The human athletes are almost exclusively full aquaforms and still can't compete with the dolphins. They've formed two separate leagues due to the dominance of the cetacean teams over the human competition. There are hydroshot facilities in most of the major settlements, and even if you're not a sports fan, you should check out a game at the floating stadium in Haven. It's a beautiful complex and a hell of an experience. A good seat for a regular-season game will run you 50 scrip.

"The other big sporting attraction on Poseidon is the Storm Belt 10,000. This is an annual endurance hydrofoil race (you guessed it, 10,000 kilometers) that runs from Haven to Wetland, straight through the Storm Belt at the height of the storm season. Participating hydrofoils aren't supposed to be armed, but otherwise, this is a race with no rules. Dozens of craft are knocked out of the race each year by their competitors before a storm or greater white even has a crack at 'em. The entry fee is 1,000 scrip, and with an average of 100 competitors, the purse is typically pretty fat. The winner usually ends up having to spend most of it on a new boat.

"The music scene on Poseidon is as varied and robust as most any city on Earth. The most original movement, of course, is the dolphin image-sound. This 'music' is made with production-quality recorders and digitizers based on the same principle as Pathfinder's implant that I told you about. You can either view the recordings in holographic format or plug it into a neural jack to experience it something like the dolphin does. And don't let the media fool you—I've jacked image-sound and it hasn't made me crazy. A number of really excellent orchestras and pop-groups perform concerts on CommCore, and it's a hell of a way to spend an evening. Jacking it live is always way better than any recording.



"The native tribal sound is also real popular right now, but if you ask me, it sucks. The stuff you find in the clubs and music stores is sell-out crap. It may seem pretty cool if you've never heard the real thing—that's why the media corps export it to Earth. Around here, no one listens to it except tourists. There are some cool groups in Kingston, though, whose traditional reggae is influenced by native tribal. Influence is one thing, mimicry something else entirely. Check out Crest if you get a chance—they're doing some rockin' stuff, and they play the Kingston waterfront clubs most every night.

"Well. Now that you've waded through this pile of download, it's time for you to come and experience Poseidon for yourself. You have a chance to see this planet at its best, before the government, the Incorporate, and mass-culture turn it into an Earth suburb. For now, Poseidon is teetering on the edge of history, and civilization is still a struggling island in a sea of wilderness. The page will turn, and the frontier will be tamed. Progress marches on. Try to live a little before it runs you down."

A final image emerges from the holoprojector. An endless blue seascape at sunset stretches from horizon to horizon, a lonely catamaran drifting lazily in the foreground. The camera zooms out as three VTOLs scream into view, bank, and disappear into the clouds.

CHARACTER CREATION

CHAPTER 02

The character creation system in **Blue Planet** is designed to help players develop realistic, well-rounded characters. There are lots of decisions and choices to make, but the system is straightforward and step-by-step guidelines are provided below. These guidelines greatly streamline the process and include page references where detailed information about each step can be found.

Players who wish to start playing right away are encouraged to choose one of the archetypes listed on pages 58–76 and allocate custom points to the skills of their choice.

1. Develop a character concept, discuss it with the game moderator, and select an appropriate character power level (see below).
2. Select a species and record the default attribute scores for that species (page 28).
3. Modify the character's attributes, using either the point-based or random system (page 33).
4. Select biomods for the character and record any changes to the character's primary and derived attributes (page 35).
5. Record the character's abilities (page 34).
6. Choose the character's aptitudes (page 37).
7. Select one origin package and two background packages for the character (page 40).
8. Choose professional training packages for the character (page 43).
9. Allocate points to the character's custom skills (page 39).
10. Consult with the game moderator and select equipment appropriate to the character and campaign (Chapter 5).

CONCEPT

As the first step in character creation, players should decide in general terms what sort of character they want to play. A character concept does not have to be long and detailed. The concept may be a short, fairly vague phrase describing the character, or a fully developed profile including things like background history, personality, and appearance. If a player wants to develop a more complete character concept, the questions in the accompanying sidebar can be used to truly flesh out the persona.

GROUP CONCEPT

Blue Planet is most enjoyable when it is shared by two or more players, in addition to the game moderator. In most games, players will likely be part of a group, and much of the enjoyment comes from the interactions of their characters. For this reason, it is usually a good idea for players to discuss their character concepts with each other and the game moderator to make sure the characters will fit well together in the kinds of stories the moderator has planned. The characters can come from any background or have different skills, jobs, or goals—in fact, they do not even have to like each other. However, the game works best when they do have some plausible, or at least interesting, reason to stick together.

POWER LEVEL AND GAME BALANCE

In **Blue Planet**—as in real life—all characters are not created equal. The fortunes of genetics, socioeconomic background, life experience, and educational or professional opportunities have a dramatic effect on characters' attributes and skills, as well as the extent to which they can take advantage of cybernetic enhancements and biotechnology. Where some players and moderators prefer this realistic diversity within their character parties, other groups prefer all characters in a campaign to begin at a similar starting point, with all characters sharing roughly the same advantages and disadvantages. To this end, **Blue Planet** provides guidelines for evaluating and controlling the power level of different characters. The moderator wanting balanced character creation can require each character to be of a certain power level. A moderator preferring a more open, realistic game can leave character power level to the player's discretion.

All characters are classified according to three power levels—everyday, exceptional, and elite—and this classification is reflected in the game mechanics as part of character creation. Each power level is described below, followed by a table that details the benefits they receive in character creation.

EVERYDAY: These are the ordinary people who represent the vast majority of the population of Earth and the Colonies.

EXCEPTIONAL: These are extraordinary and highly competent people with above-average talent and extensive training, education, and experience.

ELITE: These are the larger-than-life few who fill the privileged and powerful ranks of Poseidon's frontier society. They are handpicked from the best-of-the-best, radically modified, and extensively trained to do their jobs, and do them better than anyone else.

	Everyday	Exceptional	Elite
Attributes	0/0	3/5	6/10
Biomods	1–3 Minor	2–4 Minor, 1–2 Major	Any
Aptitudes	1/3	2/4	3/5
Custom Skills	5	10	20
Max Level	4	6	8

ATTRIBUTES: This is the number of free points the character may allocate to attributes (see page 28). The first number is used for the point system and the second is used for the random system.

BIOMODS: This indicates the appropriate range of biomods for each power level (see Chapter 6). Minor biomods sell for 10,000cs or less, while major biomods sell for more than 10,000cs.

APTITUDES: This entry lists the number of superior and strong aptitudes characters of each power level receive (see page 37). The first number indicates the character's superior aptitudes, and the second indicates the character's strong aptitudes.

CUSTOM SKILLS: This is the number of levels a player may allocate to the skills of his choice, in addition to skills acquired from training packages (see page 39).

MAX LEVEL: This entry lists the maximum level a character may gain in a skill by increasing it with custom skill points.

Players and moderators alike should use common sense when matching power level with various character roles. Though the rules allow a player to make any sort of character, it makes little sense in the context of the game to create an elite native sellout or an everyday supertrooper.

Moderators are also encouraged to mix-and-match power levels to produce the characters most appropriate to their individual campaigns. For example, a moderator who wishes to allow players to create grizzled veterans may give them elite-level custom skills, but only everyday-level attributes. Alternatively, the moderator may allow young, talented characters in their primes to take exceptional attributes and elite aptitudes, but only everyday training packages and custom skills. All of the components are interchangeable, but the moderator should always make the final determination of the combinations allowed in his game.

TWENTY QUESTIONS

- What is your character's name, sex, and age?
- Where was your character born?
- Who were your character's parents?
- Did your character have any siblings?
- What was your character's childhood like?
- What kinds of things did your character learn growing up?
- When and why did your character leave home?
- What does your character look like?
- What are your character's physical strengths and weaknesses?
- What are your character's mental strengths and weaknesses?
- What kind of training has your character received?
- How does your character earn a living?
- What most strongly motivates your character?
- What are your character's long-term goals?
- What kind of first impression does your character make on people?
- What impression do people usually have after they know your character well?
- Who are your character's closest friends?
- Does your character have a spouse or dependents?
- What traits does your character most respect in people?
- What traits does your character least respect in people?

EXAMPLE

Throughout these rules, we will use GEO Marshal Peter Church to demonstrate the conventions and mechanics for character creation, task resolution, and combat. Church is a tough, dangerous, independent man born in a Free Zone enclave. Bandits killed his father when he was very young, and this tragic experience shaped his character and motivated him to devote his life to law and order. After leaving his home, Church served in the GEO Peacekeeping Force for several years before he was recruited for the Marshal Academy.

In terms of power level, Church will clearly be an elite character. He is one of only 24 GEO Marshals on Poseidon, and he has been rigorously trained, heavily modified, and given all the authority and resources he needs to execute his duty.

CHARACTERISTICS

All characters in **Blue Planet** are described by a number of characteristics, from natural talents to capabilities learned through formal training and experience. The characteristics used in **Blue Planet** include attributes, abilities, aptitudes, and skills. These characteristics define the performance and relative capabilities of characters in terms of the game rules.

ATTRIBUTES

These characteristics measure a character's basic mental and physical capabilities. They are fundamental traits common to all animals, regardless of species. While attributes are largely determined by genetic makeup, they can also be developed through training and experience. There are eight primary attributes in **Blue Planet**, and they are organized into categories of related pairs.

PHYSIQUE	
Build	size, gross musculature, and sturdiness
Fitness	health, stamina, and physical conditioning
COORDINATION	
Agility	quickness, balance, and gross coordination
Dexterity	manual dexterity and hand-eye coordination
COGNITION	
Awareness	alertness, perception, and wits
Intellect	intelligence, memory, and reasoning
PSYCHE	
Presence	appearance, charisma, and personal appeal
Will	self-discipline and mental fortitude

Each attribute is rated by a positive or negative number, with a score of zero representing the average or norm for a mature human. Positive scores therefore represent attributes that are above average, and negative scores represent below-average attributes. This convention allows the rules to easily and intuitively model the unique attributes of the diverse species of animal life found on Earth and Poseidon. For the players, the mechanic makes it easy to distinguish between the capabilities of different character species, such as the size and physical power of a killer whale as compared to that of a pure-strain human. In terms of the game rules, attributes modify the target numbers for all related tasks (see page 109). For example, Intellect would modify the target number for a task that tests a character's reasoning or memory.

DERIVED ATTRIBUTES

Blue Planet also uses four attributes that are derived from the above primary attributes. These attributes are realistically determined by or dependent on other, more fundamental characteristics. The derived attributes are Endurance, Reflexes, Strength, and Toughness.

Endurance	stamina and staying power
Reflexes	initiative and reaction speed
Strength	overall physical power
Toughness	resistance to injury and trauma

CHARACTER SPECIES

A character's default attribute scores are based on the character's species. The following listings offer basic information about each species and their default values in each attribute, as well as any modifiers the species receives for derived attributes. These modifiers are applied after the derived attribute's base score is calculated (see page 34).

HUMAN, PURE-STRAIN (CHIMP, DARWIN, OR MONKEY)

Pure-strain humans are individuals who, for whatever reasons, have opted not to undergo even the most minor enhancements. The simplest neural jack is more than these diehard purists will accept. Chimps are usually of two kinds—those with some fanatic conviction about the sanctity of the human body or those too poor to have a choice.

Pure-strain humans are uncommon anywhere beyond Earth. The demands of space and life in the Colonies are often too much for an unmodified human and compel most who head into space to undergo at least some basic modifications. Every advantage improves one's chances and only the unwise and unprepared are unmodified.

ATTRIBUTE	BASE SCORE
Build	0
Fitness	0
Agility	0
Dexterity	0
Awareness	0
Intellect	0
Presence	0
Will	0
Endurance	+0
Reflexes	+0
Strength	+0
Toughness	+0

IN THE SERVICE OF JUSTICE

It was not starting out to be a good day. The scene that greeted Peter Church as he climbed out of his patrol hover was less than encouraging. Seven Patrol multi-fans were parked on the deck in front of the warehouse, with many edgy Patrol officers crouched behind them. A green and silver GEO VTOL darted through the air like a nervous dragonfly a hundred meters ovehead. Church spent a moment scanning the scene for his lieutenant.

Spotting a shock of red hair crouching behind a skimmer, the Marshal-in-Charge for District V scowled as he jogged across the sun-bleached plastic. The chief Patrol Officer saluted as best he could while stooped behind his vehicle. "Hey, Boss! Just in time for the fun. Looks like it's going to be an interesting morning." He started to explain, but an unfamiliar voice on the radio cut him off.

"Okay, Dillon, what you got is two options. Either these kids is leaving here in a VTOL that you're gonna put on the roof in thirty minutes, or they're goin' home in sandwich bags, understand? Now, to show our good faith, we're sendin' the youngest one out." Church raised an eyebrow.

"Kids on a field trip got grabbed off their transport when these screw heads botched some cargo job," explained the Patrol officer. "Shot the teacher dead, right in front of them. The kids, I mean."

One of the large overhead doors in the center of the warehouse began to open, and the Patrol officers all dove for cover. Church, however, remained standing, and so had a clear view of the small frightened child standing alone in the middle of the doorway. As the child looked over his shoulder and then began to run, Peter had a momentary premonition, but too late to act. Before the child had run more than a few meters, a loud crack echoed from inside the warehouse and the child's head exploded. As the sound of the gunshot disappeared into the humid sky, a part of Church's mind went with it, taking him light years and decades away.

...I, Peter Anton Church, do hereby swear to uphold the laws and edicts of the GEO. May my left arm always be raised as a shelter for the weak.

The radio spoke. "I told you, Dillon, the only way they're going home is in a hopper or in boxes. Now, either there's a hopper on the roof in 25 minutes, or we start sendin' them out, one at a bloody time!"

...May my right arm always be raised against the wicked.

Without looking around, Church reached into the open cabin of the parked Patrol hover and grabbed the autoshot from its bracket. With the weapon held loosely in his fist, he stepped around the front of the hover and strode out over the open stretch of plastic.

...I swear to defend the GEO and its citizens against all foes.

The mid-afternoon sun beat down harshly on his head as Peter bent and picked up the limp, hideous wreckage of the toddler. As he continued to walk towards the warehouse, he could feel the child's knees pressing into his chest even through his body armor. By the time he reached the door, his entire back was wet with the child's blood.

...I swear allegiance to the GEO Charter, and the Principles for which it stands.

Church brought the autoshot up, and held down the trigger. The door exploded off its track. The tough just inside the warehouse was cut from hundreds of tiny pieces of flying plastic, but that didn't prevent him from taking aim at the Marshal. His first two rounds thudded into the heavy armored vest protecting Peter's torso. The third drove white-hot irons of pain into his arm. Gritting his teeth, Church shifted the autoshot and felt it kick three times against the crook of his elbow. The gunfire left rather less of the thug than it had of the child.

...Liberty for all humankind,

Peter turned to face the stairs that led up to a row of glassed-in offices and an open conference area. A greasy-faced teenager, wearing combat fatigues and waving a pistol, came charging down the steps. When Church tossed the now-empty autoshot at him, he instinctively caught it. In one smooth motion, the Marshal drew his sidearm and fired. The autoshot clattered down the stairs, followed quickly by the punk.

...equality for all.

As the Marshal reached the top of the stairs, he quickly noticed several things. There were two people guarding the children, both of whom had automatic weapons, and the bearded man glaring out of a window and yelling into a radio was almost certainly the leader. As one of the guards raised his weapon, Church dove across the hallway into an empty office.

...I dedicate my mind to the search for truth, my body for the defense of the GEO.

The guard came cautiously around the corner into the office, searching for the madman who had managed to get past two of his companions. Spying a child's shoe sticking out from behind a desk, he fired a burst into the furniture hoping to hit the Marshal behind it. Church had a different idea, however, as he stepped from the utility closet and dragged his combat knife across the gunman's throat, releasing a red arterial spray. Peter stepped around the desk and retrieved his small, limp companion.

...I dedicate my heart to the preservation of life.

He stepped into the hall and strode purposefully towards the open conference area at the end. He could hear the frightened cries of the children. Rounding the corner, Church saw the last guard beyond a huddled mass of pre-schoolers. Hearing the Marshal's footsteps, the guard looked up. Peter promptly shot him in the chest, sending him crashing into the wall behind. Church turned towards the bearded man with the radio, stepping between him and the children. His wounded arm screaming in agony, he nevertheless held aloft his grisly burden.

"I am Peter Church, GEO Marshal. I accuse you of kidnapping, murder, attempted murder, assault on a GEO officer, and conspiracy to commit same. I find you guilty. Your sentence is death."

The man dropped the now-quiet radio and went for his weapon. Church brought up his sidearm and slowly, deliberately, shot the bastard in the forehead. As the body toppled backwards and slid down the wall, Church set the dead child gently on the floor.

...and I dedicate my soul to the service of justice.

HUMAN, MODIFIED (MODI, BUG)

Modified humans are those who did not undergo any extensive genetic redesign prior to birth, but have been modified or enhanced subsequently. The most common alterations include neural jacks and simple but obvious cosmetic changes. More extreme modifications include cybernetic replacement, tissue grafts and bud-implants, biochemical alteration, or even culture-grown limbs and accessory organs, such as gills. Modi's are born as pure-strain humans, so their default attribute values are the same as for unmodified characters. A modi character's primary and derived attributes, however, will vary depending on the biomods the player chooses for the character (see Chapter 6).

ATTRIBUTE	BASE SCORE
Build	0
Fitness	0
Agility	0
Dexterity	0
Awareness	0
Intellect	0
Presence	0
Will	0
Endurance	+0
Reflexes	+0
Strength	+0
Toughness	+0

HUMAN, GENETIC REDESIGN (GENIE)

Genies are the offspring of radical artificial evolution, created one trait at a time using the standard human genome as a basic framework. Artificial enzymes and viruses are used to recombine human, non-human, and custom codes into a potentially limitless variety of viable human organisms. Traditionally, the first modifications were relatively simple—bigger, faster athletes and stronger, tougher soldiers. In recent years, Incorporate competition has led to the creation of entirely alien forms—some beautiful, some horrid, most built for function and necessity. There are four-armed, hollow-boned spacers built for life in the Belt and sleek, gilled aquaforms, the descendants of the first colonists of Poseidon. Additional information about genie characters can be found on page 170.

ATTRIBUTE	BASE SCORE				
	Aquaform	Cat	Silva	Spacer	Transhuman
Build	0	2	3	–1	1
Fitness	1	0	2	1	1
Agility	0	2	0	1	0
Dexterity	0	–1	–1	0	0
Awareness	0	0	0	0	1
Intellect	0	0	0	0	0
Presence	0	–1	–1	0	1
Will	0	0	0	0	0
Endurance	+1	+0	+1	+1	+1
Reflexes	+0	+1	+0	+0	+0
Strength	+0	+0	+0	+0	+0
Toughness	+0	+0	+1	+1	+0

DOLPHIN (FIN, FLIPPER)

By far the most intelligent of the cetaceans, dolphins surpass humans in their conceptual and philosophical abilities. Clever, and possessing a sophisticated sense of humor, many dolphins actually value human company. Dolphin-human friendships are common and in some cases quite close. Dolphins are the most curious and motivated cetaceans as well, and have adapted best to the cybernetic tools developed for them. They are therefore the most likely to interact regularly with humans, becoming involved in their daily lives and activities. Further information on dolphin characters can be found on page 229.

ATTRIBUTE	BASE SCORE
Build	6
Fitness	2
Agility	–1
Dexterity	–12
Awareness	2
Intellect	–1
Presence	0
Will	0
Endurance	+3
Reflexes	+0
Strength	+0
Toughness	+0

KILLER WHALE (ORCA)

Slow-witted and methodical, these behemoths are still uniquely important players in life on Poseidon. Their natural talents coupled with their increased mental ability have made these creatures vital elements in GEO military and Incorporate security forces. Their sheer bulk and one-track minds make them formidable soldiers and guards, effective against all but the largest aquatic lifeforms and the most determined humans. Obviously limited as player characters by their greater size and lesser intelligence, these creatures may intimidate many game moderators. It is recommended that only experienced and open-minded gamers include killer whales as player characters in their **Blue Planet** adventures. For further information on orca characters, see page 232.

ATTRIBUTE	BASE SCORE
Build	12
Fitness	3
Agility	–1
Dexterity	–15
Awareness	1
Intellect	–2
Presence	0
Will	1
Endurance	+3
Reflexes	+1
Strength	+0
Toughness	+0

MODIFYING ATTRIBUTES

Once a player has chosen a character's species, the player may also choose to modify the character's attributes from these default levels. **Blue Planet** offers two options for doing so. Attributes may never be increased or decreased by more than three levels from the species norm, except through biomods and genetic engineering.

POINT SYSTEM

Using this method, players have complete control over their characters' attributes. Players have a number of points to spend based on their character's power level—zero for everyday characters, three for exceptional, and six for elite (see page 27). The cost to increase an attribute above its default value is listed in the table below. Reducing an attribute below the default value provides the player with additional points to spend on other attributes. These extra points are also provided in the table.

LEVEL	CHARACTER POINTS
–3	–4
–2	–2
–1	–1
0	0
+1	1
+2	2
+3	4

For example, it would cost one point to increase an attribute one level above its default value, and two points to increase it two levels above its default value. Likewise, the player would receive four extra points for decreasing an attribute three levels below its default value. Players should choose the desired values for their characters' attributes by spending their character points, then enter these values in the appropriate space on their character worksheets.

RANDOM SYSTEM

Using this method, a character's attributes are determined by a combination of the player's decisions and genetic chance. A player may allocate points to each attribute he wishes to advantage. The number of points allocated to advantage an attribute is considered the target number for a one-time roll. The player then rolls three 10-sided dice, and each die that rolls equal to or less than the target number represents a one-level *increase* in the attribute.

Players receive a number of points to allocate to advantaged attributes based on their character's power level—zero for everyday characters, five for exceptional, and 10 for elite (see page 27). Any additional points allocated to advantaged attributes must be matched by points used to disadvantage other attributes. Disadvantaging works just like advantaging, except that every die that rolls equal to or less than the target number represents a one-level *decrease* in the attribute. Players may spread the points for disadvantages among as many attributes as they like, but no attribute may be advantaged and disadvantaged.

EXAMPLE

Church is a modified human, so all of his attributes default to 0. We decide to use the random method to alter these base attribute scores. As an elite character, we receive 10 points to allocate to advantaged attributes. First, we decide to advantage Church's Awareness, allocating 6 points to that attribute. We roll three dice, getting 8, 6, and 1. The 6 and 1 are equal to or less than the target number of 6, so Church's Awareness is increased to 2. We also elect to advantage Church's Presence and Will, allocating three points to each. For Presence, we roll 5, 5, and 2, so Church's Presence increases to 1. For Will, we roll 10, 8, and 3, so Church's Will also increases to 1.

Church is an elite character and we spent 12 points to advantage his attributes, so two points must be allocated to disadvantages. We want to minimize the chances of Church having a below-average attribute, so we allocate one point to disadvantage his Build and one point to disadvantage his Intellect. Crossing our fingers, we roll 9, 6, and 3 for Church's Build, and 7, 7, and 2 for his Intellect. None of the results were equal to or less than 1, so Church's Build and Intellect remain unchanged.

Once the player has recorded the values of the character's primary attributes, he should determine the character's derived attributes. Players should also remember to modify the derived attributes by any bonuses or penalties indicated by the character's species.

Endurance is determined by averaging the character's Fitness and Will. **Reflexes** is the average of Agility and Awareness, and **Strength** is the average of Build and Fitness. All results are rounded to zero. This means that positive totals and rounded down and negative totals are rounded up—toward zero in both cases.

To determine a character's **Toughness**, consult the following table and find the range in the left column that corresponds to the character's Build and Fitness. The corresponding number in the right column is the character's Toughness.

Build + Fitness	Toughness
–3 to –6	–1
–2 to 1	0
2 to 5	1
6 to 9	2
10 to 13	3
14 to 17	4
18 to 21	5

ABILITIES

A character's abilities are the traits and talents inherent to the character's species. Specific abilities are listed below for each species.

HUMAN ABILITIES

Climbing Humans began their evolution in the trees and still remain quite skilled at climbing. Human characters can climb at a rate determined by the grade and nature of the surface being scaled. Though a character will seldom be able to climb faster than his scramble pace (see below), the actual rate is uniquely dependent on the type of climb and is left to the game moderator's discretion.

Most frequently, a climb can be resolved with an attribute roll (see page 110), and the character's action value can be used to modify the rate. Of course, if the player scores a very low action value, the game moderator may decide that there has been an equipment malfunction, or that the character has lost his hold and is sliding or beginning to fall. Only the most precarious of situations should warrant a character plummeting to certain death on the basis of a single dice roll.

The target number for a short climb should typically be based on the character's Agility, while an extended climb might test the character's Endurance. The game moderator should apply a bonus or penalty based on the difficulty of the climb, equipment available, environmental conditions, and other situational factors. The Mountaineering skill can also be used to modify the difficulty of a climb, or to allow the character to climb a surface that would be impossible without specialized training and gear.

Jumping Though certainly not as adept as some other species, humans are pretty good jumpers. There are three general types of jumps.

Vertical: A human character can make a vertical jump of a number of centimeters equal to 60 + (15 x Agility).

Standing: A human character may jump horizontally from a standing position a number of centimeters equal to 100 + (25 x character Agility).

Running: A human character must sprint for at least one action to perform a running jump. The character may jump horizontally a number of meters equal to 5 + Agility.

Note that negative Agility scores will result in jumps of less than the average human base distances.

In appropriately tense situations, the game moderator may allow the player to make a task roll against Agility to determine whether a character jumped a little bit more or less than this average. Remember, however, that a given jump will rarely deviate significantly from this norm, except in cases of mishap, such as when a character stumbles or falls.

Language Humans' linguistic abilities are unique among all the species of Earth. Every human character should be considered fluent in the verbal and usually the written expression of his native language. A human character should take a skill level in his native language or languages equal to 5 + (character Intellect). Characters must learn additional languages through specific training.

Movement Humans are capable of a wide range of mobility in a variety of different environments.

Land: Like all land animals, humans are capable of moving about on land at varying rates. For game purposes, all humans have a normal walking pace of six kilometers per hour, and can run at a pace of 15 kilometers per hour for a number of minutes equal to 50 + (15 x Endurance). In addition, there are three paces used to describe human movement rates during action sequences (see page 110).

PACE	MOVEMENT RATE
Crawl	1 meter per action
Scramble	5 meters per action
Sprint	10 meters per action

Aquatic: Though not as well adapted to the water as other species, humans are nonetheless able swimmers. Human characters can swim at a base rate of one meter per action. Due to their extensive adaptations, aquaform characters can swim at a rate of two meters per action.

Senses All human characters in **Blue Planet** have the following senses. The player determines the value of each sense individually, but they must average to a maximum of the character's Awareness. For example, if a player increases one of the senses one level above the character's Awareness score, he must reduce another sense by one level. Sense scores may be substituted for attribute scores during specific rolls as described below, and only at the moderator's discretion.

Chemical: This sense represents a character's sensitivity to odors and tastes. In most animals, taste and smell are biologically integrated and so are treated here as a single sense. Chemical rolls are made when a character performs a task based on his ability to notice or distinguish scents or flavors.

Hearing: This sense describes a character's natural ability to detect and interpret sounds. Hearing rolls are made whenever a character tries to perform a task that relies on his sensitivity to sound.

Intuition: This sense describes some characters' uncanny sensitivity to their environment that makes them feel like they are being watched, or allows them to identify who is on the other end of an incoming call before answering it. Intuition rolls are rarely made and then only at the discretion of the game moderator. However, in the right circumstances, they can be a life-saver.

Touch: This sense describes a character's sensitivity to tactile pressure. Touch rolls are made when a character is attempting to determine something about his environment using the pressure sensitivity of his skin or eardrums.

Vision: This sense is a representation of how well a character can see. This does not relate to how observant a character is, only how well his eyes function. Vision rolls are made when a character is attempting to identify something at a distance, is looking for something in particular, or is trying to see in poor conditions.

Throwing Humans' opposable thumbs, articulated limbs, and innate coordination allow them to throw small objects considerable distances. A human character can throw a one-kilogram object a number of meters equal to 35 + (10 x Strength). The game moderator should reduce this range considerably for heavier or unwieldy objects. Specific training in Throwing skill is necessary to throw objects with consistent accuracy.

MODI ABILITIES

Modi characters receive the same basic abilities as pure-strain humans. In addition, the player should select biomods suitable to his character concept (see Chapter 6). The campaign's power level will provide general guidelines for the number and type of biomods that are appropriate (see page 27). Players should also consult with their game moderator to select those modifications that are appropriate to the individual **Blue Planet** campaign.

GENIE ABILITIES

In general, genies receive the same basic abilities as pure-strain humans. Players designing genie characters should select one of the genie packages described in the Biotech chapter, starting on page 165. Players may also select specific biomods for their genie characters.

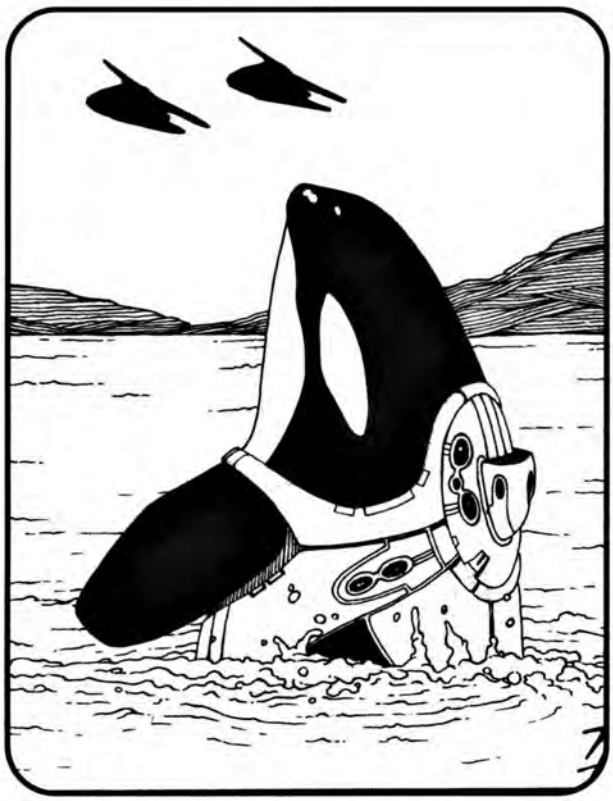
CETACEAN ABILITIES

ECHOLOCATION

All dolphins and orcas have an innate echolocation ability that grants them exceptional underwater perception. Using echolocation, a cetacean character can perceive large features of his surroundings clearly up to 800 meters and can detect small objects at a distance of 100 meters + (10 x Hearing). In addition to the size, shape, speed, direction, and distance of an object within this range, cetaceans can usually determine something of the object's texture and internal structure using echolocation.

ENVIRONMENTAL SENSITIVITY

Cetaceans enjoy a perceptual characteristic that is not adequately covered by the standard senses, though it is probably derived from them. They have a unique, instinctive sensitivity to their natural environment that human philosophers and psychologists are still struggling to explain. Many have compared it to the extreme sensitivity to the world of sound a blind person is often forced to develop. Some philosophers claim that this sensitivity is simply the result of a cetacean's lack of cognitive barriers between the subconscious and conscious mind. Whatever the explanation, a cetacean's perceptual abilities in his natural aquatic habitat are far beyond those of a human.



Navigation: Dolphins and orcas have an unerring sense of direction in familiar environments, and can navigate freely both on the water's surface and below it. In addition to the capacity to unfailingly follow a chosen compass direction, cetaceans are also able to locate land masses far beyond visual range, quickly locate and identify thermoclines, casually negotiate difficult underwater terrain, locate air pockets in a variety of geological features, and anticipate the location and movement of chosen prey animals.

Weather Sense: Cetaceans have a remarkable ability to anticipate weather patterns, including the approach of storms and significant changes in temperature. In addition, dolphins and orcas are able to accurately judge the likely severity and duration of storms and other climatic changes.

Animal Empathy: Dolphins and orcas have the ability to assess the basic emotional state of any animal with which they come into contact. In many cases, this will give them advance warning of any dangerous predators that are in the area or moving toward them. This empathic sensitivity is notoriously unreliable with respect to humans, however.

LANGUAGE Both dolphins and orcas have highly developed languages. Characters of both species receive a default score in their native language (Dolphin or Orca) equal to 6 + Intellect.

MOVEMENT While cetaceans lost the ability to move about on land when their ancestors returned to the seas 50 million years ago, they are highly mobile within their natural marine habitats.

Dolphins: Unlike humans, dolphins are genetically adapted to aquatic activity. For a dolphin, swimming is akin to the basic forms of terrestrial movement for human characters and is therefore much faster and more efficient. All dolphins have an innate Aquatics skill of 10. A dolphin character's swimming rate is 12 meters per action.

Orcas: Killer whales also have a natural skill level of 10 in Aquatics. Orca characters are significantly faster than dolphins, however, and can swim 14 meters per action.

JUMPING Cetaceans are fairly good jumpers provided they are able to build up some speed prior to leaving the water. To use this ability, a cetacean must swim at top speed for at least one action. A cetacean can jump a vertical or horizontal distance of 5 meters + Agility.

In appropriately tense situations, the game moderator may allow the player to make a task roll against Agility to determine whether a character jumped a little bit more or less than this average. Remember, however, that a given jump will rarely deviate significantly from this norm, except in cases of mishap.

NATURAL DEFENSES Cetaceans are far less dependent upon artificial weapons than humans, having more effective natural capabilities to defend themselves. To use these natural attacks in combat, cetacean characters make an Agility roll rather than a roll against a Close Combat skill.

Dolphins

Bite: A dolphin's wide, powerful jaws are lined with small, sharp teeth and may be used as a formidable weapon.

Damage Rating Strength + 1

Ram: One of the dolphin's most important natural weapons is the ability to charge at high speed and ram vulnerable areas of a target's body. To use this form of attack, a dolphin must swim at top speed for at least one action.

Damage Rating Build + 1

Orcas

Bite: A killer whale's bite is the most destructive and powerful of any extant terrestrial species, including great whites.

Damage Rating Strength + 1

Ram: Because of their increased physical power and size, a killer whale's ramming attack is far more devastating than a dolphin's. Like a dolphin, an orca must swim at top speed for at least one action and make a successful Agility roll to use this attack.

Damage Rating Build + 1

SENSES Cetacean characters have the same senses as those listed for humans, with a few notable differences. First, they have no sense of smell. A cetacean's chemical sense is limited to the sense of taste. Second, a cetacean's hearing is much broader and more sensitive than a human's. All cetaceans receive a +3 bonus to this sense. Finally, a dolphin's unique cognitive abilities are represented by a +2 bonus to Intuition. As an indication of their more methodical mental processes, orcas receive only a +1 bonus to Intuition. At the game moderator's discretion, this score may be used in place of Intellect as the controlling attribute for appropriate mental tasks.

BIOMODS Cetaceans may select certain appropriate biomods, but are subject to the same restrictions and guidelines that apply to human characters. In addition, the cost of all biomods is doubled for these characters.

EXAMPLE

To determine Church's abilities, the first thing we need to do is select his biomods. Those that will directly affect his attributes include accelerated neurons, immunological symbiote, myo-skeletal enhancement, and multiglands. After adjusting for these biomods, Church's final attribute scores are as follows:

Agility 1
Awareness 2
Build 2
Dexterity 1
Fitness 2
Intellect 0
Presence 0
Will 2

Endurance 3
Reflexes 2
Strength 2
Toughness 1

The Marshal can climb at a rate equal to his scramble pace. He can jump 75 centimeters vertically, 125 centimeters laterally, and six meters with a running start. For his native language, Church has English 5. He can run at 15 kilometers per hour for 95 minutes. The Marshal can swim one meter per action, and can throw a one-kilogram object up to 55 meters. Finally, we need to determine Church's senses. He has Awareness 2, so his senses must average to 2. We decide on Chemical 1, Hearing 2, Intuition 3, Touch 1, and Vision 3.

APTITUDES

A character's inherent ability, talent, and proficiency in distinct areas of knowledge and skill are represented by aptitudes. Formal training and experience can only take a character so far, and some characters will simply be more talented than others in specific areas of knowledge and ability. Players should note that aptitudes are fixed during character creation, and can never be altered during the course of the campaign. Characters will have many opportunities to improve their skills and learn new ones, develop their attributes, and acquire new biomodifications, but the natural ability represented by aptitudes will never change. Players should therefore assign their aptitudes to those areas in which they want their characters to truly excel.

Aptitudes are rated as average, strong, or superior, and determine the number of dice a player rolls when using skills associated with that aptitude. During character creation, players choose a number of superior and strong aptitudes determined by their characters' power level (see page 27). Everyday characters receive one superior and three strong aptitudes, exceptional characters get two superior and four strong aptitudes, and elite characters receive three superior and five strong aptitudes. All of a character's other aptitudes default to average. Each aptitude's level should be recorded in the appropriate space on the primary character sheet.

APTITUDE	DICE POOL
Average	1
Strong	2
Superior	3

EXAMPLE

Peter Church is a GEO Marshal, with a background in law enforcement and the military. He grew up in a Free Zone enclave, and that experience also helped mold his talents and proficiencies. For Church's superior aptitudes, we choose Firearms, Close Combat, and Survival. We choose Athletics, Military Weapons, Stealth, Tech, and Vehicles as his strong aptitudes. All other aptitudes default to average. These choices are a good match with Church's background, and they'll give him an edge in executing his duties on Poseidon's frontier.

SKILLS

A character's learned abilities are represented by skills. Skills are rated on a scale of 0 to 10, and determine the base target number for a skilled task (see page 109). The following table offers a qualitative evaluation of a character's training and experience at different skill levels. Note, however, that a character's actual effectiveness or ability will be determined by the combination of attribute, aptitude, and skill.

LEVEL	TRAINING
0	None
1–2	Basic
3–4	Intermediate
5–6	Advanced
7–8	Specialized
9–10	Elite

The table on the following page lists the skills available in **Blue Planet**, organized by the aptitudes with which they are associated.

APTITUDES	SKILLS
Administration	Bureaucracy, Economics, Law, Management
Agriculture	Animal Husbandry, Aquaculture, Farming, Hydroponics
Athletics	Aquatics, Archery, Freefall, Parachuting, Sports, Throwing
Close Combat	Armed Combat, Unarmed Combat
Command	Leadership, Logistics, Strategy, Tactics
Communication	Language, Negotiation, Oration, Persuasion, Writing
Culture	Cetacean, Colonial, Earth, GEO, Incorporate, Military, Native, Spacer, Street
Fine Arts	Acting, Artisan, Dance, Music, Painting, Photography, Sculpture
Firearms	Handguns, Longarms
Human Sciences	Anthropology, Archeology, History, Politics, Theology
Life Sciences	Biochemistry, Botany, Genetics, Zoology
Medicine	First Aid, Forensic Medicine, General Medicine, Pharmacology, Psychology, Surgery, Veterinary Medicine
Military Weapons	Heavy Weapons, Gunnery
Physical Sciences	Astronomy, Chemistry, Geology, Meteorology, Physics
Stealth	Hiding, Shadowing, Sneaking
Subterfuge	Bribery, Disguise, Fast-Talk, Forgery, Lockpicking, Sleight of Hand
Survival	Fishing, Foraging, Mountaineering, Navigation, Orienteering, Tracking
Tech	Computers, Damage Control, Demolitions, Electronics, Mechanics, Remote Operation
Vehicles	Driving, Piloting, Sailing

TRAINING PACKAGES

There are a lot of skills in **Blue Planet**, and this diversity allows players to carefully model their characters' knowledge, training, and experience. To help streamline the character creation process, skills have been organized into training packages that represent the realistic acquisition of similar or related skills. The training packages allow a great deal of flexibility—players can choose diverse packages to give their characters a wide range of skills, or focus on specific groups to create characters who have developed expertise in a few chosen areas.

All characters receive one origin package, two background packages, and either three or five professional packages, based on their power level (see page 27).

Each professional package has three levels—novice, specialist, and expert—and each of these levels supercedes the one below it. In other words, the skill levels offered by the novice levels have been added into the specialist levels, and the skills offered by the specialist levels have been added into the expert levels. Players should simply choose the level they want for their characters and write down only the skills offered at that level. Each level counts as one of the five professional packages a player is allowed—novice level counts as one package, specialist counts as two packages, and expert counts as three.

For example, a player creating an exceptional or elite character could choose one expert and one specialist package, or one expert and two novice packages, or two specialist and one novice package.

Most combinations of training packages will offer levels in common or shared skills. For example, the Colonial Background package offers Colonial Culture 3, while Colonial Culture 1 is available from the novice level of the Colonization professional package. When two or more separate training packages offer a common skill, the levels should be added together to determine the character's total skill level. In the above example, a character with the Colonial Background and Novice Colonization would have Colonial Culture 4.

Players should experiment with different combinations of training packages to find the set that best represents the body of skills most appropriate to their character concept. Once players have selected their characters' training packages, they should record the value of each included skill in the appropriate space on the character sheet.

CUSTOM SKILLS

Once players have selected their characters' training packages, they may allocate points to custom skills. The number of points a character receives is determined by his power level (see page 27). Everyday characters receive five points, exceptional characters get 10 points, and elite characters receive 20 points. These points may

be allocated on a one-for-one basis to skills of the players' choosing. They can be used to gain new skills that were not offered by the chosen training packages or to improve existing skills. However, custom skill points may not be used to increase a skill above fixed levels determined by the character's power level. The maximum levels are four for everyday characters, six for exceptional characters, and eight for elite characters.

ORIGIN PACKAGES

The choice of origin indicates where a character was born and where he spent the formative years of his life. It also provides the character with a body of knowledge and skills derived from this upbringing. There are several options listed below, each giving characters unique perspective and specific experiences.

HUMAN ORIGINS

Colonial – Pioneer

These individuals are born into one of the hundreds of colonial efforts on Poseidon that have been established since Recontact. Whether it is a small outpost or a large, established enclave, these people come from families trying to tame a new world for humanity.

Aquaculture 1, Aquatics 1, Colonial Culture 3, Driving 1, Farming 1, Fishing 1, Native Culture 1, Piloting 1

Colonial – Urban

Characters with this background grew up in one of the major colonial settlements on Poseidon. They may come from the narrow streets of Haven, the canals of Kingston, or the cliffside dwellings of Second Try.

Aquatics 1, Bureaucracy 1, Colonial Culture 3, Computers 1, Driving 1, GEO Culture 1, Incorporate Culture 1, Piloting 1

Earth Orbit

Born among the teeming orbitals circling Earth, a character with this origin is often of the Incorporate or indentured to them.

Computers 1, Damage Control 1, Earth Culture 3, Electronics 1, Freefall 3, Incorporate Culture 1

Free Zone – Enclave

Characters raised in the high-tech enclaves of Earth's Free Zones typically have solid technical and agricultural skills.

Computers 1, Driving 2, Earth Culture 3, Electronics 1, Farming 1, Foraging 1, Mechanics 1

Free Zone – Wasteland

In the wake of the Blight, vast areas of the Earth's surface remain depopulated and lawless. From the Balkan Peninsula to Central America, characters who grew up in the Free Zone wastelands likely spent most of their time running from—or with—the bandit gangs and petty warlords who dominate these miserable, poverty-stricken regions.

Driving 2, Earth Culture 3, First Aid 1, Foraging 1, Longarms 1, Orienteering 1, Tracking 1

GEO

These characters are born to parents who are officials, bureaucrats, or dependents of the GEO. Most have lived in many different places throughout Earth and the Colonies, and all are well educated and enriched by life experience.

Bureaucracy 1, Computers 1, Earth Culture 3, GEO Culture 3, Language 1, Politics 1

Incorporate

These characters are citizens of one of the major Incorporated states. Expected to work for their parent companies as adults, such characters enjoy a relatively high standard of living and good training.

Bureaucracy 1, Computers 1, Earth Culture 2, Economics 1, Incorporate Culture 3, Negotiation 1, Persuasion 1

Luna

Tall and graceful, many Lunars are employed by the Incorporate but fiercely maintain their independence.

Computers 1, Damage Control 1, Driving 2, Earth Culture 2, Freefall 1, Spacer Culture 3

Mars Colony

Martians are the sons and daughters of terraforming colony crews and are born of tough and rugged stock.

Computers 1, Damage Control 1, Driving 2, Electronics 1, Mechanics 1, Piloting 1, Spacer Culture 3

Native

Whether these characters have embraced the new culture and technology imported from Earth or have maintained their traditional lifestyles, they are truly the children of Poseidon. Heavily modified aquaforms, these individuals are rugged and skilled in survival. They also possess a deep understanding of the nature of the planet that no offworlder could ever gain, a nature of which the natives have become an integral part.

Aquaculture 1, Aquatics 2, Colonial Culture 2, Fishing 1, Native Culture 3, Sailing 1

Urban
Though most of Earth's great metropolitan centers suffered terribly during the Blight Years, the sprawling cityscapes are still home to millions of people.

Bureaucracy 1, Computers 1, Driving 2, Earth Culture 5, Persuasion 1

HYBRID ORIGINS
Though hybrid characters may have any of the above origin packages, there are two origin packages unique to Silvas and Cats.

Reservation
The expansive hybrid reservation in central Africa offers a severe life of hard work and hardship, but one of the few in which hybrids seem to truly find peace.

Driving 1, Earth Culture 3, Foraging 1, GEO Culture 2, Mechanics 1, Orienteering 1, Tracking 1

GEO
Almost a tradition among their people, many hybrids enter GEO service at a very early age. Such characters enjoy unique benefits and opportunities, but demanding obligations and duties as well.

Armed Combat 1, Earth Culture 1, GEO Culture 3, Longarms 1, Military Culture 2, Throwing 1, Unarmed Combat 1

CETACEAN ORIGINS
Colonial
Thousands of cetaceans have followed the waves of human colonists to Poseidon and have made themselves valuable and respected members of the colonization effort.

Cetacean Culture 3, Colonial Culture 2, Language (Interspec) 3, Remote Operation 2

Earth – Coastal/Resident
Coastal dolphins and resident orcas live in large social groups, usually near human population centers. They tend to have more educational and professional opportunities than their more feral counterparts and enjoy a more stable role in the human world.

Cetacean Culture 3, Earth Culture 1, Language (Interspec) 5, Remote Operation 1

Earth – Oceanic/Transient
Oceanic dolphins and transient killer whales live in small groups, and usually have very little contact with human civilization. Their lifestyles are closer to their primal ancestors, though some may spend time near human population centers to take advantage of educational or professional opportunities.

Botany 1, Cetacean Culture 3, Earth Culture 1, Foraging 1, Language (Interspec) 3, Zoology 1

Incorporate
Hydrospan is almost completely owned and staffed by cetaceans, and many other Incorporate states employ cetaceans as well. While exploitation and discrimination are widespread, many Incorporate cetaceans enjoy unparalleled standards of living and opportunities.

Cetacean Culture 3, Incorporate Culture 2, Language (Interspec) 4, Remote Operation 1

Native
Some 500 cetaceans accompanied the Athena Project colonists to Poseidon, and during the Abandonment they were key to the colony's survival. Over a hundred years later, the descendants of the original cetacean colonists are among the most respected and valuable members of most native communities.

Cetacean Culture 2, Language (Interspec) 5, Native Culture 3

BACKGROUND PACKAGES
Background packages help define the general history of the character prior to his first roleplayed adventure. The options provided are meant to provide a basic understanding of the circumstances that helped form a character's fundamental personality, abilities, and interests. Players should choose two of the following background packages. However, a player may not choose the same package twice.

All background packages are equally appropriate for human, hybrid, or cetacean characters. However, cetacean characters should typically substitute Remote Operation for any levels given in Driving, Piloting, or Sailing. In addition, levels in Aquatics may be converted to extra custom skill levels on a one-for-one basis.

COLONIAL
Characters with this background have been on Poseidon for several years. They have learned something of the frontier society's customs and traditions, and have picked up a few waterworld survival tricks along the way.

Aquatics 2, Cetacean Culture 1, Colonial Culture 3, Driving 1, GEO Culture 1, Native Culture 1, Piloting 1

GEO
Vast and powerful, the GEO has been Earth's world government since the early Blight Years. The organization employs millions of people across Earth and the Colonies, offering good educational and professional opportunities to its personnel.

Bureaucracy 2, Computers 1, GEO Culture 3, History 1, Incorporate Culture 1, Language 1, Politics 1

INCORPORATE
In 2199, the Incorporate states dominate the economic arenas of Earth and the Colonies. Even low-level managers enjoy good education, competitive salaries, and ample opportunities for professional advancement.

Bureaucracy 2, Computers 1, Economics 1, Incorporate Culture 3, Language 1, Management 1, Negotiation 1

INDEPENDENT
As a result of any number of circumstances, the character was forced to become self-reliant at a very early age. Perhaps the character was orphaned or his family simply wasn't around very often to look after him. The character may suffer some deep emotional scars, but he may also simply be self-sufficient and responsible.

Computers 1, Culture 2, Driving 2, Economics 2, Negotiation 2, Persuasion 1

NATIVE
For thousands of native colonists living in settlements scattered across Poseidon, the waterworld is the only home they have ever known. Whether a fisherman in an isolated settlement or a poor laborer living in Haven's projects, the natives' intimacy with Poseidon is impossible for any newcomer to share.

Aquaculture 1, Aquatics 1, Colonial Culture 1, Fishing 1, Native Culture 2, Navigation 1, Orienteering 1, Sailing 2

SPACE
Millions of humans make their living among Earth's orbital habitats, Luna, Mars Colony, or the asteroid belts of both settled star systems. These individuals possess extensive technical skills and an intimate familiarity with their dangerous environment.

Astronomy 1, Computers 1, Damage Control 1, Electronics 1, Freefall 2, Mechanics 1, Piloting 1, Spacer Culture 2

STREET
This background is one of desperate, dangerous life in sprawling urban zones. Likely to have experienced bitter violence and hard lessons, a character with this background knows the ins and outs of life in the guts of the city.

Fast-Talk 2, Hiding 1, Law 1, Persuasion 1, Sneaking 1, Street Culture 3, Unarmed Combat 1

RURAL
This package indicates the character has extended experience with life in undeveloped or non-urban environments. His understanding of the ways of life beyond major metropolitan centers is an advantage there, but in urban regions, the character is out of his element.

Animal Husbandry 2, Botany 1, Driving 2, Farming 2, Mechanics 1, Orienteering 1, Zoology 1

UNIVERSITY
This background represents the basic skills acquired through a general liberal arts education. While these skills cover only the first year or two at a major university, many students go on to more specialized studies, and the acquisition of these skills is covered by the professional training packages described below.

Computers 1, Earth Culture 2, History 1, Language 3, Politics 1, Writing 2

PROFESSIONAL PACKAGES
These packages represent the character's professional training and experience. On Poseidon, these selections represent a way of life more often than just simple employment. **Blue Planet** is set on an alien world, one that is often savage and dangerous, a frontier colony that humanity has yet to tame. Accordingly, every person is judged by what he can do and what he can offer. On Poseidon, skill and ability count for a lot more than good looks and manners. The player's choice of professional training packages will determine the character's place in the world of **Blue Planet**, and will dictate to a significant extent his status in its frontier society.

ADMINISTRATION
The wheels of government are turned by functionaries of all levels, abilities, and motivations. Whether elected, appointed or hired, administrators make policy decisions and manage the massive bureaucracies of the GEO and the Incorporate.

Novice
Bureaucracy 1, Computers 1, Economics 1, GEO Culture 1, Incorporate Culture 1, Language 3, Law 1, Leadership 1, Logistics 1, Management 1, Negotiation 1, Oration 1, Persuasion 1, Politics 1, Writing 1

Specialist
Bureaucracy 2, Computers 1, Economics 2, GEO Culture 2, Incorporate Culture 2, Language 5, Law 2, Leadership 2, Logistics 2, Management 2, Negotiation 2, Oration 2, Persuasion 2, Politics 2, Writing 2

Expert
Bureaucracy 3, Computers 2, Economics 3, GEO Culture 2, Incorporate Culture 2, Language 5, Language 3, Law 3, Leadership 3, Logistics 3, Management 3, Negotiation 3, Oration 3, Persuasion 3, Politics 3, Writing 3.

ARTS AND ENTERTAINMENT
Entertainment is one of the fastest growing industries on Poseidon. Miners and prospectors in town between excursions, scientists tired of collecting specimens, soldiers on leave—sometimes it seems like everyone is trying to escape the day-to-day for a while. And, as is the case in most frontier societies, there are always folks willing to help them. The high demand for entertainment on Poseidon doesn't mean that every two-bit crooner with a guitar is rolling in stock options. Poseidon has its share of street-corner musicians and starry-eyed dreamers hocking their underwear to pay for another demo recording.

Novice
Computers 1, Earth Culture 2, Negotiation 1, Persuasion 1. Special: choose one Fine Arts skill at level 5, and two others at level 3.

Specialist
Computers 2, Culture 2, Earth Culture 3, Negotiation 2, Persuasion 2, Psychology 1. Special: choose one Fine Arts skill at level 5, and two others at level 4.

Expert (Dancer)
Acting 5, Computers 2, Culture 3, Culture 1, Dancing 7, Earth Culture 4, First Aid 2, Freefall 1, History 1, Music 5, Negotiation 3, Persuasion 3, Psychology 3, Sneaking 1

Expert (Musician)
Acting 5, Computers 3, Culture 3, Culture 1, Dancing 5, Earth Culture 4, Electronics 3, History 1, Mechanics 1, Music 7, Negotiation 3, Persuasion 3, Physics 1, Psychology 3

Expert (Fine Artist)
Anthropology 1, Archaeology 1, Computers 3, Culture 3, Culture 1, Earth Culture 4, Electronics 1, History 1, Mechanics 1, Negotiation 3, Painting 7, Persuasion 3, Photography 5, Psychology 3, Sculpture 3

ATHLETICS
Professional athletes—especially hydroshot players—are becoming more common on Poseidon. Of course, on this frontier waterworld, some measure of athletic ability is a valuable asset for people in a broad range of professional fields.

Novice
First Aid 3, General Medicine 1, Hiding 1, Pharmacology 1, Sneaking 1. Special: take three skills from Athletics at level 3.

Specialist
First Aid 4, General Medicine 2, Hiding 2, Pharmacology 2, Sneaking 2, Unarmed Combat 1. Special: take three skills from Athletics at level 4.

Expert
First Aid 5, General Medicine 3, Hiding 3, Pharmacology 3, Sneaking 3, Unarmed Combat 3. Special: take three skills from Athletics at level 5.

COLONIZATION
Since Recontact and the discovery of Long John, the GEO, the Incorporate, and countless private organizations have endeavored to make the colony as self-sufficient as possible. This effort requires a large number of civilians to establish new settlements, produce aquacultural and agricultural commodities, and keep the colony's infrastructure running smoothly.

Novice
Animal Husbandry 3, Aquaculture 3, Aquatics 1, Botany 1, Colonial Culture 1, Driving 1, Farming 3, Fishing 3, Foraging 2, Hydroponics 1, Mechanics 1, Zoology 1

Specialist
Animal Husbandry 4, Aquaculture 4, Aquatics 2, Botany 2, Bureaucracy 1, Colonial Culture 2, Driving 2, Farming 4, Fishing 4, Foraging 3, Hydroponics 3, Mechanics 2, Meteorology 2, Native Culture 1, Veterinary Medicine 1, Zoology 2

Expert
Animal Husbandry 5, Aquaculture 5, Aquatics 3, Botany 3, Bureaucracy 2, Colonial Culture 3, Driving 3, Farming 5, Fishing 5, Foraging 4, Hydroponics 5, Mechanics 3, Meteorology 3, Native Culture 2, Veterinary Medicine 2, Zoology 3

COMMERCE
The Long John rush and subsequent economic explosion has been the true driving force behind the post-Recontact colonization of Poseidon. From Incorporate boardrooms to independently owned businesses across the archipelago, business expertise is a valuable asset on the booming colony world.

Novice
Bureaucracy 1, Computers 1, Economics 2, Fast-Talk 1, Incorporate Culture 1, Law 1, Management 2, Negotiation 2, Persuasion 1, Writing 1

Specialist
Bureaucracy 2, Computers 2, Economics 3, Fast-Talk 2, Incorporate Culture 2, Law 2, Management 3, Negotiation 3, Persuasion 3, Writing 2

Expert (Executive)
Bureaucracy 3, Computers 3, Economics 4, Fast-Talk 3, GEO Culture 1, Incorporate Culture 3, Law 3, Management 4, Negotiation 4, Persuasion 4, Politics 1, Writing 3

Expert (Trader)
Bribery 1, Bureaucracy 3, Colonial Culture 3, Computers 2, Driving 3, Economics 4, Fast-Talk 3, Forgery 1, Handguns 1, Incorporate Culture 3, Law 3, Longarms 1, Management 3, Mechanics 1, Native Culture 1, Navigation 1, Negotiation 4, Orienteering 1, Persuasion 4, Piloting 1, Unarmed Combat 1, Writing 2

Expert (Commercial Pilot)
Bureaucracy 3, Colonial Culture 3, Computers 3, Damage Control 1, Driving 2, Economics 3, Electronics 2, Fast-Talk 2, Incorporate Culture 2, Law 3, Management 3, Mechanics 1, Meteorology 3, Navigation 3, Negotiation 3, Persuasion 3, Piloting 4, Writing 2

CRIME
While Poseidon isn't entirely a lawless frontier—as anyone who has had a run-in with a GEO Marshal can attest—it is certainly true that law enforcement is less consistent on the waterworld than on Earth. Crime on Poseidon is governed by a simple principle: the bigger the crime, the bigger the organization, the bigger the response. Petty crime, like burglary and armed robbery, is usually the domain of small time criminals in Poseidon's larger settlements. While crimes like piracy, smuggling, data theft, and industrial espionage are facts of life on Poseidon, they are almost exclusively the domain of powerful syndicates.

Novice
Armed Combat 1, Bribery 1, Fast-Talk 1, Handguns 1, Hiding 2, Lockpicking 1, Negotiation 1, Persuasion 1, Shadowing 2, Sneaking 2, Street Culture 1, Unarmed Combat 1

Specialist
Armed Combat 2, Bribery 3, Fast-Talk 3, Handguns 2, Hiding 3, Law 1, Lockpicking 2, Negotiation 3, Shadowing 3, Sleight of Hand 1, Sneaking 3, Street Culture 2, Unarmed Combat 2

Expert (Burglar)
Armed Combat 2, Bribery 3, Electronics 3, Fast-Talk 5, Handguns 2, Hiding 3, Law 3, Lockpicking 5, Mountaineering 1, Negotiation 3, Shadowing 3, Sleight of Hand 3, Sneaking 4, Street Culture 3, Unarmed Combat 3

Expert (Con Artist)
Acting 3, Armed Combat 2, Bribery 5, Fast-Talk 5, Forgery 3, Handguns 2, Hiding 3, Law 1, Lockpicking 2, Negotiation 5, Persuasion 5, Shadowing 3, Sleight of Hand 3, Sneaking 3, Street Culture 3, Unarmed Combat 2

Expert (Gangster)
Armed Combat 3, Bureaucracy 3, Bribery 5, Fast-Talk 3, Handguns 3, Hiding 3, Law 3, Lockpicking 2, Longarms 3, Negotiation 5, Persuasion 3, Shadowing 3, Sleight of Hand 1, Sneaking 3, Street Culture 3, Unarmed Combat 3

Expert (Thug)
Armed Combat 3, Bribery 5, Fast-Talk 3, Handguns 3, Hiding 4, Law 2, Lockpicking 3, Longarms 4, Negotiation 4, Persuasion 3, Sneaking 4, Shadowing 4, Sleight of Hand 1, Street Culture 3, Unarmed Combat 3

DIPLOMACY
In 2199, Poseidon is teetering on the brink of open conflict and political chaos. The ambassadors, consuls, and diplomatic attaches who staff the foreign service bureaucracies of the GEO, Incorporate states, and Independent nations are responsible for controlling diplomatic crises and representing their governments' interests in this charged political arena.

Novice
Bureaucracy 1, Culture 2, Fast-Talk 1, History 1, Language 3, Law 1, Negotiation 1, Oration 1, Persuasion 1, Politics 1, Psychology 1, Strategy 1, Writing 1

Specialist
Bureaucracy 2, Culture 3, Culture 1, Fast-Talk 2, History 2, Language 5, Language 3, Law 2, Negotiation 2, Oration 2, Persuasion 2, Politics 2, Psychology 2, Strategy 2, Writing 2

Expert
Bureaucracy 3, Culture 4, Culture 3, Culture 1, Fast-Talk 3, History 3, Language 5, Language 5, Language 3, Law 3, Negotiation 3, Oration 3, Persuasion 3, Politics 3, Psychology 3, Strategy 3, Writing 3

ESPIONAGE

On the violent edge of the secret war for Poseidon's future, agents and spies execute political policies through espionage, sabotage, and even assassination. Professional, corrupt, benevolent, ruthless, vindictive or powerful, people of all kinds fill these secretive ranks.

Novice

Bribery 1, Computers 1, Culture 2, Disguise 1, Electronics 1, Fast-Talk 1, Handguns 1, Hiding 1, Lockpicking 1, Persuasion 1, Politics 1, Remote Operation 1, Shadowing 1, Sneaking 1, Unarmed Combat 1

Specialist

Bribery 2, Computers 2, Culture 3, Disguise 2, Electronics 2, Fast-Talk 2, Handguns 2, Hiding 2, Language 3, Lockpicking 2, Persuasion 2, Politics 2, Remote Operation 2, Shadowing 2, Sneaking 2, Unarmed Combat 2

Expert (Analyst)

Bureaucracy 2, Bribery 2, Computers 3, Culture 5, Culture 3, Disguise 2, Electronics 3, Fast-Talk 2, Handguns 2, Hiding 2, Language 5, Lockpicking 2, Logistics 2, Persuasion 2, Politics 3, Remote Operation 2, Shadowing 2, Sneaking 2, Strategy 2, Unarmed Combat 2, Writing 3

Expert (Operative)

Bribery 3, Computers 3, Culture 3, Culture 2, Demolitions 3, Disguise 2, Electronics 3, Fast-Talk 3, Handguns 3, Hiding 3, Language 5, Lockpicking 3, Longarms 2, Persuasion 3, Politics 2, Remote Operation 3, Shadowing 3, Sneaking 3, Unarmed Combat 3

HUMANITIES

Knowledge is power, and on Poseidon, knowledge means survival. While there is an obvious emphasis on scientific, technical, and vocational training on Poseidon, professional educators, researchers, and academics in all fields are highly valued commodities.

Novice

Computers 1, Earth Culture 1, Language 5, Writing 3. Special: choose three skills at level 3 from Fine Arts or Human Sciences.

Specialist

Bureaucracy 1, Computers 2, Earth Culture 2, Language 7, Language 3, Oration 3, Writing 5. Special: choose three skills at level 4 from Fine Arts or Human Sciences.

Expert

Bureaucracy 3, Computers 2, Earth Culture 3, Language 7, Language 5, Language 3, Oration 5, Writing 7. Special: choose one skill at level 6 and two skills at level 5 from Fine Arts or Human Sciences.

LAW ENFORCEMENT

Law enforcement on Poseidon is the responsibility of the GEO and Native Patrols, and the GEO Marshals. Chronic shortages of human and financial resources give Poseidon its reputation for rampant lawlessness, but in reality, law enforcement on the colony world is not entirely ineffective—rather, it is simply prioritized. Outlying settlements may have very little contact with official GEO law enforcement personnel. After reporting a crime in an isolated settlement, it may take several days or even weeks for Patrol personnel to show up to investigate the incident.

On the other hand, response times in major settlements, such as Haven, are typical of normal urban centers, and law enforcement in these towns is relatively reliable and efficient. And, while Marshals are usually given high-priority assignments, they are unrestricted GEO agents that have the authority to respond to any incident that draws their attention. Thus, the murder of a native in an isolated settlement like Nomad may go entirely uninvestigated, or it may result in the perpetrator being hunted by a determined Marshal who just happened to have friends in the town.

Novice

Armed Combat 1, Bureaucracy 1, Driving 1, First Aid 1, Forensic Medicine 1, Handguns 2, Law 2, Longarms 1, Persuasion 1, Remote Operation 1, Shadowing 1, Street Culture 1, Unarmed Combat 1

Specialist

Armed Combat 2, Bureaucracy 2, Driving 2, First Aid 2, Forensic Medicine 2, Handguns 3, Law 3, Longarms 2, Persuasion 2, Remote Operation 2, Shadowing 2, Street Culture 2, Unarmed Combat 2

Expert (Detective)

Armed Combat 3, Bureaucracy 3, Driving 3, First Aid 3, Forensic Medicine 3, Handguns 4, Law 5, Lockpicking 2, Longarms 2, Persuasion 4, Photography 3, Remote Operation 3, Shadowing 3, Street Culture 3, Unarmed Combat 3, Writing 2

Expert (Special Operations)

Armed Combat 3, Bureaucracy 2, Driving 2, First Aid 3, Forensic Medicine 2, Handguns 4, Heavy Weapons 3, Hiding 3, Law 3, Leadership 3, Longarms 3, Persuasion 3, Remote Operation 3, Shadowing 2, Sneaking 3, Street Culture 2, Tactics 3, Unarmed Combat 3

Expert (Undercover Officer)

Acting 3, Armed Combat 2, Bureaucracy 2, Driving 3, Fast-Talk 3, First Aid 2, Forensic Medicine 3, Handguns 4, Law 5, Lockpicking 2, Longarms 2, Persuasion 4, Photography 3, Remote Operation 3, Shadowing 3, Street Culture 3, Unarmed Combat 2

MEDICINE

The razor's edge is always a dangerous place to live, and Poseidoners can expect to get their share of nicks and cuts. Lawless mining towns, Incorporate conflict, military training accidents, industrial mishaps, and the planet's savage environment all offer ample opportunities for colonists to get themselves hurt. Doctors, nurses, EMTs, ERT medics, and military corpsmen are essential to life on the waterworld.

Novice

Biochemistry 1, Chemistry 1, First Aid 3, General Medicine 3, Pharmacology 3, Psychology 1, Surgery 1, Veterinary Medicine 1

Specialist

Biochemistry 2, Chemistry 2, Computers 1, Electronics 1, First Aid 4, General Medicine 4, Genetics 1, Mechanics 1, Pharmacology 4, Psychology 2, Surgery 3, Veterinary Medicine 2

Expert

Biochemistry 3, Chemistry 3, Computers 3, Electronics 3, First Aid 5, Forensic Medicine 1, General Medicine 5, Genetics 3, Mechanics 3, Pharmacology 5, Psychology 3, Surgery 5, Veterinary Medicine 3

MILITARY

Recontact brought with it a host of tangled and complex political issues, and outbursts of armed conflict are becoming all too common on Poseidon. Hostile natives, political insurgents, terrorists, and the increasingly tense relations between Incorporate states have driven the GEO and the Incorporate to increase their military forces on the planet.

Novice

Armed Combat 1, First Aid 1, Handguns 1, Heavy Weapons 1, Leadership 1, Longarms 2, Military Culture 1, Remote Operation 1, Strategy 1, Tactics 1, Throwing 3, Unarmed Combat 1

Specialist

Armed Combat 2, Demolitions 1, First Aid 2, Handguns 2, Heavy Weapons 2, Leadership 2, Longarms 3, Military Culture 3, Remote Operation 2, Strategy 2, Tactics 2, Throwing 4, Unarmed Combat 2

Expert (Infantry)

Armed Combat 3, Demolitions 3, First Aid 3, Foraging 1, Handguns 3, Heavy Weapons 5, Hiding 2, Leadership 3, Longarms 5, Military Culture 5, Mountaineering 1, Orienteering 3, Parachuting 3, Remote Operation 3, Sneaking 2, Strategy 3, Tactics 3, Throwing 5, Unarmed Combat 3

Expert (Marines)

Aquatics 3, Armed Combat 3, Demolitions 1, First Aid 3, Handguns 3, Heavy Weapons 5, Hiding 1, Leadership 3, Longarms 5, Military Culture 5, Navigation 1, Orienteering 1, Parachuting 2, Remote Operation 3, Sailing 3, Sneaking 1, Strategy 3, Tactics 3, Throwing 4, Unarmed Combat 3

Expert (Aerospace)

Armed Combat 2, Damage Control 1, Demolitions 1, Electronics 1, First Aid 3, Gunnery 3, Handguns 3, Heavy Weapons 2, Leadership 3, Longarms 4, Mechanics 1, Military Culture 5, Navigation 3, Parachuting 3, Piloting 5, Remote Operation 4, Strategy 3, Tactics 3, Throwing 4, Unarmed Combat 2

Expert (Navy)

Aquatics 2, Armed Combat 2, Computers 1, Damage Control 2, Demolitions 1, Driving 2, Electronics 1, First Aid 3, Gunnery 2, Handguns 2, Heavy Weapons 2, Leadership 3, Longarms 4, Mechanics 1, Military Culture 5, Navigation 2, Remote Operation 4, Sailing 3, Strategy 3, Tactics 3, Throwing 4, Unarmed Combat 2

SCIENCE

The pursuit of scientific understanding brought the first humans to Poseidon, and the planet is a wonderland for researchers in all disciplines. On a world of such scientific mystery and promise, scientists are some of the colony's most valued and prosperous professionals.

Novice

Computers 1, Remote Operation 1. Special: choose one primary field, either Physical or Life Sciences. Take each skill in that field at level 3, and each skill in the secondary field at level 1

Specialist

Bureaucracy 1, Computers 2, Mechanics 1, Remote Operation 2. Special: choose one primary field, either Physical or Life Sciences. Take each skill in that field at level 4, and each skill in the secondary field at level 2.

Expert

Bureaucracy 3, Computers 3, Mechanics 1, Remote Operation 3, Writing 3. Special: choose one primary field, either Physical or Life Sciences. Within that field, take one skill at level 7, one skill at level 6, and all others at level 5; take all skills in the secondary field at level 3.

SPACE

While Poseidon is becoming more and more self-sufficient, it still depends heavily on supplies from the Solar System, and the Long John industry remains reliant on shipment to the wealthy urban markets of Earth. The crews of the intersystem torchships may never see Poseidon except from orbit, but they are the backbone of the post-Recontact colonization effort.

Novice

Astronomy 1, Computers 1, Damage Control 1, Electronics 1, First Aid 1, Freefall 3, Hydroponics 1, Mechanics 1, Physics 1, Piloting 1, Remote Operation 1, Spacer Culture 2

Specialist

Astronomy 2, Computers 2, Damage Control 2, Electronics 2, First Aid 2, Freefall 4, Hydroponics 3, Mechanics 2, Physics 2, Piloting 2, Remote Operation 2, Spacer Culture 3

Expert

Astronomy 3, Computers 3, Damage Control 3, Electronics 3, First Aid 3, Freefall 5, Hydroponics 5, Mechanics 3, Physics 3, Piloting 3, Remote Operation 3, Spacer Culture 4

SURVIVAL
The relative scarcity of high technology, the planet's hostile climate and savage ecology, and an underdeveloped industrial sector make Poseidon an often-harsh frontier that calls for rugged and adventurous souls. Characters trained in wilderness survival skills have an important and often lucrative edge on the colony world.

Novice
Aquatics 1, Botany 1, First Aid 1, Fishing 2, Foraging 2, Hiding 1, Longarms 1, Meteorology 1, Mountaineering 2, Navigation 1, Orienteering 2, Sneaking 1, Tracking 2, Zoology 1

Specialist
Aquatics 2, Botany 2, First Aid 2, Fishing 3, Foraging 3, Hiding 2, Longarms 2, Meteorology 2, Mountaineering 3, Navigation 2, Orienteering 3, Sneaking 2, Tracking 3, Zoology 2

Expert
Aquatics 3, Botany 3, First Aid 3, Fishing 4, Foraging 5, Hiding 3, Longarms 3, Meteorology 3, Mountaineering 5, Navigation 3, Orienteering 5, Sneaking 3, Tracking 5, Zoology 3

TECHNICAL
Life on post-Recontact Poseidon is a daily challenge for technicians and engineers trying to build and maintain the colony's technological infrastructure. The scarcity of manufactured goods and replacement parts make skilled technicians some of the colony world's most valued professionals.

Novice
Computers 2, Damage Control 2, Electronics 2, Lockpicking 2, Mechanics 2, Physics 1, Remote Operation 2

Specialist
Artisan 3, Chemistry 1, Computers 3, Damage Control 3, Demolitions 1, Electronics 3, Lockpicking 3, Mechanics 3, Physics 2, Remote Operation 3

Expert
Artisan 5, Biochemistry 1, Chemistry 2, Damage Control 5, Demolitions 3, Driving 1, Genetics 1, Lockpicking 5, Physics 3, Piloting 1, Remote Operation 5. Special: take Mechanics, Electronics, or Computers at level 5, and each of the others at level 4.

CETACEAN PROFESSIONAL PACKAGES
Players with cetacean characters may use most of the professional training packages. However, the following packages have been customized specifically for cetacean characters. Except for the Whalesong package, they are intended to replace the corresponding human training packages.

COLONIZATION
Cetacean colonists are some of the most valuable resources on Poseidon, in both native and newcomer settlements. Their adaptations to the aquatic environment make them uniquely suited to a variety of marine tasks, from aquaculture to fishing.

Novice
Animal Husbandry 3, Aquaculture 3, Botany 2, Culture (Colonial or Native) 2, Electronics 1, Fishing 3, Foraging 2, Language (Interspec) 2, Mechanics 1, Meteorology 2, Remote Operation 1, Zoology 2

Specialist
Animal Husbandry 5, Aquaculture 5, Botany 3, Culture (Colonial or Native) 3, Culture (Colonial or Native) 1, Electronics 1, Fishing 4, Foraging 3, Language (Interspec) 3, Mechanics 2, Meteorology 3, Remote Operation 2, Zoology 3

Expert
Animal Husbandry 6, Aquaculture 6, Botany 4, Bureaucracy 1, Culture (Colonial or Native) 5, Culture (Colonial or Native) 3, Electronics 2, Fishing 5, Foraging 4, Language (Interspec) 4, Mechanics 3, Meteorology 5, Remote Operation 3, Zoology 4

LAW ENFORCEMENT
While somewhat rare in the Patrol and unprecedented in the Marshal Service, there are a number of cetacean personnel in the Native Patrol. Cetaceans enjoy unparalleled respect among Poseidon's natives. Cetacean law enforcement personnel are also responsible for policing the growing dolphin and orca populations on the colony world.

Novice
Bureaucracy 1, Culture (Earth, Native, or Colonial) 1, First Aid 1, Forensic Medicine 1, Hiding 1, Language (Interspec) 3, Law 3, Mechanics 1, Persuasion 1, Remote Operation 1, Shadowing 1, Sneaking 1

Specialist
Bureaucracy 2, Culture (Earth, Native, or Colonial) 2, Culture (Earth, Native, or Colonial) 1, First Aid 2, Forensic Medicine 2, Hiding 2, Language (Interspec) 4, Law 3, Persuasion 2, Remote Operation 2, Shadowing 2, Sneaking 2, Writing 1

Expert

Bureaucracy 3, Culture (Earth, Native, or Colonial) 4, Culture (Earth, Native, or Colonial) 2, First Aid 3, Forensic Medicine 3, Hiding 3, Language (Interspec) 5, Law 5, Persuasion 5, Photography 3, Remote Operation 3, Shadowing 5, Sneaking 3, Writing 2

MILITARY

Cetaceans are well represented in both the GEO and Incorporate militaries, usually serving in special marine operations units. Cetacean characters with military training have a wide range of weapons, technical, and survival skills.

Novice

Electronics 1, Gunnery 2, Hiding 1, Language (Interspec) 3, Leadership 1, Mechanics 1, Military Culture 1, Remote Operation 1, Sneaking 1, Tactics 2

Specialist

Demolitions 1, Electronics 2, Gunnery 3, Hiding 2, Language (Interspec) 4, Leadership 2, Mechanics 2, Military Culture 3, Navigation 1, Orienteering 1, Remote Operation 2, Sneaking 2, Tactics 3

Expert

Demolitions 3, Electronics 2, Gunnery 5, Hiding 3, Language (Interspec) 5, Leadership 3, Mechanics 3, Military Culture 5, Navigation 3, Orienteering 3, Remote Operation 3, Sneaking 3, Tactics 5

SURVIVAL

A century and a half after they were uplifted, cetaceans remain closer to and more in tune with their environment than even experienced and well-trained humans. As a result, cetaceans are highly sought after in a number of fields that emphasize wilderness training, including search-and-rescue and scientific exploration.

Novice

Botany 2, Electronics 1, First Aid 2, Fishing 3, Foraging 2, Hiding 1, Mechanics 1, Meteorology 2, Navigation 1, Orienteering 2, Remote Operation 1, Sneaking 1, Zoology 2

Specialist

Botany 3, Electronics 2, First Aid 3, Fishing 4, Foraging 3, Hiding 2, Mechanics 2, Meteorology 3, Navigation 2, Orienteering 3, Remote Operation 2, Sneaking 2, Zoology 3

Expert

Botany 3, Electronics 3, First Aid 4, Fishing 5, Foraging 4, Hiding 3, Mechanics 3, Meteorology 3, Navigation 3, Orienteering 4, Remote Operation 3, Sneaking 3, Zoology 3

WHALESONG MYSTICISM

While human researchers have enjoyed little success in making any sense of its enigmatic philosophy, the Church of Whalesong Theogony remains a powerful force in cetacean culture. This package represents the broad, holistic understanding and skills cultivated through whalesong mysticism.

Novice

Astronomy 1, Cetacean Culture 2, Genetics 1, Geology 1, Language (Interspec) 1, Meteorology 1, Oration 1, Persuasion 1, Psychology 1, Theology 3, Zoology 1

Specialist

Anthropology 1, Archaeology 1, Astronomy 2, Cetacean Culture 3, Genetics 3, Geology 2, Language (Interspec) 2, Meteorology 3, Oration 3, Persuasion 3, Psychology 3, Theology 5, Zoology 3

Expert

Anthropology 2, Archaeology 2, Astronomy 3, Cetacean Culture 4, Genetics 5, Geology 3, Language (Interspec) 3, Meteorology 3, Oration 5, Persuasion 5, Psychology 5, Theology 7, Zoology 5

EXAMPLE

Our next step in the character creation process is to choose the Marshal's training packages. Church was born and raised in a Free Zone enclave, so that's our choice for the origin package. For backgrounds, we choose GEO to represent Church's years in the Peacekeeping Force and Marshal Service, and Colonial to match his experience on the waterworld. For professional packages, we choose Expert Law Enforcement (Special Operations), and Specialist Military. We record the skills offered by these packages on our character worksheet and total the levels. Finally, we allocate 20 levels to custom skills by virtue of Church's elite status. We increase Aquatics, Forensic Medicine, and Street Culture by three levels, GEO Culture, Law, Persuasion, Piloting, and Shadowing by two; and Sneaking by one. The Marshal's final skill levels are as follows:

Aquatics 5, Armed Combat 5, Bureaucracy 4, Cetacean Culture 1, Colonial Culture 3, Computers 2, Demolitions 1, Driving 5, Earth Culture 3, Farming 1, First Aid 5, Foraging 1, Forensic Medicine 5, GEO Culture 6, Handguns 6, Heavy Weapons 5, Hiding 3, History 1, Incorporate Culture 1, Language (English) 5, Language (Interspec) 1, Law 5, Leadership 5, Longarms 6, Mechanics 1, Military Culture 3, Native Culture 1, Persuasion 5, Piloting 3, Politics 1, Remote Operation 5, Shadowing 4, Sneaking 4, Strategy 2, Street Culture 5, Tactics 5, Throwing 4, Unarmed Combat 5.

SKILL DESCRIPTIONS

Each skill used in **Blue Planet** is described below, organized according to the aptitude under which it falls. Note that most skills realistically cover a wide range of related tasks and areas of knowledge.

While generating their characters, players should keep in mind that the game rules encourage moderators to differentiate between simpler tasks and more difficult ones, even within the same skill. This is done with target number bonuses for easy tasks, and penalties for harder ones. This means that characters with lower skill levels will have an increasingly difficult time making skill rolls as the task penalties increase. In game terms, this helps distinguish the truly able and experienced characters from the poorly trained.

For example, the Computers skill covers such tasks as basic operation, using CommCore, upgrades, maintenance and repair, programming, hacking, and computer design and engineering. The basic operation of a computer will be possible for even unskilled users, since the game moderator should give the character a large target number bonus on such a task. Upgrading or minor repairs of a computer might be an average task, such that only professional-level characters will routinely be successful at it, and unskilled characters will not be able to do it at all. Major repairs or engineering tasks, however, will incur a significant target number penalty, so only highly skilled characters will typically succeed at them.

ADMINISTRATION

These skills cover the organization and coordination of the activities of any social, political, or commercial institution.

BUREAUCRACY

A character with this skill is familiar with the organization and procedures of bureaucratic institutions and can often find ways to improve their service and performance, or otherwise obtain services more efficiently.

ECONOMICS

This skill deals with the principles governing the production, distribution, and consumption of goods and services and with the theory and management of economies or economic systems. Characters with this skill will be able to judge the value of specific goods and services in various markets, as well as analyze current and future economic trends.

LAW

This skill gives characters knowledge and experience with the study and practice of the rules and principles governing the affairs of modern communities and enforced by GEO or Incorporate political authority.

MANAGEMENT

This skill covers the control of an institution's physical, economic, and human resources, including the ways in which they can be used most effectively.

AGRICULTURE

These skills cover the art and science of producing food crops and raising livestock, and are an increasingly valuable area of knowledge as the population of Poseidon continues to increase.

ANIMAL HUSBANDRY

This skill covers the breeding and care of domesticated livestock.

AQUACULTURE

The science of cultivating aquatic plant crops and livestock both on and under the water.

FARMING

This skill covers the cultivation of food crops in traditional terrestrial environments.

HYDROPONICS

The science of cultivating plants in nutrient solution rather than in soil. This process is especially useful for environments in which available space is an important consideration, such as orbital stations or underwater complexes.

ATHLETICS

These skills represent training in activities such as sports, exercise, and games that require physical skill and stamina.

AQUATICS

This skill covers movement and activity in aquatic environments.

ARCHERY

This skill covers the use and construction of muscle-powered missile weapons, ranging from longbows to modern compound bows.

FREEFALL

This skill represents a character's ability to function in low- and zero-g environments. Freefall skill may be used to avoid difficulty penalties to physical actions in these environments.

PARACHUTING

The skill of jumping out of aircraft with a parachute or similar device designed to slow atmospheric freefall. This skill includes training in the proper packing and maintenance of a parachute, the selection of a landing zone, and the evaluation of local weather conditions.

SPORTS
This skill must be taken individually for each sport with which the character is familiar. It represents knowledge of the rules, history, tactics, and skills of specific athletic games and contests, such as hydroshot, soccer, or baseball.

THROWING
All human characters are able to throw as a natural ability, as described on page 35. While the distance a character is capable of throwing an object is based on his arm strength, it is usually more important to determine how accurately a character throws an object. Throwing with consistent accuracy depends on use of Throwing skill.

Making an accurate throw requires a skill roll, adjusted for range by the same modifiers that are used for ranged attacks. The range categories are: Point Blank/3m, Short/6m, Medium/12m, and Long/20m+.

If the Throwing roll succeeds, assume the character has thrown the object essentially where he intended. If it fails, the game moderator should determine the amount of deviation based on the action value. The circumstances that determine the potential deviation are diverse and the moderator should use logic and the details of the location and action to describe an appropriate result. In any case, barring a critical failure, the thrown object will not typically deviate by more than half the distance of the throw.

To determine the direction of deviation from the intended target, roll a D10 and consult the following compass directions, with "north" as the direction of the throw: 1–2 N, 3 NE, 4 E, 5 SE, 6–7 S, 8 SW, 9 W, 10 NW. Obviously, this kind of detail will only be necessary in special cases, such as when the object thrown is a grenade or other explosive weapon.

CLOSE COMBAT
These skills represent several arts and disciplines of armed and unarmed combat and self-defense. See page 114 for more information on close combat.

ARMED COMBAT
This skill covers training in the use of a variety of melee weapons, including blades, nightsticks, and stun batons.

UNARMED COMBAT
Though the actual form of a character's training and ability may vary, this skill focuses on unarmed self-defense.

COMMAND
These skills represent a character's ability to manage resources and conduct operations in a military or crisis situation.

LEADERSHIP
The art of inspiring and motivating others to perform prescribed tasks and duties. In **Blue Planet**, this skill is often used to influence the willingness and enthusiasm of non-player characters to follow the direction and guidance of a player character. As with any social skills, the game moderator should feel free to modify the difficulty quite liberally according to the manner in which such an interaction is roleplayed.

LOGISTICS
This skill represents a character's ability to plan and coordinate the material supply of a military operation or similarly complex project.

STRATEGY
This skill involves planning and coordinating the operational elements of a military campaign, including the maneuver of land, air, and sea forces, as well as the deployment of orbital assets.

TACTICS
This skill involves the deployment and maneuver of individual craft or small units.

COMMUNICATION

These skills define a character's ability to interact and communicate with other people.

LANGUAGE

This skill represents the ability to communicate, in both written and verbal form, in a specific language other than a character's native tongue. This skill would also be used for Interspecies (Interspec), the combination of verbal and sign language used for unaided cetacean-human communication. This skill must be purchased independently for each language a player wishes his character to know.

NEGOTIATION

The art of subtle manipulation and calculated compromise in an effort to reach an agreement or consensus. Negotiation is distinguished from Persuasion in that it is most often concerned with commercial transactions between two or more parties. An understanding of Economics and the local Culture can improve a character's ability to use this skill successfully.

ORATION

The art of speaking powerfully and eloquently before a group of people with the intent to alter their attitudes or behavior.

PERSUASION

The art of inducing another person or persons to modify their actions or beliefs through reasoned argument or emotional and psychological appeal. As with any social skills, the game moderator should feel free to modify the difficulty quite liberally according the manner in which such an interaction is roleplayed.

WRITING

The art of constructing entertaining or meaningful written accounts and narratives.

CULTURE

These skills represent familiarity with the mores, customs, ethics, and rules of conduct of specific social and cultural communities and institutions. Each Culture skill is unique, and the following options are available.

CETACEAN

The unique social customs and traditions of genlifted dolphins and orcas.

COLONIAL

Post-Recontact colonial society and culture of Poseidon.

EARTH

The diverse social and cultural traditions found on contemporary Earth.

GEO

The activities, policies, and traditions of the Global Ecology Organization.

INCORPORATE

The customs and conventions of the Incorporated city-states.

MILITARY

The codes and traditions of the armed forces.

NATIVE

The culture and traditions of the original Athena Project colonists and their descendants.

SPACER

The culture and society of communities in orbit and the planetary colonies such as the Lunars, Martians, Belters, and Proteans.

STREET

The codes and customs of the darker side of life in any sprawling urban area.

FINE ARTS

These skills represent talent or training in a variety of art forms which emphasize aesthetic appeal.

ACTING

Training in and performance of traditional dramatic techniques, including the careful manipulation of voice and physical mannerisms in support of language.

ARTISAN

The arts of handcrafting items of practical value and high quality.

DANCE

Characters with this skill are able to perform a wide variety of traditional dances, both professionally and for personal enjoyment.

MUSIC

The art of arranging sounds so as to create a coherent and evocative composition. This skill covers both composition and ability to play a musical instrument.

PAINTING

The art of creating pictures or abstract representations in various textile mediums.

PHOTOGRAPHY

Training in the use of photographic equipment, including video and holographic recorders.

SCULPTURE
The art of shaping a three-dimensional object, figure, or design from a variety of physical media.

FIREARMS
These skills represent training in various classes of firearms. This includes loading and unloading, aiming and firing, sighting, mounting accessories, routine care and maintenance, and immediate actions necessary in the case of a misfire or jam.

HANDGUNS
This skill covers pistols and sidearms.

LONGARMS
This skill covers traditional shoulder-fired weapons such as rifles and shotguns, as well as specialized or obscure weapons such as spearguns and crossbows.

HUMAN SCIENCES
These skills represent the systematic, academic study of human behavior and society. In a time of uplifted cetaceans and recent speculations on the sentience of the aborigines, many scholars are beginning to consider how the human sciences might be applied to other thinking species.

ANTHROPOLOGY
The scientific study of the origin, behavior, and physical, social, and cultural development of human beings.

ARCHEOLOGY
The systematic recovery and study of material evidence, such as graves, buildings, tools, and pottery remaining from past civilizations and cultures.

HISTORY
The scholarly discipline concerned with the recall, recording, and analysis of past events.

POLITICS
The processes, principles, and structure of government and political institutions.

THEOLOGY
The study of the nature of the divine, religious truth, and spiritual belief systems.

LIFE SCIENCES
These skills cover the branches of science that deal with living organisms and their organization, life processes, and relationships to each other and the environment.

BIOCHEMISTRY
The study of the chemical substances and vital processes occurring in living organisms. This skill is also used extensively in the research of Long John and its applications in medicine and genetic engineering.

BOTANY
The scientific study of plants, including their taxonomy, ecology, and morphology.

GENETICS
The branch of biology that deals with heredity, especially mechanisms of hereditary transmission and variation of characteristics between similar organisms.

ZOOLOGY
The branch of biology that deals with animal life, including their structure, physiology, development, and classification.

MEDICINE
These skills cover the techniques of diagnosing, treating, or preventing disease and damage to the body and mind. There is a special "interspecies" modifier for all attempts to provide medical care for patients of a different species. A human doctor attempting to care for a cetacean receives a –2 penalty on all relevant medical rolls. A cetacean doctor treating a human patient would incur the same penalty. Differences in anatomy and physiology are only part of the basis for this modifier—communication problems are often more challenging.

FIRST AID
A character with this skill is able to administer emergency medical treatment to an injured or sick person. First Aid is used to stop bleeding, set fractured bones, stabilize a patient suffering from shock, and temporarily relieve pain.

FORENSIC MEDICINE
The branch of medicine concerned with identifying the details surrounding a death, usually in the context of a criminal investigation.

GENERAL MEDICINE
This skill covers the extended medical care a patient receives following first-aid treatment, excluding any surgical procedures.

PHARMACOLOGY
The science of drugs, including their composition, applications, and effects.

PSYCHOLOGY
The science of mental processes and behavior, including the diagnosis and treatment of mental illnesses.

SURGERY
The branch of medicine that deals with the diagnosis and treatment of injury, deformity, and disease by manual and instrumental means, often involving the replacement or removal of damaged or diseased tissue or organs.

VETERINARY MEDICINE
The medical care and treatment of animals.

MILITARY WEAPONS
These skills include the operation and maintenance of weapon systems most commonly in use by military and paramilitary organizations.

HEAVY WEAPONS
This skill covers weapons larger than longarms, such as machineguns and missile launchers. Characters firing weapons turret-mounted on vehicles use this skill, while Gunnery is required to fire integral vehicle weapons.

GUNNERY
This skill covers the operation of integral vehicle weapon systems and crew-served artillery weapons.

PHYSICAL SCIENCES
The scientific disciplines which deal with the observation, identification, description, experimental investigation, and theoretical explanation of energy and inorganic matter.

ASTRONOMY
The scientific study of matter in outer space, especially the positions, dimensions, distribution, motion, composition, energy, and evolution of celestial phenomena.

CHEMISTRY
The science of the composition, structure, properties, and reactions of matter, especially of atomic and molecular systems.

GEOLOGY
The scientific study of the origin, history, and structure of planets. Geology skill is valuable in locating and coordinating the exploitation of natural resources such as petroleum, uranium, and Long John.

METEOROLOGY
The science that deals with the phenomena of the atmosphere, especially weather and weather conditions.

PHYSICS
The science of matter and energy and of interactions between the two, grouped in traditional fields such as acoustics, optics, mechanics, thermodynamics, electromagnetism, nuclear physics, and particle physics.

STEALTH
These skills represent a character's ability to move quietly and avoid observation.

HIDING
A character with this skill is trained to use his surroundings to avoid detection. This skill gives a character knowledge of how to use camouflage to conceal his position as well as other objects.

SHADOWING
This skill represents a character's ability to follow a person unobtrusively, either on foot or in a vehicle.

SNEAKING
This skill allows a character to move silently while remaining unobserved.

SUBTERFUGE
These skills represent training in covert or criminal activities. These skills are often as important to law enforcement, counter-intelligence, and security personnel as they are to operatives and criminals themselves.

BRIBERY
A character with this skill is versed in subtle techniques of offering money or favors to a person in a position of trust or authority, with the intent to influence that person's views or actions.

DISGUISE
This skill involves the alteration of physical appearance with the intent to deceive. Disguise typically emphasizes major characteristics such as hair and eye color, complexion, apparent age, and dress. Acting is very useful in supporting and sustaining a disguise.

FAST-TALK
The art of thinking and speaking quickly and improvisationally, with the intent to deceive through bluff, bravado, or outright lies.

FORGERY
The art of replicating official documents, papers, or identification, in either hardcopy or electronic form.

LOCKPICKING
The ability to use specialized tools to open or bypass mechanical locks.

SLEIGHT OF HAND
This skill covers all feats of legerdemain, from picking a mark's pockets, to drawing from the bottom of the deck.

SURVIVAL

These skills represent survival training in wilderness environments.

FISHING

The skill of catching fish or other aquatic animals with a variety of traditional equipment, including lines, nets, trawls, and traps.

FORAGING

This skill allows a character to find food and water in the wilderness.

MOUNTAINEERING

All human characters receive Climbing as an ability, as described on page 34. Some players may also wish to have specific training or experience with techniques such as rock-climbing or mountaineering. In play, a character with training or experience in these techniques can use that knowledge to modify the difficulty of a climb. The character might know how to identify the best handholds and footholds, how to select the equipment that will be most helpful for a particular climb, how best to use that equipment, and how to maintain it properly. The difficulty of the climb itself will depend upon the physical capabilities of the character and should follow the guidelines for the climbing ability.

NAVIGATION

This skill covers the science of determining and tracking the position, course, and distance traveled of ships, submersibles, and aircraft.

ORIENTEERING

This skill allows a character to determine his location using terrain features and other landmarks, and to judge the best path or means of travel through difficult or dangerous terrain.

TRACKING

The ability to follow a mark or succession of marks left by something that has passed through a location or environment. A high action value will allow the tracker to not only follow the trail, but identify various characteristics of his quarry, including species, size, speed, and time of passage.

TECH

These skills cover the ability to operate, modify, build, and repair technological devices, including electronics, mechanical devices, computers, and telepresence remotes.

COMPUTERS

This skill represents a character's familiarity with the operation, maintenance, and repair of computer hardware and software.

DAMAGE CONTROL

This skill covers training and experience in detecting, analyzing, controlling, and combating potentially catastrophic failure of various technological systems, or serious damage to structures and vehicles. Characters with this skill can respond to a failing life-support system aboard an interplanetary torchship, control the flooding caused by a hull-breach in a deep-sea habitat, or combat an engine fire on an ocean-going vessel.

DEMOLITIONS

This skill allows a character to set explosive charges and deploy land and sea mines. The character will also be able to create homemade explosives and construct mines or explosive traps.

ELECTRONICS

This skill represents a character's familiarity with the operation, repair, and design of electronic equipment and technology, including communications and sensor equipment, cybernetics, and security systems.

MECHANICS

This skill covers the operation, repair, and design of mechanical equipment and technology.

REMOTE OPERATION

This skill represents a character's training with remotely operated devices, including cetacean drones, telepresence systems, and remotely piloted vehicles.

VEHICLES

These skills cover training in the operation and routine maintenance of vehicles.

DRIVING

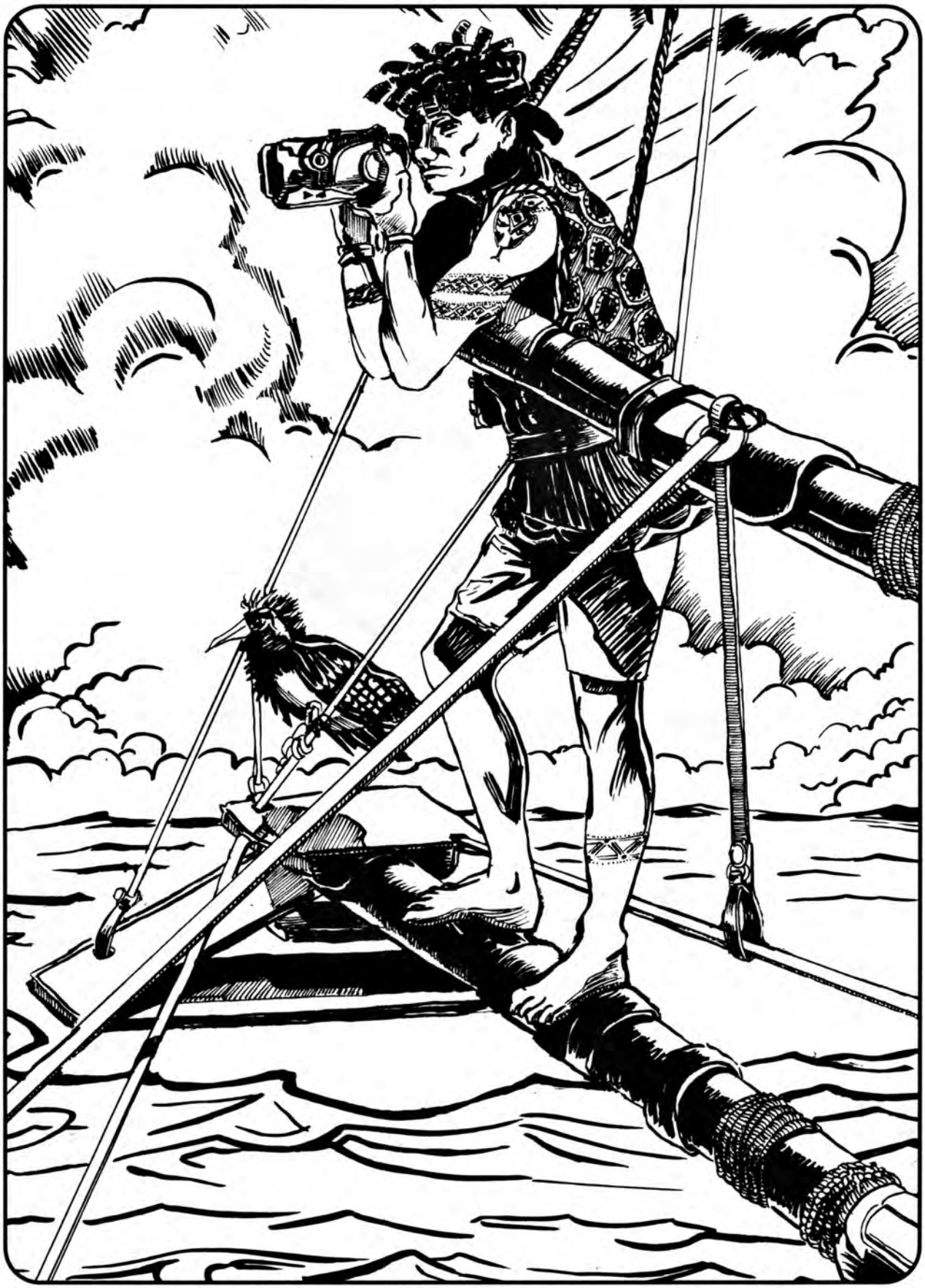
This skill includes the ability to operate a variety of modern surface-going vehicles, such as ground vehicles, hovercraft, and powered watercraft.

PILOTING

This skill includes the ability to operate a variety of sophisticated modern vehicles, such as submersibles, jumpcraft, aircraft, and even orbital shuttles. Note, however, that this skill only represents a character's familiarity with the physical operation of these vehicles. All of them rely on dedicated computer-controlled systems and a Computers roll can be used to determine a character's familiarity with individual control systems.

SAILING

This skill covers the operation and routine maintenance of wind-powered sailing vessels.



BUSH PILOT

Born on the hybrid reservation in central Africa, you enlisted with the GEO Aerospace Command the day you reached the legal age. You were trained to fly the most sophisticated military aircraft ever built. Honorably discharged after years of distinguished service, you've come to Poseidon to make a new life for yourself. Now, instead of carrying air-to-air missiles and laser-guided bombs into Earth's combat zones, you haul passengers and cargo into the Storm Belt during hurricane season.You're still not sure which is more dangerous.

ARCHETYPE DATA

Species	Cat Hybrid
Power Level	Exceptional
Custom Points	10
Armor Rating	2

PRIMARY ATTRIBUTES

Build	2	**Awareness**	1
Fitness	1	**Intellect**	0
Agility	3	**Presence**	0
Dexterity	1	**Will**	1

DERIVED ATTRIBUTES

Endurance	2
Reflexes	4
Strength	1
Toughness	1

MOVEMENT

Pace	*Meters per Action*
Crawl	1
Scramble	5
Sprint	10
Swimming	1

SENSES

Chemical	2
Hearing	2
Intuition	0
Touch	0
Vision	1

JUMPING

Type	*Meters*
Vertical	1.05
Standing	1.75
Running	8.0

WEAPONS

		Ranges					
Weapon	**PB**	**S**	**M**	**L**	**ROF**	**Ammo**	**Damage**
Claws	—	—	—	—	—	—	3
Large-Caliber Handgun	8	12	30	100	3	25	7
Shotgun	5	10	30	55	3	30	7

BIOMODS

Type	Effect
Accelerated Neurons	+1 Agility, +1 Dexterity, +1 Reflexes
Improved Blood Oxygenation	+1 Fitness, +1 Endurance, hold breath up to 10 minutes
Multiglands	+1 Will, +2 Fast-Talk, boosted attributes (see page 175)
Uplink Neural Jack	+2 bonus on related task rolls, +2 initiative on actions using the device

APTITUDES

Superior	Strong
Tech	Athletics
Vehicles	Firearms
	Military Weapons
	Survival

TRAINING PACKAGES

Origin	Reservation
Backgrounds	Colonial, GEO
Professional	Expert Military (Aerospace)
	Novice Commerce
	Novice Survival

SKILLS

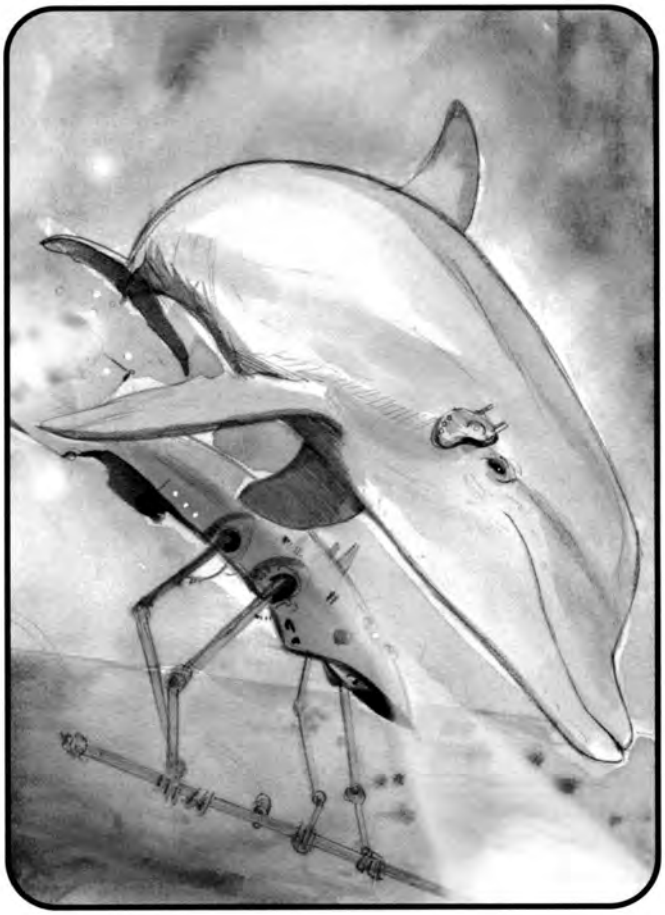
Administration	Bureaucracy 3, Economics 2, Law 1, Management 2
Agriculture	
Athletics	Aquatics 3, Parachuting 3, Throwing 4
Close Combat	Armed Combat 2, Unarmed Combat 2
Command	Leadership 3, Strategy 3, Tactics 3
Communication	English 5, Interspec 1, Negotiation 2, Persuasion 1, Writing 1
Culture	Cetacean 1, Colonial 3, Earth 3, GEO 6, Incorporate 2, Military 5, Native 1
Fine Arts	
Firearms	Handguns 3, Longarms 5
Human Sciences	History 1, Politics 1
Life Sciences	Botany 1, Zoology 1
Medicine	First Aid 4
Military Weapons	Heavy Weapons 2, Gunnery 3
Physical Sciences	Meteorology 1
Stealth	Hiding 1, Sneaking 1
Subterfuge	Fast-Talk 1
Survival	Fishing 2, Foraging 3, Mountaineering 2, Navigation 1, Orienteering 3, Tracking 3
Tech	Computer 2, Damage Control 1, Demolitions 1, Electronics 1, Mechanics 2, Remote Operation 3
Vehicles	Driving 2, Piloting 6

GEAR

Item	Item
Bodycomp	Portable Navigational Suite
Light Armor Vest	Water Purifier
Medkit	Survival Plastic
Electronics and Mechanics Toolkits	Filter Mask
(2) Magazines Handgun Ammunition (Standard)	
(2) Magazines Shotgun Ammunition (Standard)	

DOLPHIN ENGINEER

Born into the Incorporate, you have always been surrounded by human technology. Educated and trained from an early age to use the cybernetic and mechanical tools developed for cetaceans, you are as comfortable with technology as any human and more at home in your automated workspace than you are in the open ocean. Nor have you completely lost the intimate, holistic connection to the natural world that you inherited from your primal ancestors. Humans place everything in opposition, including Nature and Machine. You, however, know that there are no oppositions, only different notes in a greater harmony.



ARCHETYPE DATA

Species	Dolphin
Power Level	Exceptional
Custom Points	10
Armor Rating	0

PRIMARY ATTRIBUTES

Build	6	**Awareness**	2
Fitness	2	**Intellect**	1
Agility	0	**Presence**	0
Dexterity	–12	**Will**	0

DERIVED ATTRIBUTES

Endurance	4
Reflexes	1
Strength	4
Toughness	2

MOVEMENT

Pace	*Meters per Action*
Crawl	—
Scramble	—
Sprint	—
Swimming	12

SENSES

Chemical	2
Hearing	5
Intuition	4
Touch	2
Vision	2

JUMPING

Type	*Meters*
Vertical	4
Horizontal	4

WEAPONS

		Ranges					
Weapon	**PB**	**S**	**M**	**L**	**ROF**	**Ammo**	**Damage**
Bite	—	—	—	—	—	—	5
Ram	—	—	—	—	—	—	7
Stun Gun	3	6	10	15	3	20	Stun

BIOMODS

Type	Effect
Sonic Trode	Allows use of linked devices and tech at standard skill level
Implanted Microcomputer	100 terabytes of onboard data storage, processing, communications
Implanted Translator	Speech translated to English, German, or Japanese

APTITUDES

Superior	Strong
Physical Sciences	Administration
Tech	Communication
	Culture
	Life Sciences

TRAINING PACKAGES

Origin	Incorporate
Backgrounds	Incorporate, University
Professional	Expert Technical
	Novice Science
	Novice Whalesong Mysticism

SKILLS

Administration	Bureaucracy 2, Economics 1, Management 1
Agriculture	
Athletics	Aquatics 10
Close Combat	
Command	
Communication	Dolphin 8, Interspec 8, Negotiation 1, Oration 1, Persuasion 1, Writing 2
Culture	Cetacean 5, Earth 2, Incorporate 5
Fine Arts	Artisan 5
Firearms	
Human Sciences	History 1, Politics 1, Theology 3
Life Sciences	Biochemistry 2, Botany 1, Genetics 3, Zoology 2
Medicine	Psychology 1
Military Weapons	
Physical Sciences	Astronomy 4, Chemistry 5, Geology 4, Meteorology 4, Physics 6
Stealth	
Subterfuge	Lockpicking 5
Survival	
Tech	Computers 7, Damage Control 5, Demolititions 3, Electronics 5, Mechanics 5, Remote Operation 9
Vehicles	

GEAR

Item	Item
CICADA Drone	Work Harness
Hover Drone w/Integral Stun Gun	Electronics Toolkit
Power Shell	Mechanics Toolkit
Artificial Gill	

FIELD BIOLOGIST

Back on Earth, you were a leader in the life sciences, sought after by universities, governments, and corporations for your knowledge and expertise. Here on Poseidon, you're just another part of the food chain. The waterworld is a gold mine of alien organisms and complex ecologies, and you plan to unlock all its secrets. There are lifeforms in Poseidon's rainforests that no human has ever seen, and predators in its oceans more lethal than anything on Earth since the Cretaceous. With a little luck, you'll even live long enough to publish your discoveries.

ARCHETYPE DATA

Species	Modified Human
Power Level	Exceptional
Custom Points	10
Armor Rating	0

PRIMARY ATTRIBUTES

Build	–1	**Awareness**	2
Fitness	1	**Intellect**	2
Agility	0	**Presence**	0
Dexterity	0	**Will**	1

DERIVED ATTRIBUTES

Endurance	1
Reflexes	1
Strength	0
Toughness	0

MOVEMENT

Pace	*Meters per Action*
Crawl	1
Scramble	5
Sprint	10
Swimming	1

SENSES

Chemical	2
Hearing	1
Intuition	3
Touch	3
Vision	1

JUMPING

Type	*Meters*
Vertical	0.6
Standing	1.0
Running	5.0

WEAPONS

		Ranges					
Weapon	**PB**	**S**	**M**	**L**	**ROF**	**Ammo**	**Damage**
Diamond Knife	—	—	—	—	—	—	3
Large-Caliber Handgun	8	12	30	100	3	25	7
Hunting Rifle	10	100	200	600	3	20	9

BIOMODS

Type	Effect
Anti-Poison	Immunity to ingested poisons and natural toxins, salt tolerance
Immunological Symbiote	+1 Fitness, immunity to infectious diseases and allergies, radiation resistance
Implanted Microcomputer	100 terabytes of onboard data storage, processing, communications
Multiglands	+1 Will, +2 Fast-Talk, boosted attributes (see page 175)
Neural Jack	+2 bonus on related task rolls, +2 initiative on actions using the device

APTITUDES

Superior	Strong
Life Sciences	Athletics
Survival	Medicine
	Physical Sciences
	Tech

TRAINING PACKAGES

Origin	Earth, Free Zone Wasteland
Backgrounds	Colonial, University
Professional	Expert Science (Life Sciences)
	Novice Medicine
	Novice Survival

SKILLS

Administration	Bureaucracy 3
Agriculture	
Athletics	Aquatics 3
Close Combat	
Command	
Communication	English 7, Latin 3, Writing 5
Culture	Cetacean 1, Colonial 3, Earth 5, GEO 1, Native 1
Fine Arts	
Firearms	Longarms 2
Human Sciences	History 1, Politics 1
Life Sciences	Biochemistry 6, Botany 7, Genetics 5, Zoology 8
Medicine	First Aid 4, General Medicine 3, Pharmacology 1, Psychology 1, Surgery 1, Veterinary Medicine 1
Military Weapons	
Physical Sciences	Astronomy 3, Chemistry 4, Geology 3, Meteorology 4, Physics 3
Stealth	Hiding 1, Sneaking 1
Subterfuge	
Survival	Fishing 2, Foraging 3, Mountaineering 2, Navigation 1, Orienteering 3, Tracking 3
Tech	Computers 4, Mechanics 1, Remote Operation 3
Vehicles	Driving 3, Piloting 1

GEAR

Item	Item
Bodycomp	
Field Surgery Kit	
Portable Navigational Suite	
Water Purifier	
(2) Magazines Handgun Ammunition (Standard)	
(2) Magazines Rifle Ammunition (Standard)	

GANGSTER

When you were still a small child, the Gorchoff Family took you in and taught you how to survive on the ruined, lawless streets of Moscow. The Family gave you food, shelter, security, and education, and you have given the Family your life. The Poseidon colony is booming, and the Family has moved in to seize control of the black markets and illegal rackets. The life is ugly, dangerous, and never glamorous, but it's the only life you've ever known. You do your best to keep your nose to the wind and the skeletons safely locked in the closet. You follow orders and try to forget the corpses you've left floating in the canals.

ARCHETYPE DATA

Species	Transhuman
Power Level	Exceptional
Custom Points	10
Armor Rating	2

PRIMARY ATTRIBUTES

Build	0	**Awareness**	2
Fitness	1	**Intellect**	0
Agility	2	**Presence**	2
Dexterity	1	**Will**	1

DERIVED ATTRIBUTES

Endurance	2
Reflexes	2
Strength	0
Toughness	0

MOVEMENT

Pace	*Meters per Action*
Crawl	1
Scramble	5
Sprint	10
Swimming	1

SENSES

Chemical	1
Hearing	3
Intuition	3
Touch	1
Vision	2

JUMPING

Type	*Meters*
Vertical	0.9
Standing	1.5
Running	7.0

WEAPONS

		Ranges					
Weapon	**PB**	**S**	**M**	**L**	**ROF**	**Ammo**	**Damage**
Small-Caliber Handgun	10	20	50	150	3	35	6
Submachine Gun	10	20	50	150	3 (5)	100	6

BIOMODS

Type	Effect
Body Sculpting	+1 Presence
Multiglands	+1 Will, +2 Fast-Talk, boosted attributes (see page 175)
Transhuman	Immunity to disease, accelerated healing, extended lifespan, +1 Build, +1 Fitness, +1 Awareness, +1 Presence, +1 Endurance

APTITUDES

Superior	Strong
Communication	Administration
Subterfuge	Close Combat
	Firearms
	Stealth

TRAINING PACKAGES

Origin	Urban
Backgrounds	Street, University
Professional	Expert Crime (Gangster)
	Novice Commerce
	Novice Law Enforcement

SKILLS

Administration	Bureaucracy 6, Economics 2, Law 7, Management 2
Agriculture	
Athletics	
Close Combat	Armed Combat 4, Unarmed Combat 5
Command	
Communication	English 3, Russian 5, Negotiation 7, Persuasion 7, Writing 3
Culture	Earth 7, Incorporate 1, Street 7
Fine Arts	
Firearms	Handguns 5, Longarms 4
Human Sciences	History 1, Politics 1
Life Sciences	
Medicine	First Aid 1, Forensic Medicine 1
Military Weapons	
Physical Sciences	
Stealth	Hiding 4, Shadowing 4, Sneaking 4
Subterfuge	Bribery 5, Fast-Talk 6, Lockpicking 2, Sleight of Hand 1
Survival	
Tech	Computers 3, Remote Operation 1
Vehicles	Driving 3

GEAR

Item	Item
Bodycomp	Light Armor Vest
Ultrasonic Hypodermic	(2) Magazines Handgun Ammunition (Standard)
(1) Dose Anti-Shock	(2) Magazines SMG Ammunition (Standard)
(2) Doses Reflex Serum	

GEO MARSHAL

During a childhood spent struggling for survival in Earth's anarchic Free Zones, you learned to cherish the ideals of law, order, and justice. After serving the GEO Peacekeeping Force with distinction, you were recruited to the Marshal Academy. Now, as a GEO Marshal, you have sworn an oath to uphold and defend those principles you longed for in your youth. You are one of only 24 GEO Marshals on the colony world, granted the powers of judge, jury, and executioner by the GEO Charter. On the Poseidon frontier, you are more than a lawman...you are the law.

ARCHETYPE DATA

Species	Modified Human
Power Level	Elite
Custom Points	20
Armor Rating	2

PRIMARY ATTRIBUTES

Build	2	**Awareness**	1
Fitness	2	**Intellect**	0
Agility	2	**Presence**	1
Dexterity	2	**Will**	1

DERIVED ATTRIBUTES

Endurance	0
Reflexes	1
Strength	0
Toughness	0 1

MOVEMENT

Pace	*Meters per Action*
Crawl	1
Scramble	5
Sprint	10
Swimming	1

SENSES

Chemical	0
Hearing	0
Intuition	0
Touch	0
Vision	0

JUMPING

Type	*Meters*
Vertical	0.9
Standing	1.5
Running	7.0

WEAPONS

		Ranges					
Weapon	**PB**	**S**	**M**	**L**	**ROF**	**Ammo**	**Damage**
Diamond Knife	—	—	—	—	—	—	3
Large-Caliber Handgun	8	12	30	100	3	25	7
Assault Rifle	15	75	150	500	3 (5)	100	8 (11)
Grenade Launcher	10	50	100	500	3	6	10

BIOMODS

Type	Effect
Accelerated Neurons	+1 Agility, +1 Dexterity, +1 Reflexes
Electro-Muscular Analogs	Power source for cyberware
Immunological Symbiote	+1 Fitness, immunity to infectious diseases and allergies, radiation resistance
Multiglands	+1 Will, +2 Fast-Talk, boosted attributes (see page 175)
Myo-Skeletal Enhancement	+2 Build, +1 Fitness, –1 Presence, +1 Endurance, improved blood oxygenation, reinforced skeleton
Programmed Reflexes	Variable (see page 167)
Spyware	IR and electrical field sensors, bug detector, electrical jammer, radar, sensory recorder, lie detection, +1 Awareness when anticipating another's intent
Uplink Neural Jack	+2 bonus on related task rolls, +2 initiative on actions using the device

APTITUDES

Superior	Strong
Close Combat	Athletics
Culture	Command
Firearms	Communication
	Military Weapons
	Stealth

TRAINING PACKAGES

Origin	Earth, Free Zone Wastelands
Backgrounds	Colonial, GEO
Professional	Expert Law Enforcement (Special Operations)
	Specialist Military

SKILLS

Administration	Bureaucracy 4, Law 3
Agriculture	
Athletics	Aquatics 2, Throwing 4
Close Combat	Armed Combat 5, Unarmed Combat 5
Command	Leadership 5, Strategy 2, Tactics 5
Communication	Interspec 1, English 5, Persuasion 3
Culture	Cetacean 1, Colonial 3, Earth 3, GEO 4, Incorporate 1, Military 3, Native 1, Street 2
Fine Arts	
Firearms	Handguns 6, Longarms 7
Human Sciences	History 1, Politics 1
Life Sciences	
Medicine	First Aid 6, Forensic Medicine 2
Military Weapons	Heavy Weapons 5
Physical Sciences	
Stealth	Hiding 3, Shadowing 2, Sneaking 3
Subterfuge	
Survival	Foraging 1, Orienteering 1, Tracking 1
Tech	Computers 1, Demolitions 1, Remote Operation 5
Vehicles	Driving 5, Piloting 1

GEAR

Item	Item
Bodycomp	Light Armor Vest
Personal Comm	Combat Helmet
Broad-Spectrum Visor	• Combat HUD
Sensor Array	(2) Magazines Handgun Ammunition (Standard)
Medkit	(2) Magazines Rifle Ammunition (Standard)
(3) Recon Remotes	(6) Fragmentation Launcher Grenades

GEO SHOCK TROOPER

You are a soldier in the GEO's elite military unit, the Marine Corps Heavy Cavalry. You've been genetically engineered and extensively trained for optimal performance and maximum combat readiness. Counter-terrorism, hostage rescue, black ops, and counter-insurgency—you've been trained to do it all in service to the GEO Charter. You shrug off the scar tissue that marks your synthetic skin and the nightmares of past combat actions that haunt you at night. You train hard, fight harder, and play hardest of all, because Shock Troopers never die of old age.

ARCHETYPE DATA

Species	Human, Modified
Power Level	Elite
Custom Points	20
Armor Rating	5

PRIMARY ATTRIBUTES

Build	3	**Awareness**	2
Fitness	3	**Intellect**	0
Agility	2	**Presence**	–1
Dexterity	2	**Will**	0

DERIVED ATTRIBUTES

Endurance	2
Reflexes	3
Strength	3
Toughness	2

MOVEMENT

Pace	*Meters per Action*
Crawl	1
Scramble	5
Sprint	10
Swimming	2

SENSES

Chemical	1
Hearing	3
Intuition	2
Touch	1
Vision	3

JUMPING

Type	*Meters*
Vertical	0.9
Standing	1.5
Running	7.0

WEAPONS

		Ranges					
Weapon	**PB**	**S**	**M**	**L**	**ROF**	**Ammo**	**Damage**
Diamond Knife	—	—	—	—	—	—	6
Large-Caliber Handgun	8	12	30	100	3	25	7
Assault Rifle	15	75	150	500	3 (5)	100	8 (11)

BIOMODS

Type	Effect
Electro-Muscular Analogs	Power source for cyberware
Implanted Microcomputer	100 terabytes of onboard data storage, data processing, communications
Pain Inhibitors	Reduces wound impairment penalties by 1
Programmed Reflexes	Variable (see page 167)
Shock Trooper	+2 Build, +2 Fitness, +1 Agility, +1 Dexterity, –1 Presence, +1 Endurance, +1 Reflexes, amplified hearing, enhanced smell, night vision, telescopic vision
Spyware	IR and electrical field sensors, bug detector, electrical jammer, radar, sensory recorder, lie detection, +1 Awareness when anticipating another's intent
Uplink Neural Jack	+2 bonus on related task rolls, +2 initiative on actions using the device

APTITUDES

Superior	Strong
Athletics	Command
Close Combat	Military Weapons
Firearms	Stealth
	Survival
	Vehicles

TRAINING PACKAGES

Origin	GEO
Backgrounds	Colonial, GEO
Professional	Expert Military (Marines)
	Novice Athletics
	Novice Survival

SKILLS

Administration	Bureaucracy 3
Agriculture	
Athletics	Aquatics 9, Freefall 3, Parachuting 5, Throwing 7
Close Combat	Armed Combat 3, Unarmed Combat 3
Command	Leadership 3, Strategy 3, Tactics 3
Communication	English 5, Interspec 2
Culture	Cetacean 1, Colonial 3, Earth 3, GEO 7, Incorporate 1, Military 5, Native 1
Fine Arts	
Firearms	Handguns 3, Longarms 6
Human Sciences	History 1, Politics 2
Life Sciences	Botany 1, Zoology 1
Medicine	First Aid 7, General Medicine 1, Pharmacology 1
Military Weapons	Heavy Weapons 5
Physical Sciences	Meteorology 1
Stealth	Hiding 3, Sneaking 3
Subterfuge	
Survival	Fishing 2, Foraging 2, Mountaineering 2, Navigation 2, Orienteering 3, Tracking 2
Tech	Computers 2, Demolitions 1, Remote Operation 3
Vehicles	Driving 1, Piloting 1, Sailing 3

GEAR

Item	Item
Digital Binoculars	Targeting Interlink
Medkit	(2) Fragmentation Grenades
Portable Navigational Suite	(2) Concussion Grenades
Phototropic BDU	(2) Flash-Bang Grenades
Combat Helmet	
(2) Magazines Handgun Ammunition (Standard)	
(2) Magazines Rifle Ammunition (Standard)	

NATIVE ECOTERRORIST

You are a native of Poseidon, a descendant of the original Athena Project colonists. You were born after Recontact, so you've grown up with the Long John rush, GEO imperialism, and Incorporate exploitation. You've seen the pollution of the air and water that slowly strangles the natural world, and you've watched as friends and family have lost their homes and way of life to the inexorable march of colonial expansion. Enough is enough—it's time to fight back. No sacrifice is too great, no price is too high. The voice of your people will be heard.

ARCHETYPE DATA

Species	Aquaform
Power Level	Everyday
Custom Points	5
Armor Rating	2

PRIMARY ATTRIBUTES

Build	0	**Awareness**	1
Fitness	1	**Intellect**	0
Agility	0	**Presence**	–1
Dexterity	0	**Will**	0

DERIVED ATTRIBUTES

Endurance	1
Reflexes	0
Strength	0
Toughness	0

MOVEMENT

Pace	*Meters per Action*
Crawl	1
Scramble	5
Sprint	10
Swimming	2

SENSES

Chemical	1
Hearing	1
Intuition	2
Touch	0
Vision	1

JUMPING

Type	*Meters*
Vertical	0.6
Standing	1.0
Running	5.0

WEAPONS

		Ranges					
Weapon	**PB**	**S**	**M**	**L**	**ROF**	**Ammo**	**Damage**
Hunting Knife	—	—	—	—	—	—	2
Large-Caliber Handgun	8	12	30	100	3	25	7
Submachine Gun	10	20	50	150	3 (5)	100	6 (9)

BIOMODS

Type	Effect
Uplink Neural Jack	+2 bonus on related task rolls, +2 initiative on actions using the device

APTITUDES

Superior	Strong
Stealth	Athletics Firearms Survival

TRAINING PACKAGES

Origin	Native
Backgrounds	Native, Street
Professional	Expert Military (Infantry)

SKILLS

Administration	Law 1
Agriculture	Aquaculture 2
Athletics	Aquatics 6, Parachuting 3, Throwing 5
Close Combat	Armed Combat 3, Unarmed Combat 4
Command	Leadership 3, Strategy 3, Tactics 3
Communication	English 5, Persuasion 1
Culture	Colonial 3, Military 5, Native 5, Street 3
Fine Arts	
Firearms	Handguns 3, Longarms 5
Human Sciences	
Life Sciences	
Medicine	First Aid 3
Military Weapons	Heavy Weapons 5
Physical Sciences	
Stealth	Hiding 3, Sneaking 3
Subterfuge	Fast-Talk 2
Survival	Fishing 2, Foraging 1, Mountaineering 1, Navigation 1, Orienteering 4
Tech	Demolitions 3, Remote Operation 3
Vehicles	Sailing 3

GEAR

Item	Item
Personal Comm	
Light Armor Vest	
Medkit	
(2) Magazines Handgun Ammunition (Standard)	

ORCA PEACEKEEPER

The GEO recruited and trained you when you were very young. They cultivated your primal, predator's instinct and taught you new ways to kill. They added combat drones and cybernetic weapon harnesses to the arsenal of lethal jaws and powerful flukes you were born with. A soldier of the humans' army, you nevertheless stand apart from them, preferring the company of your cetacean comrades. Though you fight to defend their civilization, you have never really been a part of their world. But as long as the humans are intent on killing each other, you'll have a job to do.

ARCHETYPE DATA

Species	Orca
Power Level	Everyday
Custom Points	7
Armor Rating	6

PRIMARY ATTRIBUTES

Build	12	**Awareness**	1
Fitness	4	**Intellect**	–2
Agility	0	**Presence**	–2
Dexterity	–15	**Will**	1

DERIVED ATTRIBUTES

Endurance	5
Reflexes	1
Strength	8
Toughness	4

MOVEMENT

Pace	*Meters per Action*
Crawl	—
Scramble	—
Sprint	—
Swimming	14

SENSES

Chemical	0
Hearing	5
Intuition	3
Touch	0
Vision	1

JUMPING

Type	*Meters*
Vertical	5
Horizontal	5

WEAPONS

		Ranges					
Weapon	**PB**	**S**	**M**	**L**	**ROF**	**Ammo**	**Damage**
Bite	—	—	—	—	—	—	9
Ram	—	—	—	—	—	—	13
Torpedo Cannon	10	30	60	120	1	12	12
Assault Rifle	15	75	150	500	3 (5)	100	8 (11)
Grenade Launcher	10	50	100	500	3	6	10

BIOMODS

Type	Effect
Sonic Trode	Allows use of linked devices and tech at standard skill level

APTITUDES

Superior	Strong
Military Weapons	Command Survival Tech

TRAINING PACKAGES

Origin	Earth, Transient Orca
Backgrounds	Colonial, GEO
Professional	Expert Cetacean Military

SKILLS

Administration	Bureaucracy 2
Agriculture	
Athletics	Aquatics 10
Close Combat	
Command	Leadership 3, Tactics 5
Communication	Interspec 8, Orca 5
Culture	Cetacean 4, Colonial 3, Earth 1, GEO 4, Incorporate 1, Military 5, Native 1
Fine Arts	
Firearms	
Human Sciences	History 1, Politics 1
Life Sciences	Botany 1, Zoology 1
Medicine	
Military Weapons	Gunnery 5
Physical Sciences	
Stealth	Hiding 3, Sneaking 3
Subterfuge	
Survival	Foraging 1, Navigation 3, Orienteering 3
Tech	Computers 1, Demolitions 3, Electronics 2, Mechanics 3, Remote Operation 5
Vehicles	

GEAR

Item

Weapons Harness
- Torpedo Launchers (2)

CICADA
- Torpedo Launchers (2)
- Integrated Bodycomp
- Integrated Uplink Communicator

Item

Hover Remote
- Assault Rifle
- Grenade Launcher

(2) Recon Remotes
Artificial Gill
Armored Power Shell (AR 6)

SILVA WARDEN

You were born admid poverty and despair on Earth's vast hybrid reservation. When the GEO invited your people to start a new colony on Poseidon, you jumped at the chance. Growing up, you were always most at peace in the wilderness, the sprawling savannas and dark rainforests.On Poseidon, you've found a new wilderness, an untamed frontier of peril, beauty, and wonder. Unfortunately, there are those who do not respect their new world, those who only wish to plunder it of everything of value. And so you have become a hunter, stalking the criminals who defile Poseidon with their greed.

ARCHETYPE DATA

Species	Silva Hybrid
Power Level	Exceptional
Custom Points	10
Armor Rating	1

PRIMARY ATTRIBUTES

Build	3	**Awareness**	1
Fitness	3	**Intellect**	0
Agility	1	**Presence**	–1
Dexterity	0	**Will**	1

DERIVED ATTRIBUTES

Endurance	3
Reflexes	1
Strength	3
Toughness	3

MOVEMENT

Pace	*Meters per Action*
Crawl	1
Scramble	5
Sprint	10
Swimming	1

SENSES

Chemical	2
Hearing	0
Intuition	0
Touch	1
Vision	2

JUMPING

Type	*Meters*
Vertical	0.75
Standing	1.25
Running	6.0

WEAPONS

		Ranges					
Weapon	**PB**	**S**	**M**	**L**	**ROF**	**Ammo**	**Damage**
Diamond Knife	—	—	—	—	—	—	6
Large-Caliber Handgun	8	12	30	100	3	25	7
Automatic Shotgun	5	10	30	55	3	30	7 (10)

BIOMODS

Type	Effect
Anti-Poison	Immunity to ingested poisons and natural toxins, salt tolerance
Immunological Symbiote	+1 Fitness, immunity to infectious diseases and allergies, radiation resistance
Multiglands	+1 Will, +2 Fast-Talk, boosted attributes (see page 175)
Night Vision	Ability to see in low-light conditions
Uplink Neural Jack	+2 bonus on related task rolls, +2 initiative on actions using the device

APTITUDES

Superior	Strong
Firearms	Close Combat
Survival	Stealth
	Subterfuge
	Vehicles

TRAINING PACKAGES

Origin	Hybrid Reservation
Backgrounds	Colonial, Street
Professional	Specialist Law Enforcement
	Specialist Survival
	Novice Crime

SKILLS

Administration	Bureaucracy 2, Law 4
Agriculture	
Athletics	Aquatics 4
Close Combat	Armed Combat 3, Unarmed Combat 4
Command	
Communication	Negotiation 1, Persuasion 4
Culture	Cetacean 1, Colonial 3, Earth 3, GEO 3, Native 1, Street 6
Fine Arts	
Firearms	Handguns 4, Longarms 4
Human Sciences	
Life Sciences	Botany 2, Zoology 2
Medicine	First Aid 4, Forensic Medicine 2
Military Weapons	
Physical Sciences	Meteorology 2
Stealth	Hiding 5, Shadowing 4, Sneaking 5
Subterfuge	Bribery 1, Fast-Talk 3, Lockpicking 1
Survival	Fishing 3, Foraging 4, Mountaineering 3, Navigation 2, Orienteering 4, Tracking 4
Tech	Mechanics 1, Remote Operation 2
Vehicles	Driving 4, Piloting 1

GEAR

Item	Item
Digital Binoculars	Targeting Interlink
Medkit	(2) Magazines Handgun Ammunition (Standard)
Portable Navigational Suite	(2) Magazines Rifle Ammunition (Standard)
Drysuit	
Survival Guide	
Survival Plastic	
Water Purifier	

CHARACTER DEVELOPMENT

Over the course of a **Blue Planet** campaign, characters can be expected to change a great deal. They will meet new people, get into fights, fall in love, make enemies, explore new places, and learn new skills. This kind of "character development" is one of the most rewarding aspects of roleplaying games. Players improve their characters by accumulating and spending character improvement points, or ChIPs. Players earn ChIPs by carefully roleplaying their characters as defined by their background and character profile (see Chapter 3), by achieving their goals, and by surviving and learning from their adventures in the world of **Blue Planet**.

The character profile, covered in the following chapter, is used as a benchmark against which a player's roleplaying can be measured. Did the character's motivation show through in his choices and actions? Were his actions consistent with the attainment of his goal? Did the player's voice and mannerisms accurately and entertainingly convey the character's attitude? The character profile is a sketch of a character's personality, and it should be used by the moderator to judge how successful the player has been in bringing his character to life.

EARNING CHARACTER IMPROVEMENT POINTS

ROLEPLAYING

At the completion of a scenario or adventure, the game moderator should rate each player's roleplaying on a scale of 1 to 5, with 1 being the worst and 5 being the best. This is the number of ChIPs the player receives for the session or scenario based on his roleplaying. Also, during the course of play, whenever a player roleplays some element of his character's profile particularly well, the moderator may opt to have him place a check mark next to the appropriate profile component. When ChIPs are awarded, the player may take one bonus point for each check recorded.

GOALS

Players and their characters should also be rewarded for accomplishing the goals or objectives of a scenario. Depending on the campaign, the characters may be GEO Patrol Officers who apprehended dangerous criminals, natives who enjoyed a bountiful hunt, or Incorporate operatives who captured valuable research data from a rival. The moderator should award 1 to 3 ChiPs to each player for accomplishing the goals established by the scenario or created by the characters themselves in the course of the adventure. The actual points awarded should be based on the difficulty of the objective and its impact on the rest of the campaign.

SCENARIOS

Finally, players should also be awarded ChIPs if their characters simply survive and contribute to the successful completion of a scenario. At the end of each scenario, the moderator should award 1 to 3 ChIPs to each character who survives and contributed positively to the players' enjoyment of the adventure. The actual number of points awarded should be based on the scenario's difficulty, danger, and length—obviously, the moderator should award more points for a scenario that lasts several game sessions than he does for one that is completed in a single night.

SPENDING CHARACTER IMPROVEMENT POINTS

ChIPs are spent to purchase improvements in a character's skills and attributes. To improve a skill by one level, it costs a number of points equal to the new level. For example, it would cost 5 ChIPs to improve a skill from level 4 to level 5. Each level must be purchased seperately—players may not skip levels in order to save points!

To improve a primary attribute by one level, the player must spend 25 ChIPs. There are a couple of additional restrictions on improving attributes. First, no attribute may be increased above the character's species maximum without cybernetic or genetic enhancement. Second, a character may not raise an attribute more than two levels from its starting value. For example, a character with Build 0 could increase the attribute to a maximum of Build 2. Finally, characters may not directly increase derived attributes. These characteristics are dependent on the primary attributes, and only increase indirectly, when their primary attributes are improved.

To support a sense of realism, the game moderator may opt to require characters to spend a period of time participating in some form of instruction or training in order to increase certain skills or attributes with ChIPs. This is encouraged when a character attempts to learn a new skill that could not ordinarily be gained without such instruction.

CHARACTER PROFILE

CHAPTER 03

CHARACTER PROFILE

Blue Planet is designed to foster intense, mature roleplaying. The world is one of mystery and harsh conflict, a planet of wonder and frontier challenge. The characters that populate it are meant to be bigger than life and twice as real. **Blue Planet** is a roleplaying experience that is original and demanding, and players are encouraged to create unique characters with personality and depth not found in the average roleplaying system.

To promote the development of realistic characters and quality roleplayers, **Blue Planet** uses the character profile in character creation. The profile describes key facets of a character's personality and identity, and in doing so serves two basic functions. First, the profile acts as a permanent reminder of the character's fundamental nature and therefore helps in the choice of actions, guiding roleplaying. This is important because Character Improvement Points (ChIPs, see page 76) are awarded based on the quality of the players' roleplaying. Second, the profile helps the game moderator tailor scenarios to match, and therefore motivate, the characters. Game moderators are expected to consider a character's profile when making decisions about such variables as the difficulty of tasks or the reactions of nonplayer characters.

Begin creating a profile for your character by browsing through the options provided in each of the following sections. Select the one element from each section that best defines the character you want to play and enter the identifying term in the appropriate space in the profile section of your character sheet.

Especially creative players may find the listed options for any particular component of the profile limiting. In this case, players are encouraged to consult with the moderator to develop custom profile selections that most appropriately represent their character concept.

Remember, diversity is what makes life interesting. The profile is only a guideline and should be applied to character creation as such. Be creative! **Blue Planet** is a unique world of imagination and this should show clearly in its characters.

GOAL

This component of the profile is a simple description of what your character desires most, what he hopes to accomplish, discover, or become. This information is extremely valuable to the game moderator as it helps him provide compelling motivation for the players and is useful in keeping players focused on the nature of the characters they are playing.

ACCOMPLISHMENT

A character with this goal simply wishes to excel, to become the best at what he does. He isn't interested in the rewards, such as fame or wealth, that may come with mastery, he is merely concerned with the achievement of some personal standard of perfection.

ALTRUISM

Caring for others, relieving the suffering of the infirm, providing opportunity for the disadvantaged—a character with this most noble of goals merely hopes to dedicate his life to the assistance of others.

CONTENTMENT

This a simple but elusive desire. A character that chooses this goal wants general happiness in his life and is willing to pursue any circumstances that provide it.

ENLIGHTENMENT

Sometimes just to understand the truth of something is in itself a worthy achievement. A player that chooses this goal will be satisfied if he is ever able to verify or discover the truth about a significant object, event, or system of beliefs.

FAME

This does not always imply power or wealth but may be an end in itself. This selection means that for whatever reason the character wants to become well known for his abilities or achievements.

FREEDOM

This is one of the oldest and most noble goals. The character may seek liberty from political, mental, or even physical limitations and be willing to do almost anything to achieve it.

IMMORTALITY

A character may desire some everlasting posterity. Whether this need is literal, as in a longer lifetime, or symbolic, as through some legacy, the player's actions are guided by this desire.

JUSTICE

When a player selects this goal, he creates a character that is driven to right some personal or general injustice. Final satisfaction will only come when that wrong is set right or the unjust party is punished.

LOVE

The ultimate desire in every fairy tale, this choice has always been a human goal. In its purest form this emotion can lead to the most selfless acts. Whether for an individual, group or idea, a character with this motivation might even be compelled to lay down his life.

OBLIVION
The character seeks relief from his mental or emotional anguish, frequently in alcohol or drugs, and often suffers from depression. This goal frequently leads to self-destruction, either directly or indirectly.

POWER
Often a corrupting need, a character with this goal is dedicated to gaining the social or physical ability to control others. Whether with good or malicious intentions, this can be a dangerous objective.

REVENGE
Whether just or not, striving for vengeance can be obsessive. A character with this selection has a cold and dangerous goal.

REVOLUTION
Society continues to be plagued by decay and corruption, even amidst the new-found hope for the species represented by the recolonization of Poseidon. This goal represents an intense desire to tear down the system and build a new human society according to the principles of some strongly held ideology.

SURVIVAL
The instinctual desire to live to see another day is universal. As a selection, this may mean hope for the physical, economic, or even philosophical continuation of the character.

WEALTH
The character is driven by the desire for riches and is likely to go to the most extreme lengths to acquire possessions.

MOTIVATION
A character's motivation helps to explain the character's actions. A character may be motivated in a specific way simply because he feels that this is the best means for accomplishing his goal. Alternatively, a character's motivation may be influenced by events or experiences from his past.

ADVENTURE
A thirst for adventure is the primary motivation of many explorers. A character with this motivation may be a daring thrill-seeker.

COMPASSION
The character acts out of a general belief that suffering is wrong. He will work to end pain or injustice regardless of its cause.

CURIOSITY
A powerful motivation, the desire to learn and experience can be compelling. A character with this selection is driven by a need to discover and explore.

DISCONTENT
A character with this motivation is restless and dissatisfied with his current circumstances. The character wants change, wants something different, even if he is unsure what that something is.

DUTY
This selection implies that a character is driven by obligation. The character is motivated by honor and personal dedication.

FAITH
The actions of a character with this motivation are often guided by his deep religious or philosophical convictions.

FEAR
Rational or not, this can be one of the most compelling influences on a character's actions. A character with this motivation hides a terrible dread that may even affect his daily life.

GUILT
The character is driven by feelings of inadequacy or remorse resulting from some past misdeed, whether real or imagined. This motivation may drive a character either to atonement or deception.

HATRED
A powerful passion, this emotion can drive people to frightening extremes. This character is motivated by some bitter pain or terrible anger resulting from some tragic incident in his past.

HONOR
The character's actions are guided by a strict personal code of moral conduct.

LOYALTY
The character identifies with, and is loyal to, a specific group or organization, such as a clan, village, corporation, country, or institution, and is devoted to protecting and serving it.

OBSESSION
Unhealthy at best, a fanatical desire for anything usually leads to disappointment, if not destruction. A character with this motivation is willing to pursue his goal regardless of the circumstances or consequences.

PRIDE
This choice can be either earned or false and very compelling. Regardless, it can make a character do dangerous and stupid things.

PROFESSIONALISM
Doing a job and doing it well are what matter to the character. The character will take professional pride in performing difficult or demanding tasks.

SOCIAL
Cultural beliefs can be restrictive or demanding, and therefore also compelling. A character can be uniquely motivated by the pressures and expectations of society.

ATTITUDE
Attitude describes the character's basic mood and general outlook on life. Defining one's attitude is an excellent way to help create a realistic and fun character, as it is often the most entertaining aspect of roleplaying and character interactions.

ARROGANT
This character is confident in his actions, whether that confidence is justified or not. Indeed, the character is so self-assured, his superior attitude is often offensive.

BROODING
This attitude indicates that the character is outwardly troubled and dark. The character smiles little and has a continuously morose and pensive air.

CONFIDENT
In contrast to unjustified arrogance, this attitude implies that a character has a robust and healthy sense of self-esteem. This attitude indicates that the character knows his abilities well and has learned to rely on them.

COOPERATIVE
This character enjoys the company of others and will gladly work with them to achieve shared goals.

DEPRESSED
This attitude implies that the character is continuously saddened about the state of things. The character finds sorrow in daily life and is seldom anything but moody.

DISCIPLINED
Always responsible, reserved, and in control, a character with this attitude will almost never act impulsively and will often show contempt for those who do.

ENERGETIC
Regardless of the circumstances, nothing can hold back a character with this attitude. Characterized by enthusiasm and a short attention span, an energetic person is always eager to forge ahead.

HOLISTIC
A character with this attitude sees himself as only a part of the larger picture. For whatever reasons, a holistic character has a come-what-may outlook on life.

HUMBLE
Even with achievement or merit to be proud of, a character with this attitude is never boastful and continually plays down his importance. Rather than false modesty, this selection indicates that the character recognizes the value and abilities of others.

INTROSPECTIVE
Thoughtful and insightful, a character with this attitude tends to be quiet and reserved. When he does speak, it is usually because he has something important and valuable to offer.

MANIC
A character with this attitude is subject to wild swings of mood. Up one moment and down the next, calm or violent, a manic character is always unpredictable.

OPTIMISTIC
Characters with this attitude never see the down side. No matter how bad things get, how dangerous or frightening, such characters can always find hope.

PARANOID
A character with this attitude is often extremely fearful and distrustful of others. In its most extreme forms, this attitude can become a powerful and debilitating psychosis.

PESSIMISTIC
Characters with this attitude are constant downers. Regardless of how good, safe, or sure things are, these characters are always confident that they are about to go terribly wrong. Whether it is because of some great personal tragedy or simply because life, in general, saddens them, such characters are seldom happy.

REBELLIOUS
A character with this attitude is contemptuous of authority figures, has difficulty following orders, and is constantly fighting the system.

PLAYER'S CHOICE
Many elements defining **Blue Planet** characters' personal histories and personalities are offered in the character profile. However, it is impossible to be exhaustive in presenting all the facets that make up a realistic persona. The player's choice option is therefore offered to give players additional power and versatility in describing the nature of their characters.

Players are encouraged to create or describe a character aspect, quirk, or trait of their choice, one specifically relevant to their character concept. Player's choice options might include such things as phobias, mental conditions, passions, hopes, habits or dreams. Anything is possible, so be creative, be original, and have fun!

FEATURES

The section on features is a simple description of the physical appearance of your character. Much of the appeal in roleplaying is in the imagery and dazzle. A good game rolls through the mind like a movie, and the more detailed a character's appearance the better the show. There are too many options to present any complete listing here, so put some thought into it and be imaginative. The effects might be surprising.

NAME

This is always an important step in the creation of a new character and should be given due attention. Creativity and consideration can result in a name that enhances image, style, and flair. Descriptive nicknames can add a great deal to a character.

AGE

This entry indicates the character's age in years. If players wish to create particularly young or old characters there are some simple modifications that must be made to the creation process.

Adolescents, human characters between the ages of 12 and 17, will not be eligible for most professional training packages. At the game moderator's discretion, a player who wishes to design such a character should reduce the number of professional training packages normally offered at the chosen power level by two. For example, an everyday adolescent would receive only one professional training package.

Children, human characters between the ages of eight and 12, receive no professional training packages. In addition, they receive only one background package.

Unless otherwise mitigated by medical technology or longevity therapy, characters suffer a –1 penalty to all attributes, with the exception of Presence and Will, for every 10 years of age beyond 50. However, older characters are allotted an additional custom point for every year by which their age exceeds 50. For example, a 60 year-old character would suffer a –1 penalty to all attributes except Presence and Will, but would receive an additional 10 custom points to spend on skills.

GENDER

This is a simple choice of the character's sex, but can be complicated by the fact that in 2199, even sex is subject to change.

HEIGHT

This is a simple measure of the character's height (or length) in meters.

WEIGHT

Measured in kilograms, this is the character's weight in the gravity well of Poseidon. Due to the slightly higher gravity of the planet, a character's weight should be about .08 times higher than on Earth.

STATURE

This is a description of the character's physique beyond the indicators of height and weight. Stature indicates whether the character is stocky or gaunt, stooped or broad, big-boned or obese.

COMPLEXION

This describes a character's skin color and texture. Is the character pale and pockmarked or dark-skinned and healthy?

HAIR COLOR

This is a simple description of the color of the character's hair, if any!

HAIR STYLE

This describes the stylistic characteristics of the character's hair—short, curly, wavy, or high-and-tight.

EYE COLOR

This is a simple description of the color of the character's irises.

SPECIAL

This is a chance to be imaginative with individualized or notable features like scars, tattoos, piercings, birthmarks or whatever. Be creative!

ROLES

Blue Planet is a rich setting offering unparalleled depth and detail, and the range of characters appropriate to the setting is extremely broad. The following pages describe a number of character roles that feature prominently in the world of **Blue Planet.** Each description provides background and lifestyle information for the role, as well as suggestions and guidelines for choosing a character's skills and the cybernetic and biological modifications that are common in, or appropriate to, the character's professional activities.

Players—especially those playing **Blue Planet** for the first time—should look through these options and choose one that seems both compelling and enjoyable, and will be a good fit with the group concept. Players should remember that these roles are meant to be informative guidelines and should never let them interfere with their own creativity and imaginations. Players who want to merge aspects of different roles into a single concept or create entirely new roles from scratch are encouraged to do so. Players familiar with the world of **Blue Planet** who already have a solid character concept in mind may skip this section entirely. The character roles are essentially "concept sketches," and it is not necessary to use them to create a character.

Each role description provides the following information:

BACKGROUND
This component describes the specifics of each role in the world of **Blue Planet**. It is intended to give players a feel for their characters' place in the setting.

TRAINING PACKAGES
This component offers suggested training packages a player can choose to most effectively represent a character's professional training and abilities.

STANDARD OF LIVING
This section describes the employment opportunities commonly available to each role. Information is also provided on the lifestyle and finances typical of the role.

RESOURCES
This component describes the contacts, information, or physical resources unique to characters within each role.

BIOMODS
This section lists some suggested modifications common to characters in each role. These suggestions are offered as helpful examples and guidelines, rather than rigid limitations.

CHARACTER TEMPLATES
One or more character examples or variations have been listed for each role. These character templates include pre-selected professional training packages and biomods, and can be used by those who wish to jumpstart the character creation process. They are also useful as guidelines for the ways different professional training packages can be combined to create a wide variety of characters.

ADMINISTRATOR
Most of the bureaucrats and executives involved in the government and management of the GEO and Incorporate states are minor functionaries. They are the ones who organize and implement the decisions and policies of their superiors. Nevertheless, a tremendous amount of influence and power is hidden within these seemingly limited responsibilities. Quite often, the middle-managers and deputy assistant administrators knee-deep in dirtside politics are more in the know than their superiors on *Prosperity Station* and the Incorporate orbitals.

TRAINING PACKAGES
Administration is the obvious choice for a primary package. Commerce and Diplomacy make good secondary selections. Players may also choose packages appropriate to their characters' governmental institutions or departments.

STANDARD OF LIVING
Low-level administrators with the GEO or national governments earn approximately 2,000cs to 3,000cs per month. Executives with the Incorporate city-states can earn 5,000cs per month. In both cases, these salaries will typically be doubled at the higher levels of the administrative hierarchy. Most GEO administrators will either have an apartment in Haven or on *Prosperity Station*, or in the settlement where they are stationed. Incorporate executives will have a residence near the Incorporate offices in Haven, or in their employer's company town.

RESOURCES
The resources of administrators depend on the organizations they work for and their rank and seniority within those organizations. Most administrators can use company transportation and equipment, and can access impressive databases within their spheres of influence. They can also utilize company personnel and contacts. However, unless these resources are used in the execution of their duties, there can be serious consequences for their misappropriation.

BIOMODS
Rare is the functionary without a neural jack. Many also have implanted calculators or microcomputers, depending on their job responsibilities.

Bureaucrat (Everyday)
Professional Packages: Expert Administration
Biomods: Neural Jack

HCTI Administrator (Exceptional)
Professional Packages: Expert Administration, Specialist Commerce
Biomods: Neural Jack, Implanted Microcomputer

Foreign Service Officer (Exceptional)
Professional Packages: Expert Administration, Specialist Diplomacy
Biomods: Neural Jack, Body Sculpting, Implanted Translator

ARTIST

The musicians, painters, actors, novelists, and poets that comprise Poseidon's art scene are a diverse lot, but they all share a common devotion to their craft and unique lifestyle. This commitment brings a life of riches and luxury to a very few, and most artists are forced to hold down day jobs just to pay the rent.

TRAINING PACKAGES

Expert Arts and Entertainment (Musician or Painter) are the most appropriate primary packages. Good secondary packages include Commerce, Technical, and others that reflect the character's background and interests.

RESOURCES

When push comes to shove, or it comes down to eating or not, the only thing an artist will hang onto are the tools of his trade—instruments, brushes, comp-console, whatever. The rest, more often than not, goes to the landlord or the pawn shop.

BIOMODS

Computers and electronics play a major role in most artistic endeavors in 2199, so neural jacks are very common. Body sculpting is popular with performing artists, and specialized implanted micro toolkits are common among painters and sculptors. Sensory recorders are mandatory for the sim artists who are becoming more common in Poseidon's major settlements.

Dancer (Everyday)
Professional Packages: Expert Arts and Entertainment (Dancer)
Biomods: Improved Blood Oxygenation

Painter (Everyday)
Professional Packages: Expert Arts and Entertainment (Painter)
Biomods: Implanted Micro Toolkit (Painting)

Rock Star (Exceptional)
Professional Packages: Expert Arts and Entertainment (Musician), Specialist Commerce
Biomods: Neural Jack, Implanted Sensory Recorder, Implanted Translator, Body Sculpting

CIVILIAN PILOT

On Poseidon, it seems like everyone flies, but only a very few are true pilots. Modern jumpcraft and VTOL aircraft make flight accessible to the masses and small submersibles are common, but when it really counts most, the wise trust only professionals. Cyclonic storms, ragged gear, and a deadly ecology make Poseidon a hazardous place to travel, and a lucrative world for skilled pilots. The experienced pilots are good and willing to tell you about it. The inexperienced are dead. Whether the job calls for a cargo trip to the Storm Belt or a passenger charter to an undersea facility, the civilian "bush pilots" of Poseidon have the skills and experience to make the run.

TRAINING PACKAGES

Some civilian pilots received most of their flight training in military service, and the Expert Military (Aerospace) package is appropriate for such characters. For most, though, the Expert Commerce (Commercial Pilot) package is the best choice. The Technical and Survival packages also make good secondary choices for bush pilots, and those involved in smuggling or other illegal activities may want to choose a Crime package as well.

STANDARD OF LIVING

Civilian pilots typically charge around 1cs per metric ton per kilometer for cargo runs, and a passenger charter will command about 1cs per passenger per kilometer. Most of these funds, of course, are spent on fuel, routine maintenance, repairs, and other operating costs. Most bush pilots have a small, low-rent office in one of Poseidon's major settlements. Those who don't live in their office will have a small apartment in one of the settlement's less expensive neighborhoods.

RESOURCES

Civilian pilots typically own, or are making payments on, their own vehicle. The quality and reliability of these craft, however, are inversely proportional to their often considerable age. As a result, commercial operators are always scrounging for parts and equipment to keep their VTOLs in the air or their boats underway. Civilian pilots also typically have a semi-safe harborage for their craft and more often than not, an assistant sidekick they can call on to help out with a particularly big or lucrative job.

BIOMODS
Most colonial bush pilots have scraped enough scrip together to purchase a neural jack. Ex-military pilots are often augmented with accelerated neurons.

Bush Pilot (Exceptional)
Professional Packages: Expert Commerce (Commercial Pilot), Novice Survival, Novice Technical
Biomods: Neural Jack, Implanted Micro Toolkit, Salt Tolerance, Telescopic Vision

Ex-Military Pilot (Exceptional)
Professional Packages: Expert Military (Aerospace), Specialist Commerce
Biomods: Neural Jack, Accelerated Neurons

Smuggler (Exceptional)
Professional Packages: Expert Commerce (Commercial Pilot), Specialist Crime
Biomods: Neural Jack, Nightvision, Multiglands

DOCTOR
Medical doctors are found in the employ of the GEO, Incorporate, private hospitals in Poseidon's major settlements, and independent clinics all over the waterworld. Most physicians are highly educated and operate in well-equipped, quality facilities. Of course, on the edges of the frontier, "well-equipped" and "quality" are relative terms.

TRAINING PACKAGES
Doctors should choose Expert Medical as their primary training package. Science and Technical make good secondary packages.

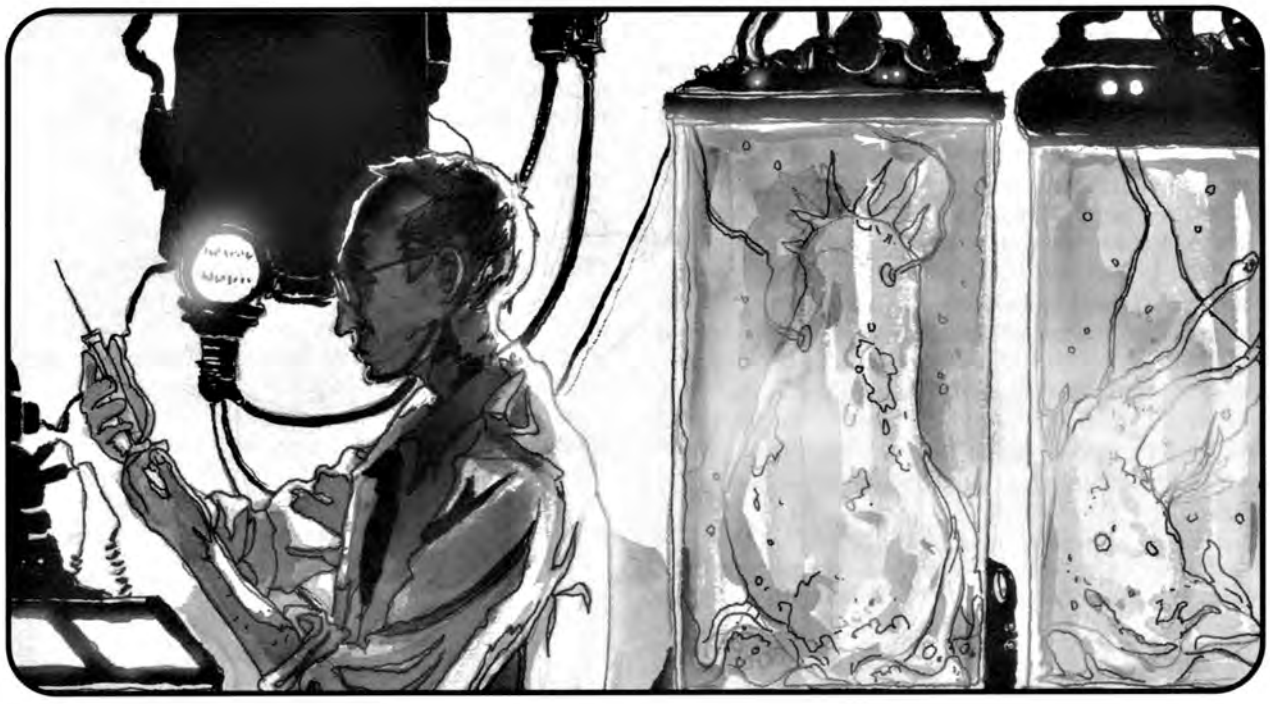
STANDARD OF LIVING
Physicians have always commanded healthy salaries, and those on Poseidon are no exception. Doctors can expect to earn between 5,000cs and 10,000cs per month. Most physicians will own a modest residence, in addition to their office or clinic.

RESOURCES
Doctors will own a clinic or work in a hospital. Most will also have one or more medical technicians in their employ, or otherwise at their disposal. They will also have quality equipment specific to the branch of medicine they practice—surgery, field trauma, etc.

BIOMODS
Neural jacks, implant microcomputers, and micro-toolkits, as well as immunological symbiotes are common among physicians. Many also rely on multiglands for added concentration, calm, and stamina.

Genetic Engineer (Exceptional)
Professional Packages: Expert Medicine, Specialist Science (Life Sciences)
Biomods: Neural Jack, Implanted Microcomputer, Immunological Symbiote

Physician (Exceptional)
Professional Packages: Expert Medicine, Novice Science (Life Sciences), Novice Technical
Biomods: Neural Jack, Implanted Microcomputer, Implanted Micro Toolkit (Surgical)



ECOTERRORIST

In the aftermath of the Blight, Earth and the Colonies have become a battleground for competing ideologies: ecological restoration and preservation against economic recovery and development. On Poseidon, this cold war has become entangled with other complex political issues, from native rights and a growing independence movement, to the controversy surrounding the GEO's formal claim on the colony. Ecoterrorists fight a continuing, illegal war against the Incorporate states and any others accused of "ecological crimes." In recent years, ecoterrorists have received increasing support from the native population, and many colonists believe that some have even established alliances with the aborigines.

TRAINING PACKAGES

Most ecoterrorists have some military training, so the Military training package is a good place to start. Appropriate secondary packages include Crime, Diplomacy, Espionage, and Survival, depending on the focus of the character concept.

STANDARD OF LIVING

Terrorists, of course, do not often earn a stable salary. Most often, an ecoterrorist's living expenses will be provided for by his parent organization, along with a small discretionary stipend of perhaps as much as 500cs per month. An ecoterrorist's living quarters may range from a small hut in a native village to a low-profile flat in Haven or Kingston.

RESOURCES

Environmental extremists will have access to detailed information about the activities of the major Incorporate states. Not necessarily confidential information, but in-depth and very useful—transport schedules, cargo manifests, research plans, etc. Every ecoterrorist on Poseidon also has at least one reliable black-market contact that can be depended on to hook him up with almost anything he might need—hardware, information, etc. In addition, such terrorists will often have the tacit support of the people. Unless an ecoterrorist has done something vile or harmed a person directly they can count on a certain level of grassroots protection and safety.

BIOMODS

Most ecoterrorists are either ex-military personnel or have been financed by terrorist groups to go head-to-head with the law enforcement and military organizations of the GEO and Incorporate states. As a result, many are extensively modified. Biomods that give terrorists an advantage in combat, like neural jacks, multiglands, and pain inhibitors, are common, as are survival modifications like anti-poison and salt tolerance. While certainly less common, a few elite terrorists may even have advanced military-grade biomods, like accelerated neurons and myo-skeletal enhancement.

Ecoterrorist (Exceptional)

Professional Packages: Specialist Military, Specialist Espionage, Novice Survival.
Biomods: Improved Blood Oxygenation, Neural Jack, Nightvision.

FREEBOOTER

Unlike the pirates of Earth history, these criminals do not inspire visions of heroism and romance, taking on royal fleets for honor or love. Much the opposite, these violent opportunists skulk about the waters of Poseidon stealing from the weak, making quick raids in the dark of night, and hiding from local authorities. Most lead a marginal, hand-to-mouth existence, but occasionally a band of these cutthroats, backed with good leadership and an extensive organization, makes a name for itself and a bit of a profit as well.

TRAINING PACKAGES

Like sailors, most modern pirates are effectively technicians, trained to operate sophisticated electronic and mechanical systems. As a result, the Technical training package is always a good choice for a skilled freebooter. Many pirates once served in the naval forces of the GEO, the Incorporate, or one of the Independent nations, so Expert Military (Navy) is appropriate. Obviously, the Crime package is a good choice as well, and Commerce and Survival are appropriate as secondary packages.

STANDARD OF LIVING

On Poseidon, piracy is far more dangerous than it is profitable. A freebooter will be lucky to stay alive and earn enough scrip to keep food and booze in his belly on most days. On occasion, a fortunate crew may make a big score, and the freebooter will have a few thousand scrip to spread around town and make some new friends. However, it never lasts long.

RESOURCES

Whatever they happen to take in a raid or steal off the dead. That, and a dirty bunk aboard ship.

BIOMODS

Few pirates are successful enough to finance extensive modifications. Freebooters favor relatively inexpensive biomods that give them an edge in a crisis, like neural jacks, pain inhibitors, and improved blood oxygenation.

Freebooter (Exceptional)

Professional Packages: Expert Military (Navy), Specialist Crime
Biomods: Neural Jack, Improved Blood Oxygenation, Pain Inhibitors

FRONTIERSMAN

Despite its steadily expanding islands of civilization, Poseidon is mostly a savage and alien wilderness. A lack of familiarity with the waterworld's complex and often deadly ecology, unpredictable weather patterns, and deceptive geography have cost countless newcomers their lives. Those elite few with the knowledge, skill, and experience to lead others into the wilderness, and bring them out again safely, are a priceless commodity on the frontier. Freelance guides and wilderness outfitters regularly work with GEO and Incorporate personnel, tourists and adventurers, research scientists, and emergency search-and-rescue or salvage teams.

TRAINING PACKAGES

Most frontiersmen will have the Expert Survival package, as well as at least the Novice Commerce package. Other good choices for secondary packages are Technical and Colonization.

STANDARD OF LIVING

The scrip a guide can charge for his services is almost entirely dependent upon his experience, reputation, and contacts. A reputable guide will be able to command 300cs or more per day. Most guides charge a premium for expeditions to Poseidon's more dangerous regions, which, many clients have noted, includes almost all of them. Many guides maintain a small office in one of the major settlements, and some even supplement their income with retail wilderness outfitting operations. Because they are rarely home, a guide's "permanent quarters" will usually be found at their place of business. Live-aboards are also popular, especially on watercraft. Because most guides have invested tens of thousands of scrip on biomods to keep them alive in the wilds, they often can't afford to pay high rents.

RESOURCES

A guide's most valuable resource is his knowledge. The wilds of Poseidon are dangerous and survival is a matter of wit and skill. Guides will invariably have the best regional maps, personally annotated by experience or word of mouth. They will also have a network of fellow guides, natives, and pioneers that can update regional information, offer hospitality, or render emergency assistance.

BIOMODS

On Poseidon's frontier, most wilderness guides are heavily modified. Anti-poison, salt tolerance, and an immunological symbiote are almost mandatory, and sensory biomods like amplified hearing and nightvision are popular as well. Many guides on Poseidon invest in full-body aquaform modifications, too, though this often keeps them in debt for several years.

Guide (Exceptional)

Professional Packages: Expert Survival, Novice Athletics, Novice Colonization
Biomods: Anti-Poison, Immunological Symbiote, Nightvision, Salt Tolerance

Outfitter (Exceptional)

Professional Packages: Specialist Commerce, Specialist Survival, Novice Technical
Biomods: Neural Jack, Implanted Micro Toolkit (Electronics, Mechanics)

GANGSTER

The technology available to the GEO in 2199, from communications relays to surveillance satellites, makes catching small-time operators a relatively simple matter. Large-scale criminal operations, though they inevitably draw the attention of the Justice Commission, rely on resources that often match those of the law enforcement services. From enforcers to mob bosses, gangsters fill the ranks of these powerful organizations.

TRAINING PACKAGES

Expert Crime (Gangster) is the best choice for a primary package. Appropriate secondary packages include Commerce and Law Enforcement—every gangster should know his enemy...

STANDARD OF LIVING

Small-time dealers and enforcers can expect to earn as much as 5,000cs per month in either salary or private business. Bosses and other connected gangsters can earn 10,000cs per month or more, and the highest ranks of the most powerful criminal families and organizations are among the wealthiest people on Poseidon. Living quarters can range from the expensive apartments and condominiums of junior enforcers to the sprawling compounds of bosses and kingpins.

RESOURCES

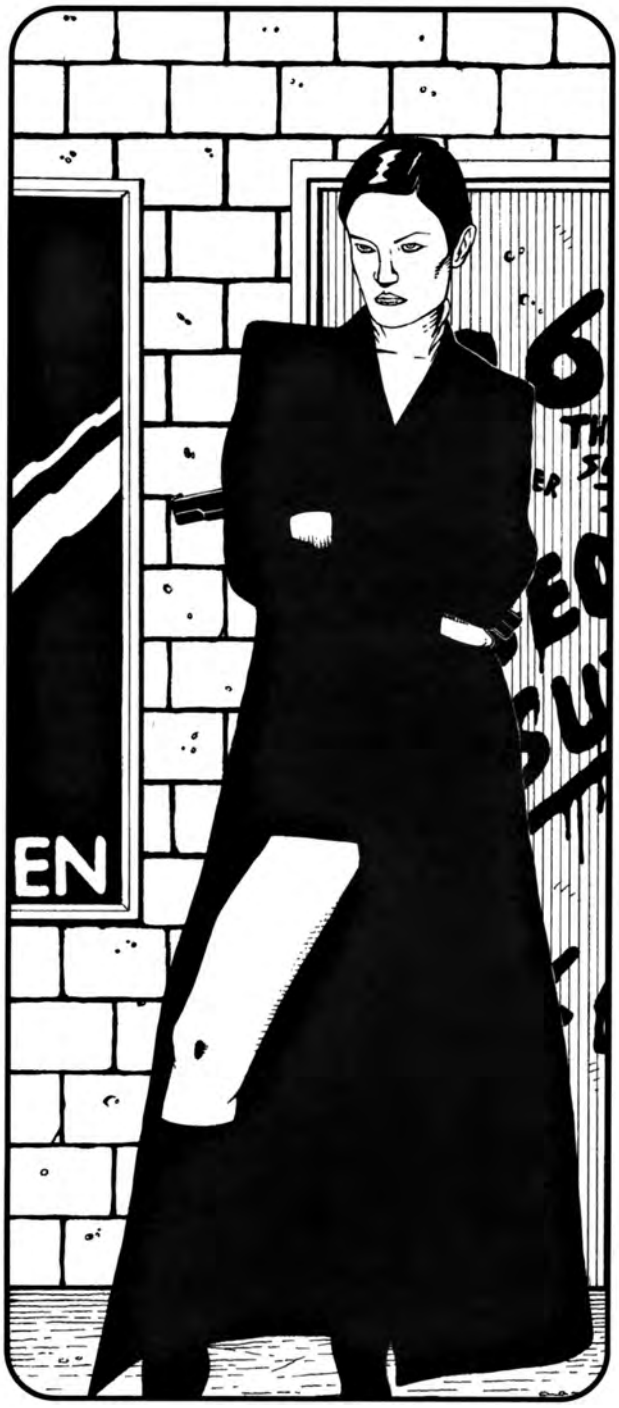
The human and technological resources available to most members of a crime syndicate are formidable, often the equivalent of a small corporation. Transportation, weapons, money and thug-power are readily available, however, "misuse" of such resources is usually lethal.

BIOMODS

Gangsters have the cash to finance several modifications that give them an edge in their cutthroat world. Neural jacks, body sculpting, and multiglands are the most common biomods, though high-level enforcers and contract killers can even have military-grade modifications like accelerated neurons and myo-skeletal enhancement.

Contract Killer (Exceptional)
Professional Packages: Expert Crime (Gangster), Specialist Military
Biomods: Neural Jack, Multiglands, Nightvision, Telescopic Vision

Mob Boss (Elite)
Professional Packages: Expert Crime (Gangster), Novice Administration, Novice Commerce
Biomods: Body Sculpting, Neural jack, Immunological Symbiote, Multiglands, Transhuman



COLD SOUP

It's a shame how long it takes some people to realize they're dead. It's just so ironic to see them walking and talking, not knowing their lives are over. Mr. 184 —I started numbering them after getting into the business back on Earth—was a perfect example. He had died just over 72 hours earlier when I was paid my advance. I am a professional, and once the "contract" is "signed," I figure the job is done. The rest is simply following up on loose ends, sort of like putting the period at the end of a sentence.

Mr. 184 was in the middle of a vain attempt to enjoy a dinner at a fine local restaurant. Tonight he was having some sort of steak, certainly a delicacy considering the flair with which the waiter brought it to him. He was dining with his current woman, a beautiful redhead, all glitter, smiles and breasts. Who said money can't buy you happiness?

In the past 72 hours I had learned quite a bit about Mr. 184. My contacts and my current employer had been very helpful. I had learned that I could expect Mr. 184 to be unarmed, being out with a lady and all. However, I could expect a number of armed and well-trained bodyguards. No problem. In fact, they would only serve to add a little interest to the evening. I also knew that the restaurant was wired, so I went in cold, no weapons. I could have arranged to have something waiting inside if there had been more time, but this too would serve to make things interesting.

I just walked in the front, right past the scanner and the maitre d'. I didn't get a table, just headed straight for the men's room. Under my coat was a black waiter's jacket. I stuffed my coat in the trash, stepped out of the restroom, and walked purposefully towards the kitchen doors.

Kitchens are where the chefs work, and chefs like to work with big knives. So do I. Knives don't go bang and a waiter with a knife would not immediately arouse suspicion. The plan was to lift one from the kitchen and use it on the dead guy outside. No problem. If I haven't exactly done it a thousand times, I am at least passingly familiar with the idea.

I pushed past the kitchen doors, and had a big, silver platter up on my shoulder before the door had swung the first time. By the time the door had swung a second time, I knew my plan would have to change. There was muscle in the kitchen, and apparently he had done his homework. The look on his face said he'd made me as a potential imposter, at least someone not on tonight's shift list. Well, at least he had the good graces to hesitate long enough for me to consider several alternative plans, select the best, and take action.

I tripped.

Actually, I stutter-stepped, and drove the edge of my heavy metal tray into the tough's larynx. He didn't have a chance. He hit the floor and flopped around there like a dying fish, clutching his throat as he suffocated. If anyone had seen the attack they apparently did not realize what had just happened. I bent over him, snagged the large pistol from under his vest, and started shouting.

"Hey, this guy blah blah blah. Get some help blah blah blah," I improvised, and soon the kitchen was stunned into inaction, just where I wanted them.

I hate it when things don't go as planned. It just seems somehow unprofessional. But errant plans are part of the business, and I am a professional, so I forged ahead. I hid the pistol and grabbed several platters of food, including the convenient serving bowl of creamy soup, and placed them on my tray. I then hefted the tray and headed for the door, passing out backwards, and then spinning to face the room. My autopilot engaged.

GEO MAGISTRATE

There are currently three GEO Magistrates on Poseidon, and they wield as much power and influence as anyone on the planet. Each Magistrate controls eight Marshals, their Districts, and all their associated Patrol resources. While not in the chain of command, the Magistrates also have considerable influence with the GEO Peacekeeping forces garrisoned on the planet. They are each responsible only to the High Commissioner for Justice, though the colony's isolation from Earth lends them a great deal of autonomy. While Marshals are the arbiters of justice on an individual level, the Magistrates mete out justice on the planetary level. They interpret GEO law on Poseidon and oversee much of the administration of the Justice Commission. Rumors abound of corruption in the lower levels of the judicial system, but the Magistrates, almost as much as the Marshals, are known for their integrity and commitment.

TRAINING PACKAGES

Administration, Diplomacy, and Law Enforcement are the most common professional packages for GEO Magistrates.

STANDARD OF LIVING

The Magistrates on Poseidon have advanced to the highest levels of the GEO hierarchy. Most will have significant wealth over and above the salaries they command from the GEO, and they can expect to bring in 20,000cs to 30,000cs per month in discretionary income. All Magistrates have permanent quarters on *Prosperity Station*, as well as a comfortable estate in the most prestigious neighborhoods of Haven.

RESOURCES

Though not above the law, Magistrates effectively are the law. There is simply very little they cannot bring to bear in the line of duty, or in their personal lives. Their access to information, equipment, funds, and personnel is essentially complete.

BIOMODS

Magistrates are invariably wealthy and privileged, and they are usually heavily modified as a result. Neural jacks, implanted microcomputers, immunological symbiotes, longevity therapy, body sculpting, and transhuman modifications are very common.

GEO Magistrate (Elite)

Professional Packages: Expert Administration, Specialist Diplomacy
Biomods: Neural Jack, Body Sculpting, Implanted Microcomputer, Immunological Symbiote, Longevity Therapy, Transhuman

GEO MARSHAL

Called "Dillons" by the more dubious elements of Poseidon society, the Marshal is a modern synthesis of law enforcement officers from an earlier time. Empowered by GEO authority, the 24 GEO Marshals assigned to Poseidon are never out of their jurisdiction, combining enforcement, investigative, and judicial powers into a single elite officer. Few can make the cut and fewer still complete the training. Those who do are competent and skilled, depended upon by government and citizens alike. Charged with protecting civil rights and enforcing environmental regulations, these officers are given free reign and often serve as the only justice on Poseidon's frontier.

TRAINING PACKAGES

Marshals should choose Expert Law Enforcement (Detective) or Expert Law Enforcement (Special Operations) as their primary training package. Appropriate secondary packages include Administration, Diplomacy, Espionage, and Military.

STANDARD OF LIVING

Rookie Marshals earn about 2,500cs per month, while experienced veterans can make as much as 5,000cs per month. Marshals most often maintain a small, comfortable residence wherever they are stationed, and also have semi-permanent accommodations on *Prosperity Station*.

RESOURCES

There is no such thing as an off-duty Marshal, and in the line of duty, if a Marshal wants it he gets it. Vehicles, weapons, information, personnel, state-of-the-art electronics, and cutting-edge prototypes, these lawmen always have access to the right tool for the job.

BIOMODS

GEO Marshals are among the most heavily modified characters on Poseidon. Neural jacks, multiglands, accelerated neurons, and myo-skeletal enhancement are standard, and spyware, programmed reflexes, immunological symbiotes, and sensory enhancements are very common. There are only 24 Marshals on Poseidon, and the GEO makes sure they have the very best.

GEO Marshal (Elite)

Professional Packages: Expert Law Enforcement (Special Operations), Specialist Military
Biomods: Accelerated Neurons, Immunological Symbiote, Myo-skeletal Enhancement, Neural Jack, Multiglands, Nightvision, Programmed Reflexes

Table near target, no food yet. Pick up folding stand, thread through tables, do not look at target. Tag muscle, there, there...there. Two standing against wall, one near door scanner. Keep going. Flip stand out, set tray down. Someone at the table beginning to complain, not their food. Ignore them. Target directly behind me. Girlfriend on right, target on left.

Go! Reach into soup, grab pistol, spin around, raise weapon, soup flying. Pistol fires, one two...three four...five six...guards down or falling. Seven eight nine ten eleven twelve, making sure job done. Target slumps, job done.

My autopilot disengaged. I dropped the weapon on the table and walked quickly to the door, stripping off the soup and blood-splattered waiter's jacket. I strolled out the front, and as nonchalantly as I could, climbed into my waiting taxi.

It was another job well done. Yeah, I'm good. As the cab lifted away and headed across town, however, I did run the job over in my head, and I realized something. I really ought to go back there some time. Mr. 184's Sundancer steak had looked really good.

GEO PATROL

These are the common precinct officers and beat-patrols responsible for routine law enforcement in Poseidon's major settlements. While not as well supported by GEO resources and authority as the Marshals, Patrol Officers are nevertheless the most numerous law enforcement officials on Poseidon. The Patrol doesn't get the media attention of either the Marshals or the Native Patrol, but their officers know their jurisdictions better than anyone. Patrol stations are organized by regional districts, each of which is supervised by a Marshal and a Magistrate.

TRAINING PACKAGES

Choose one of the Expert Law Enforcement packages as your primary training package. Appropriate secondary packages include Administration, Crime, Espionage, Military, and Technical.

STANDARD OF LIVING

Patrol Officers typically earn about 2,000cs per month, though ranking officers can make considerably more. Patrol Officers usually have a small residence or apartment near their precinct offices.

RESOURCES

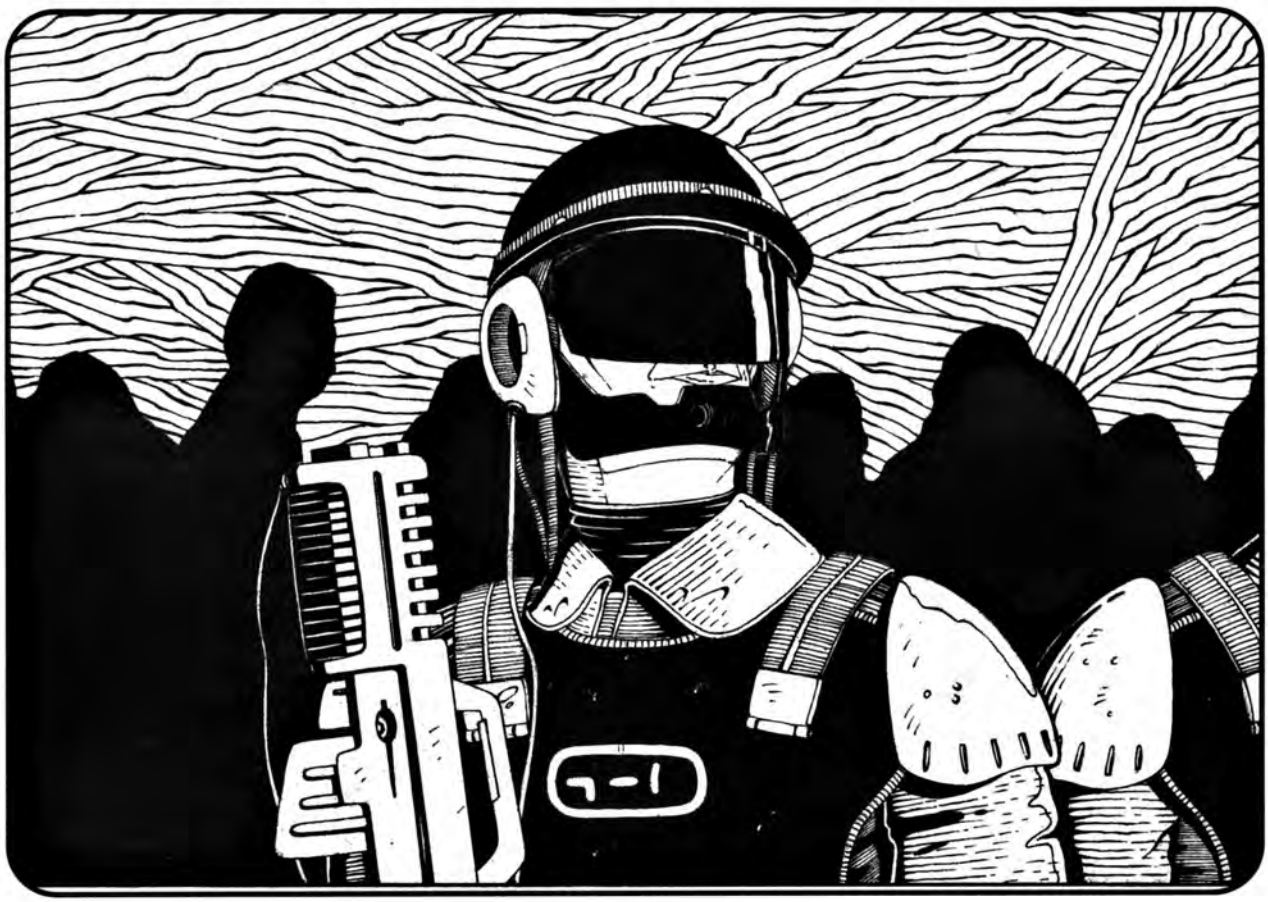
Vehicles, weapons, and backup are all part of the job. On duty, the average Patrol Officer typically carries a heavy sidearm and wears some personal body armor. Even off duty an officer can gain limited access to various databases, and can always call on a little private backup from his fellow officers.

BIOMODS

Patrol Officers are not as heavily modified as Marshals, of course, but neural jacks, improved blood oxygenation, multiglands, and immunological symbiotes are fairly common.

Detective (Exceptional)

Professional Packages: Expert Law Enforcement (Detective), Novice Administration, Novice Crime
Biomods: Neural Jack, Improved Blood Oxygenation, Multiglands



GEO PEACEKEEPER

The GEO Peacekeeping Force was the governmental response to the lawlessness and military crisis of the Blight Years. Once the strictly defensive force of the United Nations, the Peacekeepers now dominate the military landscape, both on the ground and in space. Though not always equipped with state-of-the-art hardware, the Peacekeepers make up the difference with numbers, training, and an unsurpassed intelligence network. Special public safety divisions also serve in law enforcement, criminal investigation, and emergency response. In addition, it is from the top Peacekeeper recruits that the GEO draws candidates for the Marshal Academy.

TRAINING PACKAGES

Peacekeepers should choose either the Infantry, Marines, or Navy Expert Military package, according to the player's choice of service branch. Secondary packages should be in keeping with the character's specific training and duty assignments. Espionage, Law Enforcement, Technical, and Survival are common choices. Administration and Diplomacy are also good choices for officers.

STANDARD OF LIVING

Peacekeepers earn between 1,000cs and 5,000cs per month, depending upon rank and experience. The GEO provides troopers with room and board on base, as well as full medical benefits and other characteristic perks of military service.

RESOURCES

Every trooper is issued a high-end bodycomp with integrated, military-grade communications equipment, keeping them in almost constant contact with their chain of command, even when off duty. They are also issued a heavy sidearm and custom-fit combat armor, and other gear is provided on a mission-needs basis. Troopers also have a rather formidable source of backup in their unit buddies, as soldiers loyally look after their own.

BIOMODS

Modifications typically depend on service branch and duty assignments. A soldier in a technical specialty may have little more than a neural jack, and perhaps an implanted microcomputer. Special forces soldiers may have myo-skeletal enhancement, accelerated neurons, multiglands, and neural jacks, and be only slightly less augmented than Shock Troopers. Marines stationed on Poseidon have typically received the full-body aquaform modification as well.

Commando (Exceptional)

Professional Packages: Expert Military (Infantry), Novice Athletics, Novice Survival
Biomods: Neural Jack, Multiglands, Myo-skeletal Enhancement, Nightvision

Marine Recon (Exceptional)

Professional Packages: Expert Military (Marines), Specialist Survival
Biomods: Aquaform, Neural Jack, Nightvision, Accelerated Neurons

Combat Tech (Exceptional)

Professional Packages: Expert Technical, Specialist Military
Biomods: Neural Jack, Implanted Microcomputer, Implanted Micro Toolkit (Mechanics, Demolitions)

GEO SHOCK TROOPER

In an effort to get the most bang for their military buck, the GEO created the Shock Troopers. Included in the Peacekeeper chain of command as the Marine Corps Heavy Cavalry, and commonly known as Supertroopers, they are divided into squad-size units and deployed as rapid-response teams. Supertroopers are elite commandos able to execute their missions in minimum time and with maximum force. Supertroopers are heavily modified, and only the finest Peacekeepers can ever hope to make the grade. Shock Troopers are intense, extreme, skilled, and without fear. They have superior training, the latest equipment, and a proven reputation for being the best.

TRAINING PACKAGES

Shock Troopers should take Expert Military (Marines) as the primary training package. Athletics and Survival are the most common secondary packages, though Shock Troopers with appropriate specialties may choose Espionage, Law Enforcement, or Technical. Officer characters may also want to choose the Administration or Diplomacy packages.

STANDARD OF LIVING

As the elite soldiers of the GEO Armed Forces, the Shock Troopers are well compensated for their service. Shock Troopers typically earn between 4,000cs and 6,000cs per month, in addition to the standard benefits of GEO military service. The Marine Corps Heavy Cav have specially designed permanent quarters on *Prosperity Station* and at a few dirtside bases.

RESOURCES

Shock Troopers are the elite, and there is an entire infrastructure to support them. They have the best techs, training cadre, and doctors, and their personal needs are entirely provided for. In the line of duty, there is little they do not have access to, and they are on duty almost all the time. A trooper's most valuable resource is the rest of his platoon. Troopers are rabidly loyal to their fellows and a platoon of Shock Troopers is more than a match for an entire company of standard Peacekeepers.

BIOMODS

All Shock Troopers receive the full-body Shock Trooper biomod. Most also enjoy extensive cybernetic augmentation, an implanted microcomputer and sensory recorder, uplink neural jack, pain inhibitors, and programmed reflexes.

Shock Trooper (Elite)

Professional Packages: Expert Military (Marines), Novice Athletics, Novice Survival
Biomods: Shock Trooper, Aquaform (Diver), Uplink Neural Jack, Implanted Microcomputer, Implanted Sensory Recorder, Pain Inhibitors, Programmed Reflexes

INCORPORATE SECURITY

In the harsh political and economic war-zones of the 22nd Century, most Incorporate states maintain at least a small cadre of professional soldiers. These troops are loyal and paid to stay that way. For the most part they are quite competent, specializing in facility security, temporary reinforcement, small actions, and the occasional, and distinctly deniable, covert operation. Incorporate security personnel are typically well trained, well equipped fighters, and their technology is state-of-the-art. They are often biomodified, and they understand tactics and hardware like their lives depend on it—which, of course, they do. As in any profession, incompetence is common, but assuming an Incorporate soldier is incompetent is an excellent way to very quickly end up very dead.

TRAINING PACKAGES

Because of their broad duties, Espionage, Law Enforcement, and Military may all be appropriate for an Incorporate Security officer.

STANDARD OF LIVING

Incorporate soldiers will earn between 2,000cs and 5,000cs per month, depending upon rank and security. Most will have assigned quarters in the military and security facilities of their employer's company town.

RESOURCES

Corporate security is serious business and the Incorporate are usually willing to pay for every precaution. Within the Incorporates' holdings, most security personnel have access to state-of-the-art equipment, cutting-edge electronics, and high-level clearance. They also have considerable intelligence resources both through internal and outside sources. Individually, such personnel also have significant privileges as Incorporate citizens.

BIOMODS

Low-level security will be lightly modified, but the Incorporate make sure their elite have the very best. Special operations personnel can have myo-skeletal enhancement, accelerated neurons, multiglands, programmed reflexes, sensory enhancements, and neural jacks.

Security Officer (Exceptional)

Professional Packages: Expert Military (Infantry), Specialist Law Enforcement
Biomods: Neural Jack, Improved Blood Oxygenation, Multiglands

Incorporate SpecOps (Elite)

Professional Packages: Expert Military (Infantry), Specialist Espionage
Biomods: Neural Jack, Accelerated Neurons, Myo-skeletal Enhancement, Multiglands, Nightvision

INTELLIGENCE AGENT

On Poseidon, very little of the conflict between the GEO and Incorporate states is resolved through diplomacy or force of arms alone. GEO Internal Security has a powerful and growing presence on Poseidon, and every Incorporate state with a major investment on the colony world maintains an extensive network of intelligence and covert operations specialists. In 2199, Earth and the Colonies are firmly in the grip of a second Information Age and secrets are at a premium. All major players on Poseidon employ professionals to protect their own secrets and acquire those of their rivals.

TRAINING PACKAGES

Players should choose Expert Espionage (Analyst) or Expert Espionage (Operative) as their primary training package. Good secondary packages include Crime, Diplomacy, Law Enforcement, Military, and Technical, depending on the character's focus.

STANDARD OF LIVING

Covert operatives in service to the GEO will usually earn about 4,000cs per month. Those in the employ of the Incorporate will earn 5,000cs to 6,000cs per month. GEO agents most often keep a small apartment in Haven or have assigned housing at one of the GEO's military bases on the planet. Incorporate operatives typically have a comfortable residence in their employer's company town.

RESOURCES

In the execution of their duties, the resources of these officers are usually limited only by the resources of their employer and their operational circumstances. However, being paranoid and cautious people, operatives typically have rather impressive personal resources as well. They either own or have general access to a

jumpcraft and an effective collection of weapons and electronics. They also possess high security clearances and an extensive network of contacts. Field operatives will usually have a safe house, one unknown to their employer, for when the going really gets tough.

BIOMODS

Intelligence officers are usually heavily modified. Analysts favor neural jacks and implanted microcomputers, while neural jacks, spyware, and multiglands are common with field operatives. Special operations officers and paramilitary commandos are sometimes even more heavily modified, and programmed reflexes and accelerated neurons are not uncommon in these agents.

Covert Operative (Exceptional)

Professional Packages: Expert Espionage (Covert Operative), Novice Crime, Novice Military
Biomods: Neural Jack, Spyware, Multiglands, Nightvision

Diplomatic Attache (Exceptional)

Professional Packages: Expert Espionage (Analyst), Specialist Diplomacy
Biomods: Neural Jack, Spyware, Implanted Translator, Body Sculpting

JOURNALIST

In 2199, Poseidon is where the action is. The waterworld is ripe with stories, from life in native settlements to political intrigue. All of Earth's major news services and prominent publications have permanent offices and staff on Poseidon, but only the best journalists receive assignments to the planet.

TRAINING PACKAGES

Humanities is the most appropriate choice for a primary package. Secondary packages should reflect the journalist's field of expertise, and could include everything from Military, Crime, and Law Enforcement, to Administration, Technical, and Science.

STANDARD OF LIVING

Journalists working for the largest media services on Poseidon typically earn 4,000cs to 5,000cs per month, though the salaries paid by smaller, less reputable employers will be significantly lower. Most journalists keep a small apartment near their employer's offices, though they will often spend a great deal of their time ranging all over Poseidon for a story.

RESOURCES

Independents are pretty much on their own, but those employed by even the smaller media agencies have professional access to versatile transportation, high-end communications and production gear, and one or more jaded-but-able field assistants.

BIOMODS

Neural jacks, implanted sensory recorders, and body sculpting are very common among professional journalists, and improved blood oxygenation, immunological symbiotes, and survival mods are helpful for those who spend long periods of time in the field. Veteran journalists with major media conglomerates may even be equipped with spyware.

Investigative Reporter (Exceptional

Professional Packages: Specialist Administration, Specialist Humanities, Novice Espionage
Biomods: Neural Jack, Body Sculpting, Implanted Sensory Recorder

MEDIC

On Poseidon, EMTs, ERT medics, and Peacekeeper corpsmen all receive extensive training focusing on emergency medical care under dangerous conditions and in hostile environments. With such training, most medics are reasonably competent in combat and are well-trained in the basics of wilderness survival. However, few medics have any significant experience with long-term treatment and care.

TRAINING PACKAGES

Medics should choose Specialist Medicine as their primary training package. The Technical and Survival packages make good secondary choices for ERT medics, while corpsmen should choose at least Novice Military.

STANDARD OF LIVING

Regardless of their service branch, medics will typically earn about 2,000cs per month. Ranking medical corpsmen and ERT medics can earn a bit more, and the latter often have access to hazardous-duty benefits. With the exception of military corpsmen, who will usually live on base, medics often rent an inexpensive apartment or residence near their hospital or search-and-rescue base.

RESOURCES

In the line of duty, a medic will have quality medical gear specifically designed and packed for use in the field. He will likely also have use of an emergency response vehicle of some sort, or be part of a team that does. He may also have a connection, often in the black market, that can usually score hard-to-get medical supplies in exchange for occasional, no-questions-asked medical treatments for select "clients."

ON THE JOB

Skin bought it on this little rock off Jacob's Corner yesterday. We knew the weather was going to get bad. We had just hoped that marine traffic would heed the storm warnings too. No such luck. We got the mayday and were underway in less than 12 minutes. Two ERT hoppers loaded for bear and ready to rock. Hot rod rescuers from hell, yes sir, that's us.

The problem was that Skin wasn't supposed to be with us. His lady, Belle, had found a pretty good job working for Tom at Keats' Pizza a couple months ago. It started out okay, but she seemed to be working some pretty odd hours, not coming home some nights, and there had been talk. It hadn't sounded like anything serious, but Skin had really not been himself. And Belle was around less and less. So the Old Man, he tells Skin to take the week off, get his head on straight. Skin gave him some line about being able to take care of his own life, but he stayed home the next day anyway. A few days later, he and Belle came down to the station together. It was like old times, me and Skin and Belle and Dizzy and Jimbo and Deuce and Mary sitting around, playing cards and telling fish stories, and choking down Skin's patented toxic coffee.

Skin and Belle were holding hands and looking into each other's eyes and generally making the rest of us sick being cute. But just as things were really starting to feel like they were back to normal, the horn went off. The Old Man came in and gave us a quick brief. He said it was going to be a bad one, real bad; a big blow and a freighter on the rocks. He then surprised everyone by telling Jimbo and Deuce to take the second hopper.

Now, everyone knows that Jimbo's a good pilot, but Skin was the best there ever was. Anyone says differently, they're lying. If we were going to hit some really rough weather, Skin was the only one for the second hopper. The Old Man told him it was no big deal, and that he wanted Skin to have some more time off. Belle even asked him to stay. They may as well have tried to stop the tide. Skin just

BIOMODS

Most medics who can afford it purchase the multiglands modification, as it helps them maintain their composure in crisis situations. Neural jacks are also very common, as are specialized implanted micro-toolkits. Corpsmen in elite units often have improved blood oxygenation and even accelerated neurons.

ERT Medic (Exceptional)

Professional Packages: Specialist Medicine, Specialist Survival, Novice Technical
Biomods: Respiratory Filter, Immunological Symbiote, Nightvision

Peacekeeper Corpsman (Exceptional)

Professional Packages: Expert Military (Infantry), Specialist Medicine
Biomods: Neural Jack, Improved Blood Oxygenation, Accelerated Neurons

MERCENARY

The decentralized balance-of-power and escalating conflict throughout Earth and the Colonies has resulted in an expanded role for soldiers of fortune. Constrained by scarce resources, many of the remaining nation-states of Earth employ professional mercenary soldiers to provide some semblance of defense and security. On Poseidon, itinerant professionals and soldiers retiring from service to the GEO and Incorporate are hiring on with isolated communities and independent organizations throughout the colony. While they may lack the resources of GEO or Incorporate troops, mercenaries are nonetheless dangerous and formidable soldiers.

TRAINING PACKAGES

Mercenaries should choose one of the Expert Military packages appropriate to their area of specialization. Good secondary packages include Commerce, Crime, Diplomacy, Espionage, and Survival.

STANDARD OF LIVING

For freelance mercenaries, paydays are often few and far between, but when they come, they are usually pretty profitable. Mercenaries typically command between 1,000cs and 5,000cs per day for "hot" operations. Mercenaries in the employ of major military consultancies and security companies can expect to earn a regular salary of 3,000cs to 6,000cs per month. When not in the field, most mercenaries keep a small, secure residence in one of Poseidon's outlying settlements. Many of the largest security corporations have built state-of-the-art training and operations facilities on Poseidon that provide comfortable lodging for their employees.

RESOURCES
Mercenaries, by the very nature of their profession, are a transient lot. Often they own their own personal battle kits, but little else. They are therefore almost always well armed, with worn combat armor, rugged electronics, and a formidable array of firearms.

BIOMODS
Mercenaries tend to be as heavily modified as they can afford, and given the current state-of-affairs on Earth and Poseidon, they can usually afford quite a bit. Most mercenaries invest in neural jacks, improved blood oxygenation, immunological symbiotes, and a variety of sensory enhancements. The elite will have full myoskeletal enhancement and accelerated neurons packages, though these military-grade augmentations can give them trouble with the authorities, especially at airports and spaceports.

Mercenary (Exceptional)
Professional Packages: Expert Military (Infantry), Novice Commerce, Novice Crime
Biomods: Neural Jack, Nightvision, Improved Blood Oxygenation, Immunological Symbiote

MILITARY PILOT
By land and air, on and below the surface of the oceans, warfare in 2199 is highly mobile. The GEO and Incorporate alike rely on high-tech machines and skilled pilots to deliver military forces planetwide at a moment's notice, and to provide dominating air support. Military pilots are in command of some of the most sophisticated technology in the world of **Blue Planet**. Would-be cyborgs aside, these elite soldiers are the true synthesis of human and machine, tricked to the actual gills and wired into their craft like integrated circuits.

TRAINING PACKAGES
Military Pilots should choose Expert Military (Aerospace) as their primary training package. Good secondary choices include the Technical and Survival packages.

STANDARD OF LIVING
Pilots in the militaries of the GEO, Incorporate states, or national governments usually have a rank of at least Captain, and their specialized training commands salaries of 4,000cs to 5,000cs per month. Most will have assigned quarters on a major military base.

flowed right around them and into the pilot seat of the second jumpcraft. Jimbo and I were still in the locker room, climbing into our bright orange survival suits, but we could still hear them in the hangar. Belle pleaded with Skin as he went through his preflight. She begged him, sounding almost pitiful.

Skin didn't say a word, not a thing. He just kept going through his preflight, but he was like that. Then Belle started screaming at him, calling him all sorts of awful things, cursing him for leaving her like this. I'd have rather hopped a ride on a greater white than listen to that, because I knew if I were in Skin's place, I'd have done the same thing.

Just before he engaged the turbines, Skin stopped and looked at Belle. Jimbo and I stepped out of the locker room just in time to see him pause, look into her eyes like they were the deepest place on the planet, and then take her face in both hands and kiss her hard. Then, without hesitating, he turned, hit the starter, and sealed his door. When we lifted, I was playing port observer, so I saw Belle standing there at the edge of the platform, our downwash whipping her bright yellow skirt above the grey plastic.

In the past we have accused the Old Man of being part witch, and for good reason. He alway seems to know what we are getting into before we get there. I don't know how bad I thought it was going to be on the way out, but whatever I was thinking, I was wrong. It was much worse. I know they say that after a while, you don't get seasick anymore, that your body gets used to it. Well, they're wrong. The storm was one of the worst I've ever been in, and I was sick as a newbie.

I can't really remember all that happened. Looking back it's just a chaotic stream of memory bytes: screaming fans, desperate maneuvers, touch-and-go rescues and enough wind and water to drown it all out. I do remember Skin though. It's hard to forget a hero.

We still do not know how he did it. The freighter was floundering and turning out of the wind. Before anyone realized what was happening, Skin had a tow hooked to the bow

and was lifting off the deck. There was no way in hell he should have been able to bring that sow's head back around into wind, but he did. He did, and he held it. Skin saved a lot of lives that day. He saved the freighter crew, and he saved us. He held her until we had shuttled them all to the Corner, and finally gotten clear ourselves. He saved us all from a cold, miserable death in the cold, miserable ocean. Then his turbines overheated and seized an instant later. His hopper plunged into the raging water and just like that he was gone.

The flight home was bad. The locker room at the station was worse. Belle had waited all day for us. She'd been alone in the station, and when she heard our fans, she headed for the locker room, figuring that would be the first place Skin would go. He never showed up. She sat there at the end of the bench, just staring at the nameplate on his locker, her big blue eyes looking like the loneliest part of the ocean.

The Old Man was the last into the room. He walked up to Skinner's locker, saluted, and pulled the nameplate off. He turned, and slowly handed it to Belle. Her shoulders sank, and I turned back to my locker so I wouldn't have to see her cry. She was still there when I went home, crying alone in front of Skin's locker.

Every one of the 27 people on that freighter had made it. Skin would have been pleased.

RESOURCES

Any soldier, pilot or otherwise, always has the buddies in his unit to back him up. However, the only resource a pilot truly cares about is his craft. Obviously, a pilot's access to his vehicle is typically restricted to official use, but that does not seem to matter. These war machines are unmatched in speed, power, and armaments and most pilots are hopelessly addicted, caring little about anything else.

BIOMODS

Military pilots are heavily modified, with neural jacks, accelerated neurons, improved blood oxygenation, and multiglands being standard.

Military Pilot (Exceptional)

Professional Packages: Expert Military (Aerospace), Novice Survival, Novice Technical
Biomods: Neural Jack, Improved Blood Oxygenation, Accelerated Neurons, Multiglands

MINER

Every Incorporate state involved in the mining industry on Poseidon employs hundreds of professional miners to work the Long John beds. Incorporate miners earn competitive salaries, but the risks they take and the shares they receive are usually quite disproportionate. The contracts that bring most Incorporate miners to Poseidon effectively indenture them for years, and for many, buying out their contracts becomes their only goal. Many Incorporate miners who finally complete their contracts eventually return to the Long John fields as independent prospectors. The life is hard and seldom profitable, but at least they take the risks for themselves.

TRAINING PACKAGES

The most important professional training package for a miner is Technical. Good secondary choices include Commerce and Survival.

STANDARD OF LIVING

Miners in Poseidon's Long John fields most often earn about 5,000cs per month, with bonuses offered for exceeding standard productivity quotas. Miners typically spend three weeks at a time in an Incorporate deep-sea mining base for every one week on R-and-R in some local company town.

RESOURCES

Most miners own, or are making payments on, a high-pressure industrial hard suit. Typically custom fit, this suit is all that stands between a miner and the crushing depths. Though they may appear worn and ragged, only the reckless and the stupid fail to carefully follow the maintenance schedule.

BIOMODS
Neural jacks, improved blood oxygenation, and salt tolerance are all common among Incorporate miners. Many also have implanted micro toolkits for repairing mining equipment and machinery.

Incorporate Miner (Everyday)
Professional Packages: Specialist Technical, Novice Science
Biomods: Neural Jack, Improved Blood Oxygenation

Mining Engineer (Exceptional)
Professional Packages: Specialist Technical, Specialist Science, Novice Administration
Biomods: Neural Jack, Implanted Microcomputer, Implanted Micro Toolkit

NATIVE HEALER
As the original colonists' medical supplies ran out, they were forced to find new ways to treat injury and disease. In the early years, researchers learned a great deal about the planet's ecology and biochemistry. Even before the Abandonment, scientists were researching promising medical applications of many indigenous species of flora and fauna. In 2199, native healers are a unique synthesis of traditional herbalists and medical professionals with surprisingly modern education and training. Their treatments and medicines are even being investigated by Incorporate pharmaceutical and biotech labs for possible commercial applications.

TRAINING PACKAGES
Healers should choose Specialist or Expert Medical as their primary training packages. Colonization, Science, and Survival make good secondary packages.

STANDARD OF LIVING
Native healers seldom take part in the fishing, agriculture, and commerce of their village. When not actively caring for the sick or injured, healers will be out in the wilderness, foraging for medicinal ingredients, conducting experiments, or manufacturing new curatives.

RESOURCES
Healers typically have a useful enough collection of modern medical tools and native medicines to make them vital to the health of a village. Such characters also have a small clinic and lab, typically as part of their dwelling. Healers are valued by their community and as a result are well cared for themselves. It is a belief among natives that "caring for the healer is caring for the village."

BIOMODS
Few native healers have received modifications, other than the aquaforming that is their genetic heritage. Some in larger settlements have acquired anti-poison or other survival biomods to make foraging for rare flora and fauna less dangerous.

Native Healer (Exceptional)
Professional Packages: Specialist Medicine, Specialist Colonization, Novice Survival
Biomods: Aquaform

NATIVE INSURGENT

Not all natives have reacted peacefully to Recontact. Many groups now considered "hostile" by the GEO have even developed an active warrior class. These soldiers are typically younger natives with strong philosophical opposition to government—and especially Incorporate—activities on Poseidon. While native insurgents have suffered due to inadequate training and weaponry, certain newcomers, such as arms smugglers and ecoterrorists, are beginning to change things. Many observers believe that, if unified under a common leadership, hostile native peoples could become a considerable threat to the post-Recontact colonial effort.

TRAINING PACKAGES

The Military and Survival packages are the most important to native insurgents. Good secondary packages include Colonization, Crime, and Espionage.

STANDARD OF LIVING

Native insurgents usually spend a great deal more time fishing, harvesting kelp, and tending nets than they do fighting the injustices of Incorporate excess. Insurgents are often the most driven of their people, following a day of routine labor with planning and training. Most insurgents are single men and women, and share a dwelling with their extended families.

RESOURCES

In addition to their normal share of the village resources and equipment, most native insurgents have also managed to acquire a personal assault weapon and a small reserve of propellant and ammunition. Some of these radicals may also have managed to acquire various mismatched bits of body armor.

BIOMODS

Most natives lack the resources for any but low-level modifications. The few insurgents who can afford it prefer sensory enhancements and modifications with several useful capabilities, like multiglands.

Native Insurgent (Exceptional)

Professional Packages: Expert Survival, Specialist Military
Biomods: Aquaform, Nightvision

NATIVE PATROL

The Justice Commission established the Native Patrol in an effort to address the critical shortage of law enforcement personnel on Poseidon, and to encourage cooperation from the native population. The objective of the Native Patrol is to establish a legitimate law enforcement presence among those native-controlled regions that have resisted both Incorporate and GEO intervention. Members of the Native Patrol are trained in GEO law enforcement procedures and have been authorized to call on GEO assistance when needed. Conversely, the Native Patrol has its own way of dealing with problems, and is careful to protect its own. Loyalties are often torn between the communities the officers call home and the alien government that gives them orders and signs their paychecks.

TRAINING PACKAGES

Law Enforcement and Survival are the most common training packages for Native Patrol officers. Novice levels in Colonization, Crime, or Military are good secondary choices.

STANDARD OF LIVING

Native Patrol officers earn 1,500cs to 2,500cs per month, depending upon rank and seniority. Many officers still have homes in their native villages, and usually keep a small apartment near their headquarters as well.

RESOURCES

Native Patrol officers have essentially the same access to physical resources that members of the GEO Patrol enjoy, though that access is often problematic. A unique resource enjoyed by the Native Patrol is the trust and confidence of the native population. As a result, Native Patrol officers have additional and often superior sources of information.

BIOMODS

Native Patrol officers are not paid very well and typically cannot afford even the cheapest modifications. For those few who can afford it, neural jacks and sensory enhancements are the most common.

Native Patrol (Exceptional)

Professional Packages: Expert Law Enforcement (Detective), Novice Colonization, Novice Survival
Biomods: Aquaform, Neural Jack

NATIVE SELL-OUT

Some natives have welcomed Recontact and abandoned the traditional lifestyle of their parents and grandparents. These natives, considered sell-outs by their own people, usually inhabit the slums and ghettos of the major settlements in vain attempts to get a share of the pie. Many work for hire, doing almost anything to get by. Often doing dirty work for the Incorporate, or even turning to petty crime, sell-outs are non-citizens, looked down on by the newcomers and considered traitors by their own.

TRAINING PACKAGES

Colonization, Commerce, Crime, and Survival are all appropriate for native sell-outs, depending on their backgrounds and interests.

STANDARD OF LIVING

Native sell-outs are often among the poorest colonists on Poseidon. Their part-time jobs and petty crime rarely pay for anything more than a decrepit hotel room or ghetto flat, irregular meals, and enough liquor or drugs to temporarily take their minds off their misery.

RESOURCES

Unfortunately, having abandoned their native communities, and with the odds against them in the modern settlements, such characters have very little in the way of resources.

BIOMODS

Only a rare few sell-outs have managed to scrape together a few thousand scrip for a low-level modification or two.

Native Grifter (Everyday)

Professional Packages: Expert Crime (Con Artist)
Biomods: Aquaform

OPPORTUNIST

Something for nothing, the big dream. Long John fever, real-estate scams, and confidence games, or maybe just a knack for seeing the whole picture and capitalizing on opportunity. Some people have always been attracted to the easy bucks. Call them entrepreneurs or con artists, these people want it all and they want it now. On Poseidon there are opportunists on every street corner and in every corporate boardroom, wheeling and dealing, playing for the big score.

TRAINING PACKAGES

The Expert Crime (Con Artist) package is a good start, and Commerce and Arts and Entertainment make good secondary choices.

STANDARD OF LIVING

An opportunist's dreams of wealth are always much grander than his reality. The fact is, in Poseidon's frontier society, the only consistent way to prosper is to have something of value to offer, and money for nothing is little more than a pipe dream. Most opportunists are forced to scrounge and hustle for survival on the margin, and any cash they do manage to score is quickly blown on their next big scheme. Many opportunists split their nights between the canals and the seedier tenements.

RESOURCES

As new characters, opportunists have nothing to their name but their wits. Most find that the pursuit of the score is half the fun.

BIOMODS

Successful opportunists may have scrounged up enough cash to finance low-level body sculpting or a neural jack. An opportunist coming off a big score might even have managed a multiglands implant or similar biomod, but he's probably still running from the people he cheated to get it.

Con Artist (Everyday)

Professional Packages: Expert Crime (Con Artist)
Biomods: Body Sculpting

PIONEER

Since Recontact, the GEO and many private organizations have sponsored colonization efforts on Poseidon. Whether living in the waterworld's major settlements or in isolated communities far from civilization, the civilian colonists of Poseidon face far greater hardships but enjoy unparalleled freedom and opportunity when compared to the vast majority of civilians on Earth. These colonists may be simple farmers or homesteaders, but they are all committed to carving out a civilization in Poseidon's savage wilderness.

TRAINING PACKAGES

Expert Colonization is the best choice for a primary training package. Appropriate secondary packages include Commerce and Survival.

STANDARD OF LIVING

Most pioneers on Poseidon live at essentially a subsistence level. Their days are filled with activities directly supporting the survival of themselves, their families, and their communities. Pioneers will have a modest residence in their community, invariably one that they have built themselves.

RESOURCES

The resources available to the average Poseidon colonist are understandably limited. Technology is carefully maintained and highly prized. Tools are usually manual devices and most work is accomplished by back-breaking labor. The typical pioneer will own a hunting rifle, a variety of hand tools, and a healthy farm plot or a small fishing boat. They will also usually be part of a dedicated community that takes pride in caring for its own.

BIOMODS

Few pioneers can afford extensive biomodification. Anti-poison and salt tolerance are common for those who frequently work in the kelp fields, and neural jacks are not unheard of for those who operate the agricultural machinery and hydroponics systems of sophisticated settlements.

Pioneer (Everyday)

Professional Packages: Expert Colonization
Biomods: Anti-Poison, Salt Tolerance

PRIVATE INVESTIGATOR

On Poseidon, private investigators straddle a thin line between legitimate investigation or security professionals, and criminals for hire. The fact is, most people turn to private investigators for services that law enforcement officials can't provide. In many cases, this is simply due to the lack of available resources, but sometimes, it's because the job can't be done without bending a few laws in the process. Nevertheless, many private investigators run legitimate operations, and even Marshals have been known to contract their services when conducting a demanding investigation.

TRAINING PACKAGES

The Crime and Law Enforcement packages are good choices for private investigators. Good secondary packages include Commerce, Espionage, Military, and Technical.

STANDARD OF LIVING

Private investigators on Poseidon can hope to earn between 2,000cs and 3,000cs per month, though income can be unpredictable in this profession. The going rate for most jobs is around 500cs per day, plus expenses, and a private investigator's income is limited only by the number of clients he or she can line up. Most private investigators live in a small, inexpensive flat behind or above their offices in one of Poseidon's major settlements.

RESOURCES

A tiny office, some medium-grade surveillance electronics, and an army of informants are the primary resources of a private investigator on Poseidon. Their success and livelihood instead depends mostly on their insight and experience.

BIOMODS

Few private investigators make enough money to finance extensive modifications. Neural jacks are very common, as are sensory biomods. The prosperous investigators who can afford it will usually invest in spyware.

Private Investigator (Exceptional)

Professional Packages: Specialist Crime, Specialist Law Enforcement, Novice Espionage
Biomods: Neural Jack, Spyware

PROSPECTOR

Like the gold hunters of Earth history, Long John prospectors are an obsessed and desperate lot. Slowly plying the deep-ocean floor in worn and dangerously ragged diving systems, they stake their lives on aging equipment and a lethal environment for the chance to strike it rich. Brutal conditions, brutal job, brutal people, deep-ocean diggers are the absolute orneriest individuals one is likely to meet.

TRAINING PACKAGES

The Survival and Technical packages are most important to prospectors. Science and Commerce make very good secondary packages.

STANDARD OF LIVING

As valuable as Long John is, it's even harder to find and harvest efficiently. Though all hope to strike it rich, the vast majority of Long John prospectors risk their lives to scratch just enough ore out of the planet's crust to keep their subs running and their bellies fed. One gram of unrefined ore brings about 1,000cs on the open market, so at least a prospector doesn't have to find a whole lot to get by. Most prospectors sleep in their hovercraft or submersible, but they'll occasionally spend a night or two in a cheap hotel in their favorite mining town.

RESOURCES

Prospectors own, or are in debt because of, some sort of surface craft and either a towed sensor array or a dubious submersible, either of which is used to slowly scan the sea floor for the tell-tale signature of a Long John deposit. Beyond this, any resources a prospector has depends entirely on his skill and luck.

BIOMODS

Most prospectors have scraped together enough cash to afford a neural jack for interfacing with vehicles and mining equipment. Beyond this, a few successful diggers will have improved blood oxygenation or any of several survival biomods. Most dream of the day when they can purchase a full-body aquaform modification, but if they can ever afford that, they would then be able to find something safer to do for a living.

Prospector (Exceptional)

Professional Packages: Specialist Survival, Specialist Technical, Novice Science
Biomods: Neural Jack, Improved Blood Oxygenation, Salt Tolerance

SAILOR

Wherever humanity has traveled, sailors have taken it there. Manning merchant freighters across Earth's oceans or carrying precious cargo from one Poseidon outpost to another, sailors are a close-knit society and watch out for their own. Incorporate, GEO, or even private, sailors tend the lifeline linking the countless scattered settlements of the frontier waterworld.

TRAINING PACKAGES

In 2199, most sailors are simply technicians who ply their trades aboard marine vessels. As such, the Specialist Technical package is a good choice. Appropriate secondary packages include Survival, Commerce, and even Crime, for those involved in smuggling and related activities.

STANDARD OF LIVING

Sailors aren't among the most well-compensated professionals, and are usually fortunate to earn 800cs to 1,000cs per month. Their only permanent quarters are likely to be aboard their ship, and time in port is usually spent in a cheap motel or boarding house.

RESOURCES

The only things a sailor can count on are his ship and shipmates, and that eventually things are going to get rough. As a result, sailors are a close group and loyal, eager to back each other up and to offer the shirts off their backs for a fellow sailor. Sailors also have access to their vessel and her onboard equipment, but this access is usually limited to professional need.

BLACK CHARLIE

I thought it was really something when I managed to get a third season of funding at HIST. I knew it would set me back at least a year, but it was for science, you know. I mean, if we can understand Poseidon's ecology better, we'll be able to make more sense of Earth's. And that's worth anything.

So I got this extra funding, but no one bothered to tell me I'd be working with Dr. Davenport. You know "Black Charlie" Davenport? They say he eats grad students for breakfast and post-docs for lunch with junior faculty members as hors d'oeuvres. But he's better at characterizing organisms in the field than anyone else around. And he is just fantastic with the portable mass spectrometers. No matter that he doesn't pack more than about 10 or 15 kilos into the field, and leaves the rest of the equipment to his assistants and students. Jerry Wozcniak told me once that he didn't even pack in a copy of Harrison's Field Guide. And one time, when one of his new grads didn't bring their own water purifier with them, Davenport let him drink right from a stream. Kid got some kind of parasite and almost died.

Everybody I ever met that knows anything about Black Charlie has heard about how he always carries that military assault shotgun. Well, I don't know what else you heard, but I saw him use it.

See, we were tracking the migratory patterns of this mammaloid. They showed up for three weeks out of the year near the Arctic Circle, and for another few weeks near the equator, but it was a mystery where they went in the meantime. And everybody just knows that they haven't got the dentition to handle zooplankton or just anything from the open water. So last season's team had radio-tagged this entire herd, and we were going to track them from one of their migratory terminals and see where they went. We followed them through open ocean until they just stopped one night, all of them in the same place. We were in this ancient rustbucket and the nav gear was a joke. Before we knew it we'd run "aground" on a sargassum raft.

So we were mired in this slimy mess, and all around us were these weird mammaloids going "oooop, oooop, oooop!" over and over again. We did get some outrageous footage of feeding behavior, however, and a few courtship rituals, and

BIOMODS

Most sailors are unable to afford extensive biomodification. Some purchase neural jacks to facilitate the operation of sophisticated computers, electronic systems, and mechanical equipment. Many also acquire implant micro toolkits. For those who can afford it, the salt tolerance biomod is also popular.

Merchant Sailor (Everyday)

Professional Packages: Specialist Technical, Novice Survival
Biomods: Neural Jack, Salt Tolerance

SCHOLAR

Scientists are not the only academic professionals who play an important role in Poseidon's frontier society. Scholars in the human sciences, especially archaeologists, anthropologists, and historians, are becoming increasingly common, both in the field and at the Haven Institute of Science and Technology. While these academicians don't often get the respect those in the hard sciences do, those who receive grant support for work on Poseidon, or who are tenured at HIST, are often the contemporary leaders in their fields.

TRAINING PACKAGES

Scholars should choose the Expert Humanities package, and secondary packages appropriate to the character's background and professional interests.

STANDARD OF LIVING

Scholars on Poseidon can expect to earn salaries of between 5,000cs and 6,000cs per month. Most will have a comfortable apartment or residence in Haven or another of the major settlements.

RESOURCES

Scholar characters have access to the most extensive archives of general knowledge available. They also typically have the considerable resources of their institution at their professional disposal. They also may have working relationships with, and therefore access to, the resources of certain Incorporate or the GEO.

BIOMODS

Few scholars are wealthy, but most can afford neural jacks and implanted microcomputers. Immunological symbiotes are also popular, as they save scholars from their irregular sleep schedules, poor diets, and high stress levels.

Archaeologist (Exceptional)

Professional Packages: Expert Humanities, Novice Arts and Entertainment, Novice Survival
Biomods: Neural Jack, Implanted Microcomputer, Implanted Micro Toolkit

SCIENTIST

Hardly geeks in lab coats, most scientists with the clout to be posted on Poseidon are intelligent, ambitious professionals. Whether motivated by the potential fame and fortune to be had in uncovering the planet's secrets or driven by honest curiosity, such men and women are always uniquely qualified in their fields. Chemists, biologists, and ecologists, they all find the new planet fascinating, formidable, and enigmatic.

TRAINING PACKAGES

Scientist characters should choose the Expert Science training package. Most also have at least Novice Technical, and Survival makes a good secondary choice for field biologists and the like. Administration is a good choice for career academics, or scientists working in government or the private sector.

STANDARD OF LIVING

The scientists fortunate enough to be posted to Poseidon are usually either the leaders in their field or the favorite graduate students and colleagues of those who are. In addition to the private and public grants that finance their work and provide for a comfortable if not extravagant lifestyle, scientists in the employ of the GEO, Incorporate, or a private institution can expect to earn 5,000cs per month, or more. Most GEO scientists on Poseidon keep a small apartment on the HIST campus, while the rest have a modest residence near their places of employment.

RESOURCES

Most scientists able and serious enough to be working on Poseidon are well supplied, and can usually obtain whatever they need to further their research. Vehicles, security personnel, equipment, data—almost anything in the pursuit of the answers.

BIOMODS

Most scientists can afford neural jacks, implant microcomputers, and specialized implant micro-toolkits. Many will also be able to afford immunological symbiotes. Scientists who work in the field a lot may also invest in anti-poison and salt tolerance to improve their chances of survival in Poseidon's harsh wilderness.

Astrophysicist (Exceptional)

Professional Packages: Expert Science (Physical Sciences), Specialist Space
Biomods: Neural Jack, Implanted Microcomputer, Immunological Symbiote

Field Biologist (Exceptional)

Professional Packages: Expert Science (Life Sciences), Specialist Survival
Biomods: Neural Jack, Implanted Microcomputer, Anti-Poison, Salt Tolerance

enough communal parenting to completely rewrite that garbage that Earwins published last year.

It really caught us off guard when they all disappeared. Over the course of about five or 10 minutes, they all went "oooop, ooop, ooop," and dove into the water. I thought it was some kind of group play exercise, or that they were going out to mate. Hosokawa thought they were moving on with the migration. But Black Charlie starts yelling and cursing at the engineer to get us moving, and takes his gun right up to the front of the boat. We all thought he was totally bats, you know?

Dr. Davenport started yelling at absolutely nobody, just cursing and screaming at the water, right? When all of the sudden, this huge white thing erupts out of the sargassum in a huge geyser of water. I think Dr. Davenport was sort of surprised or something. He quit yelling and fell over backwards. The pilot started yelling "White! White! White!" into the comm, and pumping the engine controls back and forth. Dr. Davenport recovered and started blazing away at the lesser white.

By now the boat was underway and headed right at the lesser, throttles opened wide. It took Black Charlie a minute to realize what the pilot was doing, and when he figured it out he turned around waving his arms. "No. No! Noooooooooo!" We rammed the monster with a jarring shudder that rocked the boat and knocked most of us to the deck. The lesser toppled over, and sort of floated there, thrashing around. Turns out that we broke its pseudospinal cord.

After a couple of hours, the mammaloids came back, and started munching on the carcass. The next day, the remains sank, and the whole time, Dr. Davenport alternately stormed around the deck or sat there all morose. He hadn't wanted to kill the white; he'd wanted to take it back as a specimen.

I think it might be time to finish up this dissertation. I don't think I could handle another field season in the wilds of Poseidon with Black Charlie.

SPACER

Whether they are making cargo runs in the inner system, hauling ore from the Belt to Mars Colony, or manning deep-sleep torchships through the wormhole, spacer crews challenge the oceans of space separating Earth and the Colonies.

TRAINING PACKAGES

Most spacers will want to start with the Expert Space training package. Good secondary packages include Commerce and Technical.

STANDARD OF LIVING

Because of the somewhat greater technical and personal demands of their profession, spacers are typically somewhat better compensated than sailors. The crew of Incorporate spacecraft can expect to earn 2,000cs per month, or more, depending upon their skills and length of service. The crew of ships with less reputable ownership will make considerably less. Like sailors, spacers are unlikely to have permanent lodging beyond their ship.

RESOURCES

In essence, the personal resources of a spacer are the same as those of any other sort of sailor—loyal shipmates and the onboard resources of his vessel.

BIOMODS

Most spacers who were not genetically engineered make every effort to finance the full-body spacer biomod package. For the rest, immunological symbiotes and improved blood oxygenation are common biomods. Many spacers also have neural jacks for interfacing with complex engineering systems.

Space Crewman (Everyday)

Professional Packages: Expert Space
Biomods: Neural Jack, Implanted Micro Toolkit

TECHNICIAN

While most of Poseidon's natives are happy snatching their living from the sea with wooden spears and woven nets, most modern colonists are very attached to the technology they have brought with them. The modern colony depends on its equipment, and even more on the professionals trained to operate, maintain, and repair it. Nominally specialists, most real technicians are such gearheads that they usually have skills and training in a variety of related disciplines.

TRAINING PACKAGES

Technicians should choose the Expert Technical training package. Commerce, Science, and Space make good secondary packages.

STANDARD OF LIVING

Independent technicians and machinists can expect to earn 2,000cs to 4,000cs per month running their private repair and machine shops. Technicians in the employ of the Incorporate will earn between 3,000cs and 5,000cs, depending upon their qualifications and seniority. Incorporate engineers can earn upwards of 8,000cs per month. Independent techs, like most small business owners on Poseidon, keep a small apartment in or near their place of business. Incorporate technicians and engineers will have apartments matching their station in their employer's company town.

RESOURCES

Tools, lots of tools. Technicians love their tools more than they love most of the people they know. Technicians always own or have access to the right tools for the job, and on the Poseidon frontier this is no small thing.

BIOMODS

Prosperous technicians and engineers will have neural jacks, implanted microcomputers, and specialized micro toolkits.

Hacker (Exceptional)

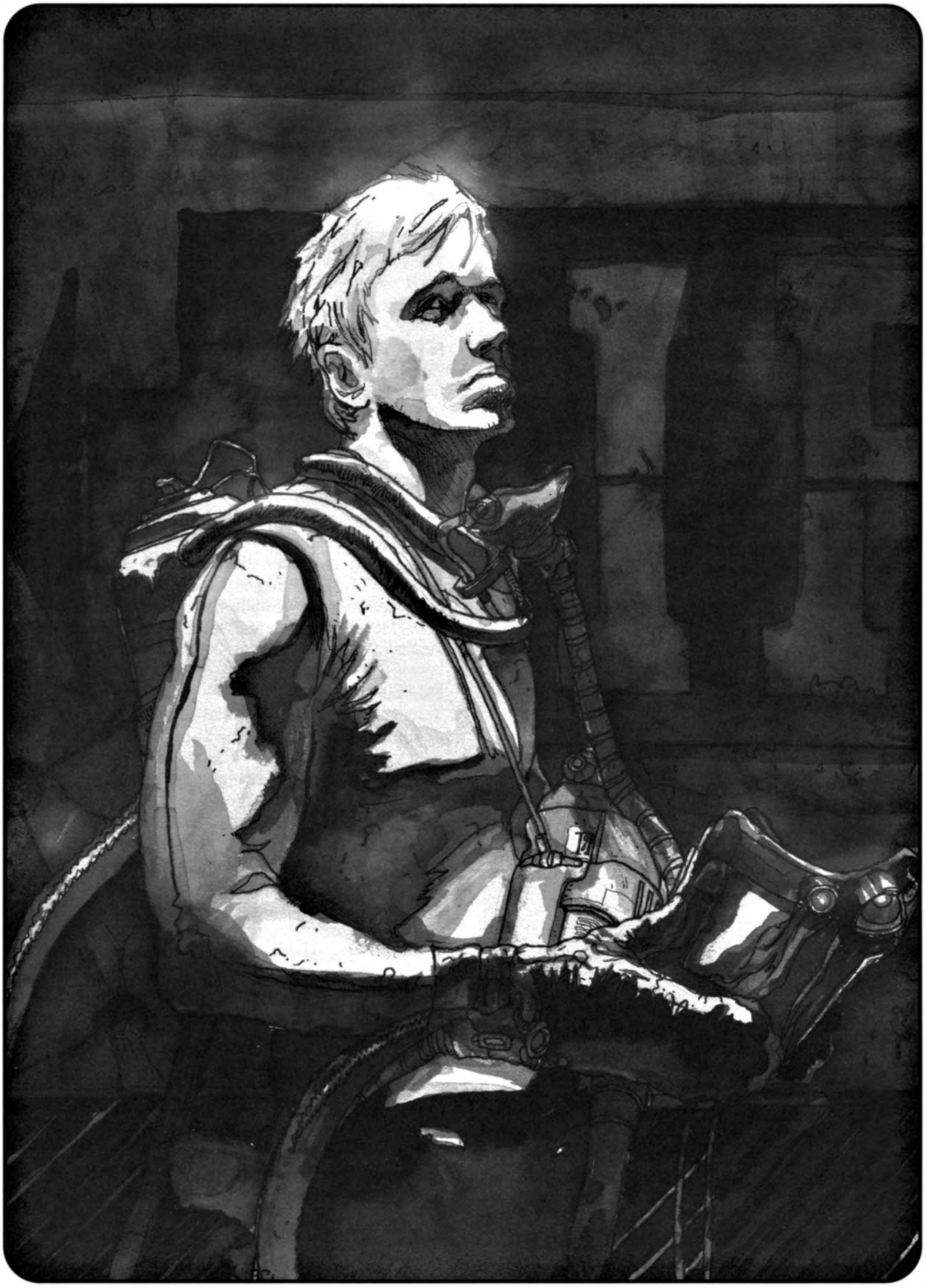
Professional Packages: Expert Technical, Specialist Crime
Biomods: Neural Jack, Implanted Microcomputer, Multiglands

Engineer (Exceptional)

Professional Packages: Expert Technical, Specialist Science
Biomods: Neural Jack, Implanted Microcomputer, Implanted Micro Toolkit

Mechanic (Everyday)

Professional Packages: Expert Technical
Biomods: Neural Jack, Implanted Micro Toolkit (Electronics, Mechanics)



THUG

Every major settlement on Poseidon has its share of street punks and petty thieves. For whatever reasons—poverty, tough luck, or antisocial tendencies—these characters would rather take it than work for it. While such criminals don't have to worry about the attention of the law as much as their counterparts on Earth, they do tend to face armed marks with enough self-defense skills to have survived on Poseidon. They also have to contend with vigilante gangs and heavy competition. It's not a good life, but hey, it beats kelp farming.

TRAINING PACKAGES

The Expert Crime (Thug) package is obviously an appropriate choice. Good secondary packages include Law Enforcement, Survival, Commerce, and Colonization.

STANDARD OF LIVING

The profitability of small-time criminal activity is mostly dependent on the nature of the crime. Petty thieves and muggers usually ply their trades just enough to get by, while drug dealers and other thugs involved in more high-profile, lucrative industries can earn a "respectable" income of 5,000cs per month, or more. Even prosperous thugs, however, are still creatures of the nighttime streets. Seedy hotel rooms and tenement flats in the expanding ghettos of Poseidon's major settlements are where they call home.

RESOURCES

A thug's only real resources are a handgun and a sincere lack of conscience.

BIOMODS

Thugs are even less likely to have the money to afford enhancement than con artists. After all, if they had money, they wouldn't be thugs. Low-level enhancements like body sculpting or improved blood oxygenation are possible, but most thugs rely on enhancement drugs to give them a cheap edge on the streets.

Dealer (Everyday)

Professional Packages: Expert Crime (Thug)
Biomods: Body Sculpting

TRADER

Poseidon's manufacturing and retail sectors are terribly underdeveloped, and there is plenty of room in the waterworld's frontier economy for independent entrepreneurs and traders. These adventurous and ambitious profiteers may own and operate a general store or trading post in one of Poseidon's small communities, or they may run a beat-up cargo-hauler, trading valuable commodities between isolated settlements.

TRAINING PACKAGES

The Expert Commerce (Trader) package is obviously a good primary choice. Survival and Technical packages make good secondary choices.

STANDARD OF LIVING

A trader's income is about as variable as any profession on Poseidon. His prosperity depends on his knowledge of local markets, his ability to negotiate a favorable deal and a fair bit of luck. The trader's basic maxim is to purchase commodities in markets where they are plentiful and cheap and sell them in markets where they are rare and highly valued. A shrewd trader, particularly one who is willing to supply needed goods to outlying settlements, can expect to bring in a few hundred scrip each month, over and above the cash needed to cover inventory and operating expenses. Most traders will live in a back room or upstairs flat of their store or trading post. Traveling traders will most often live aboard their vehicles.

RESOURCES

Traders either own a small trading post or a cargo-hauler of some sort. Their store or vessel is typically packed with an inventory of stock as variable as the imagination, and this stock is in a continual state of flux as items are sold and acquired.

BIOMODS

Traders usually sink most of their profits into their vehicles and inventory, but neural jacks, micro toolkits, and the occasional survival biomod are not uncommon.

Trader (Exceptional)

Professional Packages: Expert Commerce (Trader), Novice Survival, Novice Technical
Biomods: Neural Jack, Implanted Micro Toolkit, Salt Tolerance

WARDEN

From poaching to the dumping of industrial wastes, Poseidon is beginning to suffer from the same exploitation that ravaged Earth's ecology. The GEO has strict laws meant to maintain the planet's environmental integrity, but it has too few resources to adequately patrol Poseidon's vast oceans. To help combat this wholesale exploitation, the GEO offers bounties for information leading to the arrest and conviction of individuals charged with ecological crimes of any kind. This policy has given rise to a sort of freelance bounty hunter commonly referred to as a Warden. Wardens collect evidence against—and sometimes even apprehend—individuals suspected of ecological crimes. A diverse lot, some Wardens operate out of urban centers using online investigation and cutting-edge surveillance technology. Most Wardens, however, are heavily armed frontiersmen who patrol the wilderness for poachers and other eco-criminals.

TRAINING PACKAGES

Most Wardens will have Specialist or Expert Survival, and at least Novice Law Enforcement. Good secondary packages include Crime, Military, and Technical.

STANDARD OF LIVING

A straight bounty of 500cs is offered for information adequate to indict any individual or organization for a felony within the Justice Commission's environmental protection statutes. An additional 500cs is offered if there is an eventual conviction. Unfortunately, Wardens are vulnerable to both criminal and civil charges in the event of a false arrest or assault.

RESOURCES

A Warden typically has a vehicle of some sort—a boat, hydroplane, or jumpcraft. They also have a hunting rifle for protection in the bush, and a heavy sidearm for protection from human animals. Most Wardens also have at least one well-informed contact in some major urban center, one that can keep them informed of potential bounties. Such contacts are usually within the offices of the Justice Commission.

BIOMODS

Wardens favor a number of biomods that improve their chances of survival. The most common are anti-poison, salt tolerance, improved blood oxygenation, and immunological symbiotes. Some also invest in enhancements that help them apprehend dangerous criminals, like multiglands and accelerated neurons.

Warden (Exceptional)

Professional Packages: Specialist Law Enforcement, Specialist Survival, Novice Crime
Biomods: Anti-Poison, Salt Tolerance, Improved Blood Oxygenation, Immunological Symbiote

SYNERGY GAME SYSTEM

CHAPTER 04

TASK RESOLUTION

Any action a character attempts in **Blue Planet** is called a task. Whenever the outcome of a task is uncertain, players roll 10-sided dice to determine if the character is successful, and if so, to what degree. When rolling dice, a 0 always indicates a result of 10, so each roll produces a number between 1 and 10.

SKILLED TASKS

When a character attempts an action that relies primarily on his education and training, it is called a skilled task. The number of possible skilled tasks is effectively unlimited, but examples include driving a vehicle, firing a gun, picking a lock, or hacking a computer network.

Players can make two kinds of rolls for skilled tasks—success rolls and opposed rolls. Both use the same basic resolution mechanic with simple variations that allow players and moderators to handle a broad range of game situations. The rules below apply to both types of rolls, though opposed rolls use a few additional conventions as well.

APTITUDE

When a character attempts a skilled task, the player rolls from one to three dice. The specific number of dice the player rolls is determined by the character's aptitude for the skill being tested. A character with average aptitude rolls one die, a character with strong aptitude rolls two dice, and a character with superior aptitude rolls three dice. When rolling the dice, the player counts only the lowest roll and ignores any other results.

EXAMPLE

Marshal Church has drawn his sidearm and is aiming at a rapidly approaching hopper. The game moderator tells the player to roll against Church's Handguns skill, which falls within the Firearms aptitude. Church has superior aptitude in Firearms, so the player rolls three dice. He rolls 9, 7, and 5, so the player keeps the 5 and ignores the other results.

TARGET NUMBER

In **Blue Planet**, dice are always rolled against a target number. For skilled tasks, the base target number equals the sum of the character's skill level and the attribute score the moderator feels best governs that skill under the circumstances. A roll is successful only if the lowest die result is equal to or less than the target number.

EXAMPLE

The moderator tells the player to roll against Church's Dexterity and Handguns to see if his shot hits the jumpcraft. Church has Dexterity 1 and Handguns 6, so his base target number to hit the jumpcraft is 7. The player's best dice result must be equal to or less than 7 for the roll to succeed.

TASK DIFFICULTY

In some cases, the game moderator may decide that a task is easy enough or challenging enough to warrant a bonus or penalty to the base target number. In such cases, the player simply modifies the target number by the bonus or penalty determined by the moderator, and rolls against this new number. Game moderators should use the following guidelines when considering task difficulties. The left column describes tasks in terms of difficulty, while the right lists the appropriate modifier.

DIFFICULTY	MODIFIER
Foolproof	+5
Routine	+3
Easy	+1
Average	—
Complicated	–1
Challenging	–3
Formidable	–5

EXAMPLE

The game moderator considers the various modifiers to Church's shot and decides on a –2 penalty. This makes the effective target number for the shot 5. Since Church's best dice result was a 5, his shot shatters the oncoming vehicle's windscreen and the panicked pilot careens into the side of a nearby warehouse.

Moderators are encouraged to use difficulty modifiers liberally in their games to best model the unlimited range of circumstances that arise during play. The task resolution system in **Blue Planet** is designed on this principle, and it will work most smoothly when modifiers are used appropriately. A common sense application of difficulty modifiers will ensure that even poorly trained characters usually succeed at routine tasks, such as executing a basic CommCore search, asking for directions to the restroom in a foreign language, or judging compass directions on a clear day with the sun to use as a reference point. Just as important, modifiers should be used to make difficult tasks impossible for the poorly trained and challenging for the highly skilled.

UNSKILLED TASKS

Often, players will want to attempt tasks that require skills their characters do not have. In these cases, the moderator should first determine whether any such attempt is possible. Many tasks, especially those based on specific knowledge, are impossible without at least minimal training. For example, speaking or reading a foreign language generally requires some specific education. Other

tasks, like firing a gun or operating a computer, can be attempted without specific training. For these tasks, the base target number is zero, modified by the controlling attribute. Unskilled characters will therefore typically be able to complete only relatively easy tasks.

EXAMPLE

Marshal Church is briefing the officers in his organized crime task force about new evidence linking the Gorchoff Family to terrorist activity around the Pacifica Archipelago. Church doesn't have any Oration skill, but the moderator decides that should not prevent him from giving the briefing. Church has Presence 0 and Oration 0, so his base target number for the task will be 0. However, the moderator gives the player a +5 bonus, since Church is addressing his own people on a topic he's researched extensively. Chances are, the briefing will be informed and comprehensive, but not especially polished or eloquent.

ACTION VALUE

It is often important to know not just whether a character was successful, but how well he succeeded or how badly he failed. A character's degree of success or failure at a task is equal to the difference between the best die result and the target number. This number is called the task's action value, and may be positive or negative. Positive action values represent successful tasks, and negative action values represent failed tasks.

EXAMPLE

Church's target number to shoot the hopper was 5, and the player rolled a 5. This gives Church an action value of 0—a marginal success. The Marshal would have missed the jumpcraft if it had been a little further away, or moving a little faster.

ATTRIBUTE ROLLS

There will occasionally be tasks that simply test a character's raw physical or mental abilities, rather than a specific skill. In such cases, players roll against the attribute the moderator determines is most appropriate to the situation. When making an attribute roll, the player rolls two dice against a base target number of 5, modified by the value of the attribute.

EXAMPLE

Marshal Church is wading through the carnage left behind in the wake of an ecoterrorist attack on a Biogene research lab. As he walks through the facility, he hears a cry for help coming from beneath a pile of debris. The Marshal steps in and begins attempting to clear the debris, a task the moderator decides will test Church's Strength. The Marshal has Strength 2, so the player rolls two dice against a base target number of 7 to complete the task.

OPPOSED ROLLS

Sometimes a character will be challenging or contesting the skill of another character, an animal, or even a machine. In such circumstances, the game moderator should ask for opposed rolls. The opponents, usually a player and the moderator, both roll dice using the rules for success rolls. The opponent with the highest positive action value wins the contest. If the opponents tie or both fail the roll, the contest is a draw. To determine the winner's relative action value for dramatic purposes, simply take the difference between the winner's action value and the loser's action value.

EXAMPLE

Church is pursuing a thug he suspects of distributing pharium for the Gorchoff Family. He sees the thug duck into a run-down building and disappear. The game moderator decides the thug will attempt to hide among some discarded bioplastic crates. The thug has strong aptitude in Stealth and a Hiding skill of 5. The moderator rolls the dice and scores an action value of +3. Church searches for the thug, and the player makes an Awareness roll, scoring an action value of +5. Church hears one of the crates scrape against the floor and catches a glimpse of the thug's brightly colored jacket in the darkness. The Marshal draws his sidearm and closes in to apprehend the suspect.

COMBAT

In 2199, Poseidon is still an untamed frontier, and the planet itself can be savage and violent. Because conflict typically plays an important role in adventure games, most characters will eventually be forced to fight if they hope to survive. Violence in **Blue Planet** is not meant to be gratuitous. Instead it is intended to create a sense of vivid reality and urgency to life on Poseidon, keeping players excited and motivated by providing dire consequences for their actions.

The combat rules are designed to be fast-paced and streamlined, while being realistic enough to lend excitement and detail to a character's actions. Acts of violence are usually traumatic, and the system models this carefully, giving players a gritty, realistic experience. Survival on Poseidon is hard enough when all you face is the planet's savage ecology. Having to survive humanity's own unique brand of savagery as well makes the difficult nearly impossible.

ACTION ROUNDS

In reality, brawls and firefights are usually fast, chaotic, and seamless sequences of action and reaction. When the fight is over, the whole thing is often a blur in the memories of the surviving combatants. They may not know how they survived, let alone what specific decisions they made at each turn as the engagement unfolded. In a roleplaying game, however, it is often important for the players and game moderator to track the precise

timing of each character's actions. Players need to know when and how often their characters act relative to others, and this requires the game moderator to add structure and organization to the course of events. **Blue Planet** uses action rounds for this purpose.

Action rounds are artificial units that divide an action sequence into manageable increments. They are best considered highly variable and plastic with respect to the amount of time each represents. Each round is sufficient time for the characters involved in an exchange to execute a given number of individual actions. The actual time each round takes varies, depending on just how many actions are included. Action rounds are simply used to determine how much each character can accomplish relative to the actions of others.

For most game situations, this level of abstraction is acceptable, and makes action rounds robust. In some cases, though, it is necessary to precisely track the passage of time during an action sequence. For this purpose, action rounds should be considered to average about three seconds over the course of a given action sequence.

ACTIONS

During each action round, a character can perform one or more simple actions. Simple actions can be mental or physical, and involve a single movement, motion, or operation. Common examples include drawing a weapon, firing a gun, throwing a punch, standing from a prone position, shouting a warning, or diving through a window. Characters can walk and perform another simple action with no penalty. If a character is scrambling and attempting another action, any task rolls suffer a –2 penalty. A character who is sprinting may perform no other actions.

INITIATIVE

A character's chances of surviving combat often depend on his ability to assess a situation, identify and track threats, and react quickly and appropriately. Usually, this ability depends on a character's alertness, response time, and physical quickness. These factors are modeled by use of the Reflexes derived attribute.

Before each action round, players should make a Reflexes roll to determine how quickly and how often their characters can act in the round. Each player rolls two dice against a target number of 5, modified by the character's Reflexes. The players' action values on this roll determine their initiative, and actions are taken from highest action value to lowest. For relatively large groups, it is sometimes helpful for the moderator to simply count down from 10 to the lowest action value, allowing the characters to act when it is their turn. Players who fail their initiative rolls may still act in the round, though they must wait until the count reaches their negative action value.

EXAMPLE

Marshal Peter Church walks into the Gutted Fisherman, a dingy waterfront saloon, hot on the trail of a smuggler who killed a Patrolman the previous night. Church is edgy and wired and looks over the scene. As he walks to the bar, he IDs the suspect by the tribal tattoos on his neck. The perp looks up and initiative rolls are made as the game enters action rounds. Church has Reflexes 2 and scores a +4 action value on the roll. The smuggler, hopped up on "juice," has Reflexes 1 and scores a +2. Church will act first when the count reaches 4, followed by the perp at 2.

MULTIPLE ACTIONS

Characters who score an action value of +3 or more may act twice in an action round, and characters who score an action value of at least +6 may act three times. Players whose characters qualify for multiple actions should subtract three from their initial action value and take their next action at the new value.

INITIATIVE ACTION VALUE	ACTIONS
+2 or less	1
+3 to +5	2
+6 or more	3

EXAMPLE

Church scored an action value of +4, so he'll be able to act twice. The smuggler will only be able to act once during the round. When the count reaches 4, Church draws his Peacemaker and yells, "GEO Marshal! Freeze!" The player subtracts three from his action value, so Church will act again when the count reaches 1. On 2, the punk is eligible to act. The smuggler hits the floor in a roll, drawing a concealed pistol from his jacket. On 1, the Marshal resolves his second action, striding forward and kicking the table out of the way.

HOLDING ACTIONS

Any time a character is eligible to act in a round, the player may opt to hold the action in reserve. A player may hold his character's action as long as he wishes, and then use the action at any time during the same encounter. However, a character cannot take any other action until the held action is used or it is lost. Held actions are resolved before the actions of any other characters eligible to act at that time. A player can only hold one action in reserve at a time, and if eligible to act again in the round, he must wait the normal three-count before acting again. If the three-count takes the character's initiative action value to a negative number, any remaining actions are lost.

EXAMPLE

The following round, Church again wins initiative, acting on 6, 3, and 0, while the smuggler acts on 5 and 2. On 6, Church can shoot the suspect if he wants to, but the player decides to hold his action. The Marshal calmly levels his magnum at the punk's head, preparing to fire. The player tells the moderator he will interrupt the smuggler's action and fire if the punk makes any threatening moves. On 5, the moderator tells the Marshal that the smuggler is swinging his handgun around into firing position. The player immediately resolves his held action, and the Peacemaker roars. The Marshal would still be eligible to act again at 2. However, his third action, which would not be taken until the count reaches –1, is lost.

RANGED COMBAT

Ranged attacks are made with any weapon capable of striking an opponent from a distance. Examples include guns, rocket launchers, bows, and thrown weapons like knives and spears.

An attack with a ranged weapon requires a success roll against Dexterity and the appropriate skill, such as Handguns, Throwing, or Heavy Weapons. There are various circumstances that modify ranged attack rolls, and these are detailed below.

RANGE

In general, the closer the target, the easier it is to hit with a ranged weapon. The distance from the attacker to the target falls within one of four ranges: point-blank, short, medium, or long. Game moderators should apply difficulty modifiers to attack rolls based on the range to the target. Specific ranges for individual weapons are listed with their descriptions (see Chapter 5).

RANGE	MODIFIER
Point-Blank	+2
Short	—
Medium	–2
Long	–4

SIZE

Large targets are easier to hit than smaller targets, and moderators should apply difficulty modifiers to the attack rolls to model this. The following table lists typical modifiers for relative target sizes. Moderators are encouraged to use these values as guidelines.

SIZE	MODIFIER
Huge	+4
Large	+2
Average	—
Small	–2
Tiny	–4

Huge	the target is more than twice as large as a human
Large	the target is about twice as large as a human
Average	the target is about the size of a human
Small	the target is about half the size of a human
Tiny	the target is less than half the size of a human

MOVEMENT

Movement of both the attacker and target have an effect on the accuracy of ranged attacks. Target movement is the easiest for the shooter to accommodate. Below are several benchmark numbers that will help in assigning modifiers for target movement.

PACE	MODIFIER
Walk/Crawl	–1
Scramble	–2
Sprint	–3

An attacker's own movement is harder to accommodate because it has such a negative, unpredictable effect on the attacker's aim. An attacker who is walking suffers a –2 target number penalty, and if he is scrambling he receives a –4 penalty. If an attacker is sprinting, there is no reasonable chance of hitting the target.

COVER

A target protected by cover is much harder to hit than one who is in the open. For the purposes of ranged-combat modifiers, all cover falls into one of two categories—partial or full. If a character has partial cover, roughly half of his body or less is protected. Full cover indicates that about three-quarters of the character's body is protected.

COVER	MODIFIER
Partial	–2
Full	–4

Note that it is possible for cover to be penetrated by a ranged weapon, with the projectile passing through the obstacle and striking the target. This result is indicated if the attack's action value is equal to or less than the attack modifier provided by the cover. When this occurs, the attack can be considered successful, but the cover's armor rating is subtracted from the attack's damage rating (see page 117). This protection is cumulative with any personal armor the target is wearing. The following table lists the armor rating of various types of cover.

COVER RATING	ARMOR
Brush	1 / meter
Aluminum	1 / 5 centimeters
Wood	1 / centimeter
Stone	1 / 2 millimeters
Steel	1 / millimeter
Titanium	1 / 0.5 millimeters
Bioplastic	See page 143

EXAMPLE

As Church neutralizes the first smuggler, a second emerges from the restroom to his right. The second punk looks up to see the Marshal standing over his dead partner and ducks back behind the doorframe leading into the restroom. Church covers the doorway with his weapon and begins to approach, slowly. As the Marshal closes, the suspect leans out from behind the doorframe and points a handgun at Church. The Marshal immediately fires his Peacemaker. His base target number is 7, but the attack receives a –4 penalty because the target has full cover—only his head and one arm and shoulder are in the open. The player rolls a 6 and scores an action value of –3, a miss. However, the shot would have hit if not for the cover, so the moderator decides there is a chance the round could penetrate the doorframe and hit the suspect. The doorframe is wood about three centimeters thick, so it provides an armor rating of 3.

AIMING

Aiming will improve a character's chance to hit a target. For every action a character aims up to a maximum of three, he receives a +1 bonus to the target number.

RECOIL

The recoil of a discharging firearm makes accurate rapid-fire difficult. To model this, each successive shot after the first in a single action is made at a fixed –2 penalty. A character may avoid this penalty by firing only once per action. Because of the lack of compensating gravity, recoil penalties in freefall are doubled.

AUTOMATIC FIRE

Many weapons in the world of **Blue Planet** are designed for automatic fire, and the unique characteristics of such weapons require special consideration in the rules.

Modern automatic weapons are designed for burst fire, in which a single pull of the trigger fires a fixed number of rounds. Small arms usually fire three-round bursts, but vehicle-mounted cannon and other heavy weapons can fire bursts of as many as 10 rounds. Every automatic weapon has a burst fire value that indicates how many rounds are fired in each burst and is used to track ammo supply. An automatic weapon can fire a number of bursts in each action equal to its normal rate of fire.

The muzzle velocity and cycling rate of modern firearms are so high that the recoil caused by the first rounds of a single burst do not impact the weapon quickly enough to affect the accuracy of the last of the burst's rounds. For this reason, there are no recoil penalties associated with the individual rounds in a given burst. Subsequent bursts in the same action, however, are subject to the standard –2 recoil penalty. Additionally, because the rounds of a single burst are so closely spaced, it is assumed that they either all hit or all miss their target. All burst fire weapons therefore have two damage rat-

ings (see page 117). The first is used when the weapon is fired in single-shot mode, and the second is used when the weapon fires in burst-fire mode.

Weapons may also be designed for full-automatic fire, in which the weapon discharges as long as the trigger is depressed. A weapon's full-automatic rate of fire is listed in parentheses, and represents the number of bursts that can be fired each action in this mode. Accurate fire is very difficult in full-auto mode, and advanced training is typically required to use autoweapons effectively. When used in full-automatic fire mode, the standard recoil penalties are doubled unless the weapon is mounted. A range of mounting systems are available, including bipods, tripods, vehicle gun mounts, and weapons harnesses.

CLOSE COMBAT

Sometimes characters will be forced to fight at close range, either unarmed or with a melee weapon. In close combat, action rounds are used normally, initiative and action resolutions are the same, and actions can be held as well. The only exception to the normal rules is that defensive maneuvers do not require actions. Characters may always defend against any close-combat attack, as long as they are aware of it. However, attempting to defend against more than one attack in a round will test a character's skill. For every attack a character must defend after the first, there is a cumulative –1 penalty on the task roll. Characters who forgo an attack and spend an entire action on defense receive a +2 bonus to defense rolls against all attacks until they are eligible for their next action.

Assuming the target is attempting to defend, close combat attacks are resolved using opposed rolls. The attacker must make a successful attack roll, and must score a higher action value than the defender. If the defender scores an action value equal to or greater than the attacker's, the attack misses or is blocked. If the target of an attack is not defending, the attack is resolved with a success roll.

COMBAT MANEUVERS

In close combat, there are a variety of attack and defense options available to the combatants. **Blue Planet** uses combat maneuvers to represent these options. These maneuvers are described below, along with their type–offensive or defensive–controlling attributes, the skills used to execute them, and any special rules that govern their use.

Dodge

Type: Defensive
Attribute: Reflexes
Skill: None

This maneuver is the most common defense in hand-to-hand combat. If the defender beats the attacker on the opposed roll, the character has avoided the attack. A character can dodge by making an attribute roll against Reflexes, so no combat training is necessary. However, while dodging is an effective way to avoid an attack, it leaves the character off-balance and out of position. Whenever a character dodges an attack, the character's next action must be used to regain balance and position unless he scored a relative action value of +3 or better on the dodge roll.

Hold

Type: Offensive
Attribute: Agility
Skill: Unarmed Combat

Characters use this maneuver to immobilize an opponent. If the attacker wins the opposed roll, the defender is effectively pinned and suffers a penalty to all physical actions equal to the attacker's relative action value. After successfully scoring the hold, the attacker can maintain the hold on subsequent rounds. The defender suffers the penalty on his physical actions until the hold is broken. The defender can break the hold on any subsequent action by winning an opposed roll against Strength and Unarmed Combat.

Parry
Type: Defensive
Attribute: Dexterity
Skill: Armed Combat or Unarmed Combat

This maneuver can be used to defend against any close-combat attack. It can be used either armed or unarmed, but unarmed parries against armed attacks suffer a –2 penalty. If the defender matches or exceeds the attacker's action value, the character blocks or parries the attack.

Strike
Type: Offensive
Attribute: Agility or Dexterity
Skill: Armed Combat or Unarmed Combat

This is the standard maneuver for attacking unarmed or with a melee weapon. Punches and armed attacks are usually based on Dexterity, while kicks typically use Agility. If the attack is successful, it inflicts damage based on the lethality of the weapon or hand-to-hand attack (see Damage, page 116).

Throw
Type: Offensive
Attribute: Agility
Skill: Unarmed Combat

This is an unarmed maneuver intended to knock an opponent to the ground. If the attacker wins the opposed roll, the defender suffers no damage but is knocked down. The attacker can even hurl the defender a number of meters equal to the relative action value, up to a maximum of about three meters.

EXAMPLE
Church leaps from the deck of his patrol boat to the hijacked barge, just as two of the pirates come up from below. One thug is hefting a bloody length of chain, the other a heavy, industrial plastic pipe. The trio rolls for initiative. Church scores an action value of +6, while the pirates score +2 and 0. Church acts first, on 6. Well aware of the dozen or so liquid hydrogen canisters lashed about the deck, Church grabs the fireaxe clamped to the bulkhead instead of his Peacemaker. On 3, Church is eligible to act again. The player decides to hold the action, letting the punks make the first move.

As the Marshal expected, the pirates are stupid. Instead of separating to come at him from the flanks, the faster of the two swings his pipe on 2. Church's player decides to parry the attack, and the player and moderator make opposed rolls. The punk has Dexterity 0 and Armed Combat 3, while Church has Dexterity 1 and Armed Combat 5. The pirate scores a +1 action value, but Church gets a +3. The Marshal catches the wild swing on the sturdy shaft of his fireaxe. As the punk continues past the Marshal with the force of the attack, the player

immediately decides to execute his held action and Church slams the spiked end of the fireaxe into the punk's gut. The pirate desperately attempts to dodge the blow, and the player and moderator again make opposed rolls. This time, the player only manages a +1 action value, but the moderator fails the roll. Church allows himself a moment of satisfaction as his weapon bites into the punk's abdomen.

The second pirate closes in, swinging the chain at the Marshal's head. The player and moderator make opposed rolls, and both score action values of +3. Since the roll was a draw, the Marshal successfully blocks the attack. Since Church held his second action until 2, he would not take the third until the count reaches –1 and it is lost.

The player and moderator roll for initiative again, and the punk gets lucky. Church scores an action value of +2, but the thug scores a +3. Realizing he's in trouble, the pirate decides to spend his action defending, so he will receive a +2 bonus on his defense rolls until his next action.

On 2, the Marshal is eligible to act. With his fireaxe caught in the punk's chain, the Marshal lashes out with a brutal kick. The player and moderator make opposed rolls, with the moderator adding a +2 bonus to the pirate's target number. The Marshal wins anyway, and the kick strikes the punk in the chest, sending him crashing to the deck. When he recovers, he is looking down the barrel of the Marshal's Peacemaker.

SITUATIONAL MODIFIERS

The specific rules for ranged and close combat included some common modifiers for attack rolls. The circumstances under which game combat takes place are extremely varied, and moderators are encouraged to freely modify target numbers based on the situation. The following table lists a number of modifiers that may be useful in both ranged and close combat.

SITUATION	MODIFIER
Poor visibility	–2
Blind fire	–5
Underwater	–3
Unstable footing	–1
Firing with off-hand	–2
Firing handgun one-handed	–1
Firing longarm one-handed	–3
Under heavy fire	–2
Target prone (short range)	–1
Target prone (medium range)	–2
Target prone (long range)	–3
Target prone (point-blank range)	+2
Height advantage	+1
Firearm supported	+1
Flank attack	+1
Rear attack	+2

DAMAGE

Poseidon is a dangerous frontier world where there are many ways for characters to come to harm, and the potential severity of injury ranges from the inconsequential to the lethal. The damage system in **Blue Planet** is based on several principles that may not be immediately apparent to all readers and warrant a brief discussion.

1 Any attack that can harm a character has the potential to kill the character. A small knife can kill a man if it strikes him in a vulnerable location with enough force to penetrate flesh and damage vital tissues and organs. While some weapons are obviously more lethal than others, this simply means that they are more likely to kill or seriously injure, not that less lethal weapons are incapable of doing so.

2 Any combatant, regardless of skill, can be dangerous in the right situation. This is especially true where firearms are involved. A character who is shot in the head by a five year old with a large caliber handgun is in just as much trouble as if the handgun were wielded by a GEO Marshal. The Marshal's shot is much more likely to hit, but won't necessarily do more damage. Skilled combatants in **Blue Planet** may elect to attempt more difficult attacks that inflict greater damage, but the player must decide to do so before the dice are rolled (see called shots, page 118).

3 There is no such thing as non-lethal damage. Even barehanded attacks have the potential to kill, often accidentally. Blunt trauma attacks that "stun" or knock out a character do so by damaging the central nervous system, usually by concussion of the brain. Such damage is obviously dangerous and potentially lethal. A character struck in the chest with a blunt object may suffer a splintered rib that punctures a lung. Bone shards from a broken arm may sever an artery and result in lethal blood loss. A punch to the abdomen can cause internal bleeding and a slow, painful death. Such critical injuries are unlikely between relatively inexperienced unarmed combatants, but many characters in the military, covert operations, or the criminal underworld are specifically trained to kill in unarmed combat.

4 It is not where the attack lands that matters, it is what it damages. A character can be shot in the head and survive relatively unscathed if the bullet fails to destroy vital tissues and organs, such as the brain or major blood vessels. Likewise, a bullet that severs an artery in an arm or leg can kill very quickly. This is one reason hit location is abstracted in **Blue Planet**—it is the severity of the wound that really matters, not the part of the body it damages. Another issue is that many attacks—especially from firearms—will affect multiple locations. For example, a bullet may pass through an arm and penetrate the chest. This level of detail and realism is not possible without a very complex hit location system, so the rules simply focus on the severity of the wound.

5 Wound lethality is not cumulative, but impairment and blood loss are. Many roleplaying games use some variant of a "hit point" system, in which a character's life is gradually whittled away as he takes more and more damage. In fact, a character who is punched in the face and suffers a broken nose is no more or less likely to die if he is subsequently shot in the chest with a large caliber handgun. The broken nose is irrelevant to the character's survival of the gunshot wound. However, every attack that does significant damage will impair a character's ability to act effectively, and this impairment is cumulative. The more damage the character suffers, the worse off he will be. Likewise, blood loss and hemorrhagic shock are also cumulative and these are crucial factors in the lethality of critical wounds—the more such wounds a character suffers, the more blood he will lose and the more quickly he will die.

WOUNDS

In **Blue Planet**, successful attacks usually cause damage and result in three possible wound levels—minor, serious, and critical.

Minor wounds are painful injuries with moderate physical damage. Examples include contusions and lacerations, dislocated joints, and strained muscles. These injuries are not life threatening, but they hurt and can be disorienting. Characters suffer a –1 impairment penalty for each minor wound they sustain. The impairment penalty modifies all character actions until the wound is healed or its effects are mitigated by medical treatment.

Serious wounds are much more dangerous, but are not typically fatal. Examples of serious wounds include deep bruises and cuts, minor fractures, torn connective tissue, moderate hemorrhaging, and concussions. Characters suffer a –2 impairment penalty for each serious wound they sustain. Additionally, the pain, trauma, and shock caused by serious wounds can incapacitate characters. Whenever a character suffers a serious wound, the player must make a *stun roll*. A stun roll is an attribute roll against Will and should be modified by the –2 impairment penalty only for that wound. The stun roll is not modified by any impairment penalties accumulated for other injuries.

If the player scores an action value of –5 or worse on this roll, his character loses consciousness. If the player fails the roll by less than five, the character remains conscious, but is incapacitated and unable to act effectively. As a general rule, the character is unable to take any action that would ordinarily require a task roll. The character can, however, manage simple actions, such as crawling for cover, calling for a medic, or perhaps shouting a warning. A character will remain unconscious or incapacitated for a number of minutes equal to (10 x the action value of the stun roll, ignoring the negative sign) or until successful first aid is administered (see page 118). If the player makes the stun roll successfully, his character may continue acting subject to the –2 impairment penalty. In addition, characters with one or more serious wounds may not sprint.

Critical wounds are life-threatening injuries and involve severe trauma to the character's body. Examples of critical wounds include severed arteries, damaged organs, massive hemorrhaging, and severe concussion, shock, or trauma. If a character suffers a critical wound, the player must make two important rolls.

The first is the *trauma roll*. The player makes an attribute roll against Fitness, applying only the –3 impairment penalty for the given critical wound. If the player makes the trauma roll successfully, the wound is not lethal. If the player scores an action value of –5 or worse, the wound is instantly lethal. In this case, there is no need to make a second roll. If the player fails the roll by less than five, the character is dying from shock and trauma. If the character does not receive successful first aid within a number of minutes equal to (10 + the action value of the trauma roll, ignoring the negative sign) the character will die. This time is halved for each subsequent trauma roll the character fails.

Unless the trauma roll indicated immediate death, the player must now make a stun roll, applying the –3 penalty for the critical wound. If the player scores an action value of –5 or worse, his character is unconscious. If the player fails the roll by less than five, his character is incapacitated. If the player makes the roll successfully, the character is able to continue acting, but suffers the –3 impairment penalty for the critical wound. Note that this specifically allows for the possibility of a character who has suffered a mortal injury (indicated by a failed trauma roll) continuing to act temporarily. Such a character will still die, however, if he does not receive first aid within the allotted time. Characters who have suffered a critical wound may only move at their walking or crawling pace, as both scrambling and sprinting are impossible.

Except for stun and trauma rolls, the impairment penalties for wounds are cumulative. A character who has taken a minor wound (–1 penalty) and a serious wound (–2 penalty) suffers a –3 impairment penalty to all actions.

DAMAGE RESOLUTION

Every weapon and unarmed attack in **Blue Planet** has an associated damage rating. The higher this value, the more lethal the weapon or attack. To determine the damage of a given attack, first subtract the target's Toughness and the rating of any armor protecting the target from the base weapon damage rating. Next, roll three dice against this modified damage rating. Each die that rolls equal to or less than the damage rating represents one wound level. One success indicates a minor wound, two successes indicates a serious wound, and three successes a critical. If all three dice roll higher than the damage rating, the attack landed, but was glancing enough, or of insufficient power, to do any significant damage.

SUCCESSES	WOUND LEVEL
0	None
1	Minor
2	Serious
3	Critical

EXAMPLE

Marshal Church is conducting surveillance on a suspected mob hangout when he is ambushed by Gorchoff syndicate gangsters. Ducking behind his patrol hopper, he returns fire on the wiseguys. His first shot hits an enforcer crouching at the corner of a dumpster. Church's Peacemaker has a base damage rating of 7. The gangster has Toughness 1 and a heavy duster with an armor rating of 1, so the modified damage rating is 5. The player rolls three dice, getting 8, 4, and 1. Since two dice rolled equal to or less than the modified damage rating, the shot inflicts a serious wound. The game moderator then makes a stun roll for the enforcer, who has Will 0. The moderator rolls against a base target number of 5, modified by the –2 penalty for the serious wound, for an effective target number of 3. He rolls a 6 and a 5, for an action value of –2. The gangster is incapacitated but not unconscious, and falls back behind the dumpster, screaming in pain.

Some attacks, especially from heavy weapons, can have modified damage ratings in excess of 10. In these cases, the attack automatically inflicts a critical wound, and each point of damage rating over 10 increases the wound's impairment penalty by one. This additional penalty must be applied to the trauma and stun rolls resulting from such attacks.

EXAMPLE

Church loads an explosive round in the chamber of his assault rifle and takes aim at another gangster. With the explosive ammo, the weapon's modified damage rating is 11. A successful hit will automatically inflict a critical wound, and the impairment penalty for the wound will be increased by 1, to –4.

Note that the damage ratings of armed close-combat attacks are determined by adding the attacker's Strength to the base damage rating of the weapon. For characters whose Strength is below the human norm, this means the base damage rating is decreased. In the case of unarmed attacks, the modified damage rating may therefore be zero or less. However, if the character is wielding a weapon of some kind, such as a knife or nightstick, the minimum damage rating is 1, regardless of the character's Strength. Effectively, if the character is strong enough to wield the weapon (moderator's discretion), he is strong enough to do damage with it.

CALLED SHOTS

Combat in **Blue Planet** is designed to be fast and furious, with a minimum of bookkeeping and table references. To avoid such cumbersome elements and still provide an effective mechanic for attacking specific parts of a target, **Blue Planet** uses a called-shot rule.

To model the ability of skilled fighters to precisely target their attacks, players can accept penalties on their attack rolls to gain bonuses on their damage ratings. For every –1 penalty a player accepts on the attack roll, the player may either increase or decrease the attack's damage rating by 1. This allows skilled characters to attack to kill or subdue.

EXAMPLE

With his next shot, the Marshal decides to take out a hulking bruiser with a shotgun. Church notices the telltale bulk of body armor under the thug's jacket. The player figures the bruiser will be tough to take down and decides to take a called shot with the rifle, accepting a –3 penalty on the attack roll in exchange for a +3 bonus to the damage rating. If this shot hits, its base damage rating will be 11 (base 8, plus 3 for the called shot).

FIRST AID

Emergency medical treatment will greatly improve a character's chances of surviving an injury. To administer first aid, a player makes a success roll against Intellect and First Aid. The patient's impairment penalties are applied to the target number of the First Aid roll, regardless of who is administering the aid. This means that the impairment penalties are effectively doubled for injured patients who attempt to treat themselves. Proper medical supplies and equipment, such as medkits, provide bonuses to the target number of first aid rolls.

EXAMPLE

Church returns to the Patrol precinct with a minor wound and a serious wound. The on-duty medic can treat Church's wounds, applying the –3 impairment penalty to his First Aid roll. If the Marshal attempted to treat the wounds, there would be a –6 penalty to the roll.

First aid has three effects. First, it can effectively treat minor wounds. There may be lingering scars, bruises, or discomfort, but any impairment penalties incurred from minor wounds are eliminated. Second, successful first aid allows characters to recover from incapacitation or unconsciousness. Such characters can act normally, subject to any remaining impairment penalties. Finally, first aid will stabilize a patient who is dying of trauma from a critical wound, as long as it is administered within the allotted time. The patient may still be incapacitated, but is no longer in danger of dying.

A character can typically only attempt first aid once per patient, but if the situation is appropriate, more than one character can attempt to aid the same patient.

SPECIAL DAMAGE

The following rules detail several types of damage not typically associated with combat. These rules do not cover all possible ways that characters can get themselves hurt in **Blue Planet**, but the moderator can use them as guidelines to handle most situations that might arise.

FALLING

The damage rating of a fall depends on the distance fallen. The damage rating is 1 for every meter of distance the character falls. A character who falls less than three meters will suffer no damage if the player can make a successful Agility roll.

EXPLOSIVES

Explosives are area of effect weapons, and the farther away a target is from the center of the explosion, the less severe the damage it sustains. To model this, the damage rating of explosive weapons is reduced by one for every two meters separating the target from the center of the explosion.

The damage explosives normally do is caused by a combination of fragments and concussion. Poseidon is a waterworld, however, and much of the action takes place underwater. In this denser medium, the concussion of an explosive weapon is effectively much more powerful. To model the increased destructive force of underwater explosions, increase the base damage rating of submerged explosive weapons by 3.

BURNING AND ELECTRICAL SHOCK

Injuries from heat or electrical shock can be horrific and deadly. The extent of a burn injury is related directly to the temperature or amperage, and the duration of the exposure. For every action round a character is exposed to a heat or electrical source strong enough to burn, roll for damage against a base damage rating of 3. Increase the damage rating by 1 and roll again for every additional action round the character is in contact with the hazard. The moderator may also increase the base damage rating for extremely high-temperature fires or high-amperage electrical shocks. All but the heaviest armor is ineffective in mitigating such injuries.

HYPOTHERMIA

Characters subjected to intense cold for a prolonged period of time will suffer hypothermia as their bodies' systems begin to shut down. Roll against a damage rating of 5 for every hour the character is subjected to freezing air temperatures or for every 10 minutes of exposure to water of 5°C. The moderator should add 1 to the damage rating for every 10° below these limits, but may reduce the rating if the characters are able to take appropriate precautions, like lighting a fire, wrapping up in blankets, or sharing body warmth. Only insulated or heated armor will protect against hypothermia.

POISON

Many of Poseidon's denizens are quite venomous. Victims must usually be attacked in close combat for poison to be injected and its effects applied. All poisons, natural or otherwise, have a damage rating, onset time, and duration. Damage caused by natural toxins is resolved in the same way as other damage, with some minor variations. Poisons cause wound levels, just like other attacks. However, there is usually some delay after a poison is administered before its effects are apparent in the poisoned organism. This delay is called the poison's onset time. When a character is poisoned, the moderator should immediately resolve the wound level suffered, but the effects should not be applied to the character until the onset time has passed. If the character is treated with an appropriate antitoxin before the onset of the poison's effects, the character will suffer no damage.

Minor wounds resulting from toxins usually involve dizziness, weakness, and severe nausea, while serious and critical wounds are usually the result of damage to the victim's circulatory, respiratory, or nervous systems. The effects of minor wounds caused by poison, including impairment penalties, fade away once the toxin's duration has passed. The effects of serious and critical wounds, however, are permanent until treated or healed.

Poisonous creatures must usually penetrate a victim's skin with a natural weapon, such as claws, fangs, stingers, or barbs to administer poison. These attacks in themselves are often incapable of inflicting any damage. As a result, they require some slight variants in the way armor is treated in the rules. Specifically, any fairly heavy or durable covering is sufficient to block the natural attacks of most of Poseidon's smaller denizens. A poisonous attack will only be successful if it strikes an unprotected area. In this case, the quality or thickness of the protection is not as important as the area of coverage. A rugged drysuit is much better protection against poisonous bites and stings than an armored vest, because it covers a larger portion of the body.

When a poisonous creature attacks a character, the moderator should apply a penalty to the creature's target number based on the protective coverage of the victim's clothing. Again, the penalty should be based on the area of coverage, rather than the quality or thickness of the material. If the attack scores a hit despite the modifier, the character is assumed to have been bitten or stung on an unprotected part of the body. Armor does not reduce a toxin's damage rating, though the victim's Toughness does.

COVERAGE	MODIFIER
Minimal	–1
Partial	–3
Full	–5

Minimal About a quarter or less of the body is covered (e.g., boots or gloves, an armored vest that leaves the arms unprotected)

Partial About half of the body is covered (e.g., a heavy jacket or rugged trousers)

Full Most of the body is covered, with only a few small areas left unprotected (e.g., a durable drysuit with only hands, neck, and face unprotected)

If a character is completely covered, such as with a diving hard suit, full combat armor, or a hazardous environment suit, the character cannot be poisoned unless the creature's attack actually does enough damage to penetrate the armor or protective covering.

The *Moderator's Guide* lists the poison damage ratings, onset times, and duration for specific organisms (see page 163).

SUFFOCATION AND DROWNING

When characters suffocate, they do not suffer damage as such—they simply pass out and eventually die as their central nervous system fails from lack of oxygen. A suffocating unmodified human without training in Aquatics or some related skill can resist unconsciousness for 100 seconds + (30 seconds x Endurance). Add (10 seconds x Aquatics skill) as a bonus for training in breath control. After falling unconscious, a character will die from oxygen starvation in one minute + (15 seconds x character Endurance).

Drowning is simply suffocation due to the presence of water in the lungs, and the same rules apply. After the appropriate time limits, a character will pass out, inhale water, and then begin to suffocate. First aid can save a drowning victim, but only if it is administered within the time limits described above.

HEALING AND RECOVERY

Characters can recover from wounds naturally over time, and characters who receive the care of a trained medic or physician will typically heal faster than those who do not. Recovery time is negligible for successfully treated minor wounds.

• The time it takes for a character to recover from a serious wound is equal to 10 weeks – (1 week x Fitness). If the character is treated by a medic, a successful General Medicine roll, modified by any wound penalties, will reduce this period of time by a number of days equal to the action value of the roll.

• The time it takes for a character to recover from a critical wound is equal to 10 months – (1 month x Fitness). If the character is treated by a medic, a successful General Medicine roll, modified by any wound penalties, will reduce this period of time by a number of weeks equal to the action value of the roll.

Only one roll can be made for each wound, and the cumulative wound penalties suffered by the character are applied to the target number of each roll. The moderator may also require a severely injured character to undergo one or more surgeries before the healing process can begin. The moderator should also modify the General Medicine roll for factors such as the medical facilities, equipment, and support staff to which the attending physician has access. This modifier will be highly variable, ranging from –5 for very poor conditions to +5 for a well-equipped, modern hospital or infirmary.

VEHICLE DAMAGE

Damage to vehicles is resolved just like it is for living targets. All vehicles have an armor rating that is subtracted directly from the damage rating of the attack. Three 10-sided dice are rolled against this modified damage rating, and the result determines the attack's damage level—the vehicle equivalent of wound levels. There are three damage levels—minor, serious, and critical—and they have specific effects similar to those for wounds. All vehicles also have a special attribute, Durability, that serves the same purpose as Will and Fitness in determining the effects of wounds on living targets.

Minor Damage

The vehicle has sustained enough damage to impair its performance, and the operator receives a –1 target number penalty to all maneuvers attempted with the vehicle. The attack was not severe enough to render the vehicle inoperable.

Serious Damage

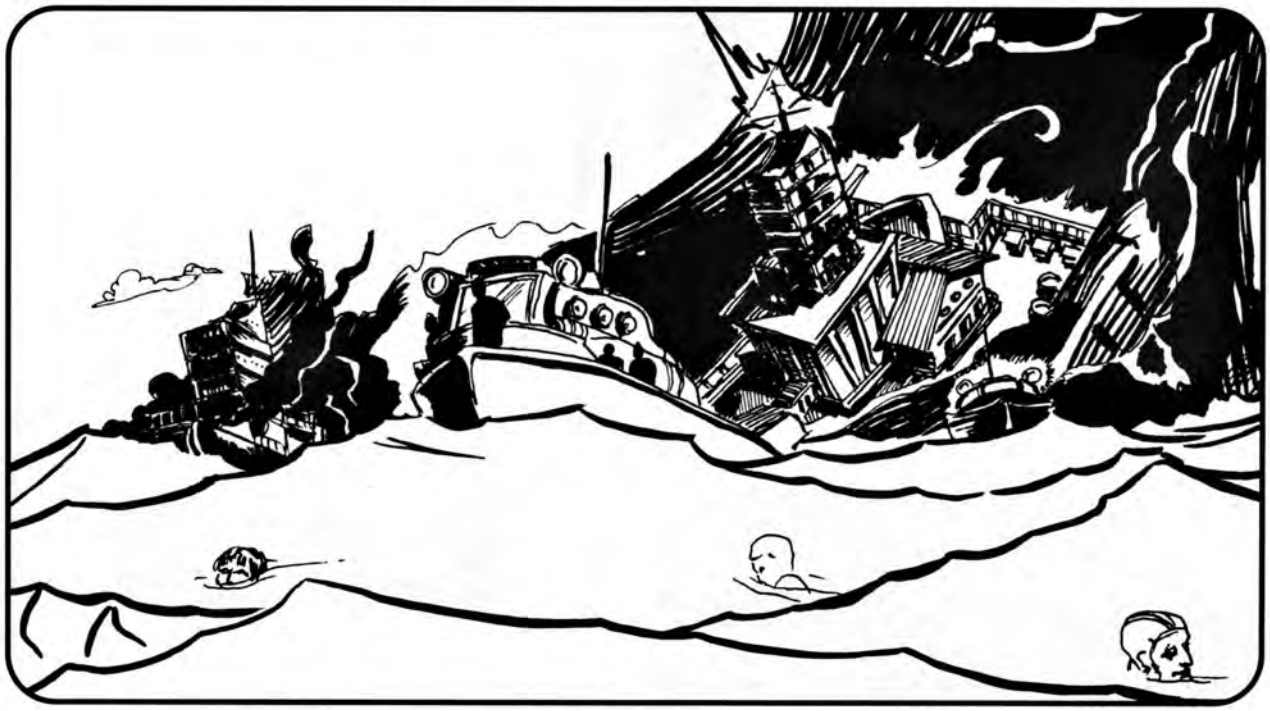
The vehicle has sustained significant damage, and the operator receives a –2 penalty to all maneuvers attempted with the vehicle. Also, the operator's player should make a Durability roll, applying only the impairment penalty for this specific attack. If the player scores an action value of –5 or less, the vehicle is rendered inoperable. If the roll fails by less than 5, the vehicle's speed ratings are halved. If the roll succeeds, the vehicle continues operating subject to the –2 impairment penalty.

Critical Damage

The vehicle has sustained severe damage, and the operator receives a –3 penalty to all maneuvers attempted with the vehicle. In addition, the operator's player should make a Durability roll, applying only the impairment penalty for this specific attack. If the player scores an action value of –5 or less, the vehicle is destroyed and the occupants suffer a wound equal to the damage rating of the attack. If the roll fails by less than 5, the vehicle is rendered inoperable. If the roll succeeds, the vehicle's speed ratings are halved but it may continue operating subject to the –3 impairment penalty.

EXAMPLE

Marshal Church fires his Peacemaker at a group of poachers in a beat-up jumpcraft. The base damage rating for the Peacemaker is 7, but the jumpcraft has an armor rating of 5, so the modified damage rating is 2. Church's player rolls three dice, getting 8, 2, and 1. The bullet smashes through the body of the jumpcraft and penetrates the vehicle's fuel cell, causing serious damage. The jumpcraft has Durability 0 and the impairment penalty for serious damage is –2, so the target number for the Durability roll is 3. The moderator makes the roll, getting a 9 and 5. The roll failed by less than 5, so the vehicle is still functioning, but its speed ratings are halved.



HARDWARE

CHAPTER 05

TECHNOLOGY KEY

In the world of **Blue Planet**, technology is interwoven with daily life, and most of Poseidon's inhabitants depend on it for survival. In the game of **Blue Planet**, there are certain conventions that facilitate the use of technology in play.

DESCRIPTION

This is a description of the typical construction and function of a particular device. In a world where technology is always being improved, there is always variation between designs. These descriptions present the average capabilities, functions, and statistics for a given device. If the item has any special rules associated with its use or function, they are also explained here.

DIMENSIONS

These values represent the average size, mass and volume of the described item.

POWER SOURCE

This identifies the typical power source, if any, for a given item.

AVAILABILITY

This is a description of the relative availability of a device. There is no connotation of legality, only of abundance. An item may be abundant and still be illegal.

VERY COMMON

The item is easy to find and can be bought almost anywhere.

COMMON

The item is available in many places and can be obtained with minimal difficulty.

UNCOMMON

The item is somewhat unusual and can be obtained only in specialty shops.

SCARCE

The item is difficult to find and may require special knowledge or contacts to obtain.

RARE

The item is extremely difficult to find because of such factors as production difficulty, expense, or legality.

COST

This represents the standardized relative value of an item, in corporate scrip, with no regard to its legality or availability. Legally restricted or hard to find merchandise will fetch higher prices, regardless of their standard cost. Because of the extreme variety of circumstance in **Blue Planet**, game moderators should consider availability, legality, and the character's situation before setting a final price for a given piece of equipment.

Some equipment descriptions contain additional information regarding function or use. Consider these where applicable.

RATE OF FIRE

This is the number of rounds or bursts the weapon can fire in a single action.

Weapons capable of full-automatic fire are listed with a second value in parentheses. This is the number of bursts the weapon will fire in full-automatic fire mode (see page 113).

BURST FIRE VALUE

This is the number of rounds the given weapon fires in a single burst (see page 113).

DAMAGE RATING

This is the value for a given weapon's damage potential (see page 117).

ARMOR RATING

This is the value of the protection offered by a given type of armor (see page 117).

RANGES

These are the effective weapon ranges for a given weapon, listed for point blank, short, medium, and long (see page 112).

FORM

This describes the state of a drug, tablet, or injection.

DOSAGE

This describes the frequency of use or duration for a given drug.

POWER SUPPLIES

BATTERIES

Most portable electronic devices need batteries to function. In 2199, batteries are room-temperature superconductors made from ceramic compounds. Batteries of high capacity and more or less infinite numbers of recharges are the norm. Batteries typically hold about 600 watt-hours per kilogram, or 2,100 Joules per gram, which is perhaps double the power of non-rechargeable late 20th Century batteries and several times better than rechargeable ones. Batteries mass about 1.5 kilograms per liter of volume, for a power storage capacity of about 900 watt-hours per liter. Batteries come in several standard sizes, suitable for most applications.

Most battery-powered devices use enough cells to provide at least 50 hours of continuous operation or several months of intermittent use. Most electronic devices contain a small induction coil for recharging. Homes and vehicles usually come equipped with one or more induction pads, which can fully charge anything up to several heavy duty cells in an hour or less, just by placing the electronic device on the pad. A chime or visual alert lets the user know when recharging is complete.

NANO CELL

About 10 microliters in volume (smaller than a freckle), they have negligible energy capacity and are used in small disposable items, such as medical probes or audio bugs that transmit occasional microwatt data bursts. Range of such infrequent transmissions is no more than about a hundred meters. Typically, a nano cell is integrated with the chip it is designed to power during the fabrication process. Devices that use nano cells have such low power consumption that they can often recharge by absorbing power from the ambient radio or electrical energy leaking from other devices (a tuned induction coil on the integrated circuit handles this function). Nano cells have negligible cost and are usually factored into the cost of whatever device they are integrated into.

Dimensions: Less than a gram, 10 microliters
Availability: Very common
Cost: As part of device

MICRO CELL

At one milliliter in volume (the size of a fingernail), these are the smallest consumer batteries. They are used in low-power electronics like calculators and tiny radio receivers. They only hold a fraction of a watt-hour of energy and cost about 1cs each.

Dimensions: Less than a gram, one milliliter
Availability: Very common
Cost: 1cs

MINI CELL

This is the second most common battery in use, with a volume of about one centiliter and a mass of about fifteen grams (a bit larger than a tablespoon). These are used singly or in combination in weapon sights, pistols, hand-held sensors, small radio receivers, and body-comps. They hold about nine watt-hours of energy each and cost about 2cs.

Dimensions: 15 grams, one centiliter
Availability: Very common
Cost: 2cs

STANDARD CELL

This is the most common cell in use, with a volume of about seven centiliters and a mass of about 100 grams (about the size of a 21st Century "D" battery). These are used singly or in combination in rifles and heavy weapons, stun weapons, flashlights, portable computers, radio transmitters, and other portable devices that require more power than a mini cell. They hold about 60 watt-hours of energy and cost about 10cs each.

Dimensions: 100 grams, seven centiliters
Availability: Very common
Cost: 10cs

HEAVY CELL

This is the largest consumer cell and has a volume of about a liter. Heavy cells are used singly or in combination to power the circuits of heavy weapons, environment suits, and high-power radios, or as vehicle backup power. They hold about 900 watt-hours of energy and cost about 100cs each.

Dimensions: 1.5 kilograms, 1 liter
Availability: Very common
Cost: 100cs

INDUSTRIAL CELL

These are very large units manufactured for a specific purpose, such as powering a minisub. Energy storage is dependent on size, and the cost is about 50cs per liter, each liter holding 900 watt-hours of energy. They may be available on the consumer market after being stripped from junked vehicles, but getting a specific size or configuration is unlikely.

Dimensions: Varies, 1.5 kilograms per liter of volume
Availability: Common
Cost: 50cs per liter

FUEL CELLS

For large applications or long-term use, fuel cells are the preferred method of generating electrical power. Fuel cells combine stored hydrogen and atmospheric oxygen to generate electricity. With liquid oxygen storage, they can also be used underwater, though the usual application is to use a fuel cell on the surface and batteries underwater. Fuel cells contain integrated hydrogen crackers, which can strip the hydrogen from any hydrocarbon for use in the fuel cell. Some localities store their hydrogen in metal hydrides, producing the hydrogen by fusion-powered electrolysis of water. Others mine deep-water methane deposits, and a few use refined hydrocarbons.

Fuel cells produce about 1 kilowatt of power per liter and have a mass of about 1 kilogram per liter. The byproducts of using a fuel cell are hot water or steam (which can be used for drinking or bathing purposes),

and if a hydrocarbon is used as the base fuel, a carbon-containing sludge that must periodically be emptied from a holding tank. Many self-sufficient homes have a 20-kilowatt fuel cell as a permanent fixture that serves several purposes. As a small, efficient power source, it can be located so that even if a solar or wind farm were destroyed by severe weather, the fuel cell would probably survive. If the solar and wind farms produce more power than the home's battery bank can take, the excess power can be used to crack hydrogen and oxygen for later use by the fuel cell or a fuel cell-powered vehicle. Last, since a natural byproduct of the fuel cell is hot water, it is often a home's hot water heater, adding a boost to solar-heated water and recharging batteries at the same time. The hot steam can also be used with a hose to scour fungus off of walls and boat hulls.

Fuel cells consume about 1 kilogram of fuel per 10 hours of operation. Fuel cells cost about 100cs per liter, with a minimum size of about 20 liters. Most storage tanks mass about 2 kilograms per liter when full, cost 20cs per liter, and store 1 kilogram of hydrogen. Hydrides have a minimum mass based on the metal part of the hydride, while methane or other hydrocarbon tanks have waste mass associated with the unused carbon part of the hydrocarbons. Hydrides are safer and the preferred storage, but hydrocarbon tanks are simpler to refuel and do not require any extra manufacturing steps as metal hydrides do. Fuel supplies with integrated oxygen storage can be used underwater or in vacuum, but the fuel consumption is tripled because on-board oxygen is used.

Dimensions: At least 20 kilograms, 20 liters
Availability: Very common
Cost: 100cs per liter

ELECTRONICS COMPONENTS

In the year 2199 computers are more than simply tools in their own right; they have become a part of nearly every device used in daily life. Everything from cameras to coffee makers contains some form of computer.

ACCESS CHIP

Every electronic device, and almost all mechanical ones, contains an integrated computer known as a standard access chip. This microcomputer monitors the device and is often connected to a microphone and speaker, so it can hear and respond to simple speech. The chip is used for troubleshooting and tracking of power usage, reliability, and any other technical problems. A chip only responds to a series of one- and two-word commands prefaced by a short code word specific to the device. The chip responds with technical details on the functioning of the device. Most responses are simple statements as to the level of power remaining in the batteries or whether the device is capable of performing a given function. However, some of the responses are likely to be useful only to someone who understands the technical language of engineers.

Repairing a device containing a chip provides a +1 bonus to the target number of the repair roll for anyone trained in Electronics. This modifier is lost if the chip malfunctions or is turned off.

INTERACTIVE ACCESS CHIP

Almost every electronic device with a volume of 0.5 liters or larger contains a more sophisticated processor, equivalent to a bodycomp. This type of circuit is known as an interactive chip or less favorably as a "gremlin." In addition to possessing all of the functions of a standard chip, a gremlin is capable of interacting through ordinary speech. It is therefore considered less frustrating to use than the painfully limited standard chip. In addition, some devices equipped with a gremlin will have a small holo projector by which schematics and more detailed messages can be presented.

Statements like "Gun, are you still working?" or even "Camera, choose the best setting to maximize the visibility of the object in the left quarter of the viewfinder," are possible when using a gremlin. They are not intelligent and are totally incapable of any type of creative thought. However, they can interpret simple inferences and can even understand some commonly used slang. It is left to the game moderator to determine if an interactive access chip can understand a question or command.

Repairing a device containing a gremlin gives even unskilled characters an Electronics skill of 1, in addition to providing a +1 bonus to the target number of the task roll for anyone trained in the skill. These modifiers are lost if the gremlin malfunctions or is turned off.

It is possible to temporarily turn off access chip speakers. This is commonly done in combat or other high-stress situations. The constant repetition of "This unit is not rated for the current level of usage," has resulted in the destruction of more than one such device.

INTERFACE TECHNOLOGY

All computers and most electronic devices require input data or commands, as well as the ability to generate output. In 2199 there are three different forms of computer and device interface.

NEURAL INTERFACE JACKS

Neural jacks are sophisticated cybernetic interfaces mounted directly into the nervous system of the user. They provide superior interface quality and efficiency. For complete details on neural jacks see page 167.

MANUAL INTERFACE

The simplest interfaces are still the keypad, microphone, speaker, and visual display. The display may be holographic and the keypad may be a VR device, but only the quality of the interface changes, not its nature. Most simple manual interfacing is done verbally through voice-recognition programs.

Dimensions: Less than 0.25 kilograms and 1 liter
Power Source: Standard cell
Availability: Very common
Cost: 25cs to 1,000cs, depending upon format and optional functions

TRODES

Trode or contact interfaces are sensitive electrodes mounted on a headset within the weak electrical field generated by the user's brain. These devices sense and interpret the user's neural impulses, translating them into digital signals that are then passed on to the computer or device. The trodes then translate device output into neural signals that the user receives as visual and auditory stimuli. As a result, trodes have become popular in entertainment applications, providing the user the illusion of actually participating in virtual games, interactive stories, or recorded events.

Trodes provide an efficient, accurate, and fast interface that enhances a user's performance with the interfaced device. All actions executed through a trode contact receive a +1 bonus. Additionally, trodes eliminate the need for physical action on the part of the user. All actions initiated through a trode are almost instantaneous, slowed only by the speed of the trode's interpretive programming. In game terms this means that a character acting though a trode receives a +1 bonus to initiative (see page 111) during an action round in which the character is using the interface to perform an action. This rapid action is limited to actions through the trode, and by the physical capabilities of the device being controlled.

Using a trode does not impede physical actions any more than normal mental activity would complicate such actions. However, to function properly, the trode must maintain uninterrupted contact with the electrical field of the user's brain. Physical actions that would prevent this by removing or dislodging the headset, even temporarily, would break the interface with the device. Loss of interface typically sends devices into inactive standby mode.

Dimensions: 0.1 kilograms, 0.35 liters and adjustable to fit
Power Source: Mini cell
Cost: 1,200cs
Availability: Common

COMPUTERS

Computers are an integral part of daily life, both in the Solar System and on the colony world. They are used in limitless applications and are ubiquitous in technological society.

In the last decades of the 21st Century, size ceased to limit either computer function or data storage. Standardized formats were eventually established for smaller computers, and data storage devices were constructed in several standard configurations. These configurations have been so successful that they are still in use in 2199, over 100 years later.

BODY COMPUTERS

Bodycomps are the personal computer of 2199. They come in a variety of forms with numerous options. Bodycomps usually reflect the lifestyle of the user. On Earth, credit card-like bodycomps are the most common. Simple and inexpensive, they support most options and programs. In space or on Poseidon, wrist-mounted, watch-like bodycomps are preferred. Still other models are clipped to clothing or hang from neck cords. Though the forms vary, the capabilities of bodycomps are similar.

A standard bodycomp uses verbal or cursor control input with holographic display. However, any of the possible interfaces can be used to operate a bodycomp, assuming it is equipped with the proper hardware options. Standard bodycomp options include at least one dataspike port and a wireless modem for access to CommCore. Available options include solar cells, radio communications, trode or jack lines, satellite uplinks, biomonitors, and global positioning systems. Such options quickly add to the price of a basic bodycomp, however.

Players must specify the programs and databases stored in their bodycomps, and are restricted by that content until they are able to change it. Remember, too, that many software applications are very expensive, and being able to run a certain program is not the same as being able to afford it. Cost, function, availability, and size of various programs and databases are left to the discretion of the game moderator.

Dimensions: Typically about 90 grams and 0.12 liters
Power Source: Mini cell
Availability: Very common
Cost: 200cs for a basic unit, up to 2,500cs depending upon format and options

DATASPIKE

The final successor to the laser disk, dataspikes are small cylinders with a blunt, optical-grade plastic point on one end. Dataspikes can store up to one terabyte (1,000,000 megabytes) of information. This is enough storage to hold 50,000 fully illustrated encyclopedia volumes. Dataspikes contain a core of light-sensitive protein, and data is stored by configuring the proteins with lasers of different colors. Some brands even have a tiny readout that automatically displays the primary directory name or the spike ID. Spikes are resistant to moderate temperatures and magnetic fields and are remarkably durable.

Dimensions: 9 grams and 0.05 liters
Power Source: None
Availability: Very common
Cost: 5cs for a blank dataspike; dataspikes containing data or programs cost considerably more, depending on the value of the information

MAIN COMPUTERS

Bodycomps are amazing devices, but they *are* limited. Their speech recognition is fairly literal and they are incapable of making independent decisions or of running certain high-end programs. The same is not true of larger, more sophisticated computers. Larger, more powerful, less portable computers are called maincomps. Maincomps are common everywhere—in business, onboard large vehicles and spacecraft, and in research labs. They are found anywhere sophisticated computer power is required.

Maincomps store data using DNA memory cores. The advent of advanced genetic engineering technologies and artificial enzymes has allowed the use of DNA as a data storage medium. Originally evolved to store the vast data needed to run living organisms, DNA is a ready-made memory device.

DNA gel cores consist of optical crystal cylinders that contain a suspension of life-support fluid and large amounts of DNA. Data is read with laser light and altered by enzymatic activity. The cores are essentially large, living cells whose only function is data storage. The metabolic life support system required to keep a DNA core "alive" limits the minimum size of such a device to about five liters, but the gain in storage capacity and access time is formidable. A five-liter DNA core can store up to 10 exabytes of information and access is essentially at the speed of light. If life support for a DNA core is cut, the gel will begin to fail and data will be lost within only a few minutes. Backup power systems and portable life support devices are therefore common.

Maincomps are not sentient, but they simulate sentience very well and can be disturbing to people not used to them. Maincomps even appear to develop personalities of their own, though this effect is only an artifact of their programming as the computers adapt to frequent users.

Every maincomp comes with basic interfacing programs and hardware pre-installed, a multi-channel wireless modem, and a large holographic display. Optional hardware is ubiquitous and new devices and programs are in constant development. As with bodycomps, the capabilities of a maincomp are strictly limited to the programs and databases it contains. However, the sophistication and functionality of a maincomp is only limited by cost and the designer's imagination.

Dimensions: 10 kilograms and 7 liters
Power Source: A heavy cell or connection to an external power supply
Availability: Common
Cost: 6,500cs for a basic model; more elaborate models with concert-quality speakers, large holo-displays, or extensive data libraries can cost over 15,000cs

COMMUNICATIONS

PERSONAL COMMUNICATORS

Personal communications equipment is small and versatile. Most units are mounted in a light headset or contained in a single earplug. These devices are generally voice-activated and can function with sub-vocalizations or bone conduction. These radios operate on a broad spectrum of frequencies and often contain scanners. Military-grade personal comms are usually integrated into combat helmets and run frequency-hopping and scrambling programs. A basic comm set has a line-of-sight range of 10 kilometers.

Dimensions: 20 grams
Power Source: Mini cell
Availability: Common
Cost: 140cs

UPLINK COMMUNICATORS

Uplink communicators are the most common form of long-range communications on Poseidon. Almost every modern vehicle has an uplink, and most outposts, colonies, or military units have several. These devices have small, folding transceiver dishes, holographic interfaces, modem capabilities, and heavy-duty batteries. Uplinks require an operational communications satellite to relay signals. This requires that the user have access to one of the numerous sats orbiting Poseidon.

Satellite communication on Poseidon is often problematic. Severe weather, sat malfunctions and sabotage, jamming signals, and constantly changing security protocols make reliable communications difficult. There are several strictly commercial public sat systems online, but their operation and maintenance is unregulated and therefore unreliable. They are also very expensive, usually requiring payment authorization in advance.

Dimensions: 1.7 kilograms and 2.1 liters
Power Source: Heavy cell
Availability: Common
Cost: 1,450cs

ROBOTICS AND REMOTES

In 2199, the line between mere machines and actual robots is a blurry one. Computer integration and cybernetics have become so sophisticated that almost every device, appliance, apparatus, and vehicle has some level of autonomy or independent operation. In addition to this autonomy, most devices also possess some level of remote access, allowing users to operate most equipment through interlinks or telepresence.

ROBOTS

True robots dominate the commercial world with applications in heavy industry, manufacturing, construction, agriculture, and transportation. They are also common in domestic, medical, and military settings, as well as space exploration. Most robots are simply automated machines designed for repetitive or exacting jobs, or for use in environments or tasks that are too dangerous for human workers. Others are sophisticated complexes of computers and peripheral devices that are used to control and service mass transportation, domestic facilities, orbitals, or underwater complexes.

As impractical as it is for most industrial applications, the human form is seldom copied in robotics. Most robots are designed specifically for their intended task and so their sizes, shapes, and capabilities are as variable as they are versatile.

AGRICULTURAL ROBOT

Most agrobots are heavy duty, spider-legged machines of various sizes, equipped with a sprawling array of manipulating arms, waldos, tool accessories, and cargo pods. They plod, march, and skitter about crop fields, plowing, planting, spraying, digging, and harvesting with care and reliability. Large farms or ranches typically have a number of specialty robots all slaved to a master control program, while smaller operations usually have one or two more versatile and autonomous machines.

Dimensions: 0.5 to 3 meters, 5 to 800 kilograms
Power Source: Standard to industrial cells
Availability: Common
Cost: 200cs to 10,000cs

CONSTRUCTION ROBOT

Construction drones range from small diagnostic 'bots that crawl through wall spaces testing cable, to massive earth-moving mining drones. They are found on every construction site in the known systems and are vital in the maintenance of orbitals and submerged complexes. They come in a spectrum of designs with capabilities to match—drilling, welding, plastic extrusion, cutting, fabrication, and demolitions. Construction robots typically have sophisticated telepresence systems so they can be handled by experienced operators for subtle jobs or tasks in hazardous environments.

Dimensions: 0.5 to 5 meters, 4 kilograms to 22 metric tons
Power Source: Standard to industrial cells, fuel cells
Availability: Common
Cost: 150cs to 180,000cs

DELIVERY ROBOT

Delivery robots generally come in two types. The first is smaller and fan powered, used to deliver dataspikes and other small packages. These machines zip about urban centers on quick errands, typically carrying small cargos of ordered merchandise or data that is impractical or unsafe to transfer digitally. Such secure carriers usually operate at altitude and are often equipped with stunners to deter hijacking.

The second type are essentially unpiloted vehicles, wheeled or otherwise, used to haul larger items such as construction material, furniture, manufactured goods, or agricultural products. Such delivery robots may operate locally, or over planetary distances via satellite-routed control.

Dimensions: 0.5 meters and 10 kilograms up to 8 meters and 7 metric tons
Power Source: Standard to industrial cells, fuel cells
Availability: Uncommon
Cost: 200cs to 200,000cs

DOMESTIC ROBOT

Most domestic robots are part of integrated systems that serve as caretakers for anything from an industrial complex or military base to a single family home or apartment. A maincomp and expert programs control a small army of machines and appliances that can trim the grass, vacuum the hall, and scrub the bathroom, or order groceries, prepare dinner, and wash the dishes.

Other subroutines and peripherals control amenities such as lights, communications, and entertainment equipment, actually learning personal preferences and anticipating user requests. Though any real intelligence is strictly illusionary, domestic robots are typically programmed to interact with artificial personalities—so realistically, sometimes, that it is easy to forget they are only well-designed machines.

Dimensions: 0.25 to 1 meter, .1 to 5 kilograms
Power Source: Standard cells and external power supplies
Availability: Common
Cost: 2,500cs to 55,000cs

REMOTES

In the world of **Blue Planet**, remotes, remote operation, and telepresence are common aspects of everyday life. Anyone with a bodycomp, an interlink transmitter, or an uplink jack has the power to start a coffeemaker in the kitchen, run a hover drone through town, or pilot an assault craft on the other side of the world. In major urban centers, remotes swarm about town and the airwaves are awash with public, commercial, government, and military telepresence frequencies. Repeater stations dot mountaintops and whole satellite networks are dedicated to keeping operators in contact with distant equipment.

Any device with telepresence capabilities is technically a remote, but typically, remotes are mobile devices equipped with audiovisual pickups and auditory speakers. More versatile remotes may have broadband sensory arrays, manipulating waldos, cargo pods, and sometimes even onboard weapons.

Remotes are controlled through comm suites of varying sophistication. The simplest follow auditory commands or those from tactile input devices, such as joysticks. Higher end remotes allow users to immerse themselves within the device's onboard systems, perceiving input and controlling movement as if the machine were part of their own bodies.

To prevent more than one operator at a time from accessing—and therefore compromising—a remote's function, most operation depends on access codes. The software used to control the remote first initializes access with the codes, and then piggybacks a unique session code on the control signal, giving the user sole access to the remote's systems. Though code breaking, jamming, and EMP are threats to remote control, access code security is adequate under most circumstances.

Most remotes have a degree of autonomy, and some even feature expert-system programming, allowing robust response to various circumstances and further blurring the line between remotes and robotics. Remotes can be programmed to navigate to specific waypoints, or they can be left to monitor a site or situation, signaling the user when certain stimuli are observed. They can be left in holding patterns and can follow a given course when the user's attention is needed elsewhere. They can be stationed as autonomous sentries, challenging or even firing on intruders.

Because remotes are so common, their use is regulated. All remotes must be licensed and must display their license number. This law is obviously difficult to enforce and easy to break, but for the most part, law-abiding operators comply.

When a remote is used in action rounds, it must follow the same initiative rules as the character operator. However, if the remote is being controlled through a neural jack, the inherent integration of thought and control gives the device a distinct advantage. If neural interface is being used, direct signal contact gives the remote a +2 to its initiative target number. If the remote is being operated through a local repeater station, it receives a +1, and if it is being operated through a satellite uplink, there is no bonus.

CETACEAN REMOTE

Certainly the most common type of remote on Poseidon, cetacean hovers allow humanity's counterparts to interact freely within terrestrial settings. With versatility limited only by their designs, these remotes are built in an array of sizes and configurations. Most are lift-fan driven and rather small, with only audiovisual pickups, sonar receivers, and linguistic translators. Others are larger, with cargo capacity and waldo manipulators.

Cetaceans are known for strong personalities, typically demonstrated by enigmatic and often outlandish personal habits. This element of their behavior seems to have carried over to their use of remotes. Cetaceans, often individually indistinguishable to humans, seem to have gone overboard with customizing their remotes, giving them ridiculous cosmetic features such as garish, photosensitive paintjobs, built-in fiber optic accents, and even holographic projectors. Anthropologists suggest this may be intentional overcompensation on the part of cetaceans to emphasize their individuality, which is so often ignored by humans.

Dimensions: 0.25 to 2.0 meters, 0.65 to 15 kilograms
Power Source: Standard to heavy cells
Availability: Common
Cost: 225cs to 3,450cs

COMBAT REMOTE

Combat remotes can be both savior and scourge in a modern firefight. Their versatility and expendability make them invaluable defensive weapons and frighteningly lethal offensive ones. Whether they stalk along on bird-like legs, skitter about like spiders, run on wide rubber tracks, or zip through the air on lift fans, these machines are just weapons systems looking for targets.

Most designs feature modular construction that allows the user to adapt the weapon systems to specific missions. Most combat rigs carry broadband sensory arrays and high-end, encrypted comm systems. Others carry laser designators for directing incoming fire, or non-lethal weapons like stunners and tear gas. Some are equipped for planting explosives or as bomb-delivery systems themselves. Still others are essentially automated litters, designed to recover casualties from hot combat zones.

Dimensions: 0.75 to 3 meters, 5 to 1,250 kilograms
Power Source: Heavy to industrial cell
Availability: Scarce
Cost: 1,200cs to 85,000cs

RECON REMOTE

Reconnaissance remotes come in two basic designs—flyers and crawlers. Flyers are smallish sphereoids with center-mounted, counter-rotating lift fans. They typically have 360° broadband sensory arrays, and are no louder than some of Poseidon's larger insect analogs. Crawlers are smaller and decidedly subtler. These insect-legged remotes readily navigate most terrains and are virtually impossible to detect.

Most recon remotes have phototropic housings to reduce their visual profiles and utilize autonomous navigation and packet transmissions to minimize their radio signatures.

Dimensions: 12 to 25 centimeters, 20 to 50 grams
Power Source: Standard cell
Availability: Scarce
Cost: 450cs to 1,300cs

SURVEILLANCE REMOTE

Sophisticated audiovisual bugs are tools of the trade in the world of modern industrial espionage. The most versatile and hardest to combat are the tiny, insect-like mobile designs. These devices can infiltrate through ventilation systems, in the packaging materials of an arriving shipment, or hidden in the clothing of an employee or apparent customer. They can hide when they have to and relocate to advantageous or sensitive positions as needed. They can explore with relative impunity during off hours and some are even equipped to tap into fiber-optic lines or computer storage media.

Such remotes are typically low powered and can recharge parasitically or via retractable solar strips. When in observation-only mode, their comm systems broadcast condensed packets to minimize their electrical signature. They must therefore usually be supported by a signal booster hidden within a kilometer radius.

Dimensions: 2.0 to 5.0 centimeters, 3 to 10 grams
Power Source: Micro cell
Availability: Rare
Cost: 650cs to 2,800cs

SENSORS

BROAD SPECTRUM VISOR

"Peepers" are visor-style sunglasses that also function as sophisticated visual sensors. The visor processes infrared and amplified light just like multi-spectrum binoculars. Standard visors are controlled by pressure switches at the temples; more sophisticated models contain integrated trodes. Trode versions often have rear-facing pickups that literally give users eyes in the back of their heads.

Dimensions: 40 grams
Power Source: Mini cell.
Availability: Uncommon
Cost: 460cs, 2,300cs for the trode version

COMBAT HUD

A combat HUD is a more sophisticated version of a sensor array designed for military applications. In addition to the functions described for the sensor array, a combat HUD uses a dedicated comp to store maps and other mission data, manage navigation and communications, and interface with other hardware. Three-hundred-sixty-degree holographic pickups can feed split-display imagery to other unit members or mission commanders. There is also an integrated biomonitor to track the wearer's vital signs, and an onboard navigational suite that functions as a map box.

The device includes short-range communications gear with a 10-kilometer, terrain-dependent range. The unit also has an emergency locator beacon that can be activated manually or by its link to the biomonitor. The beacon has a 100-kilometer line-of-sight range.

Most combat HUDs are integrated into combat helmets, but they are also available in a soft cap design favored by covert operatives. The HUD interface is usually by neural jack or helmet mounted trodes, but voice activation and visor displays can be used.

Dimensions: 0.25 kilograms and 0.4 liters
Power Source: Standard cell
Availability: Rare
Cost: 9,400cs

DIGITAL BINOCULARS

These binoculars have up to 25x magnification and process infrared, ultraviolet, and amplified light. Most models also have integrated laser range-finders and digital compasses. The magnification gives a user a +5 bonus to distance-hampered vision rolls.

In infrared mode it is possible to see objects by the heat they generate or reflect and to see significant heat sources behind thin barriers. Users can also track warm-bodied animals by the heat left in their footprints for several minutes after their passing, depending upon ambient temperature and terrain conditions. The quality of the images produced by IR sensors is always grainy, making it impossible to distinguish detailed surface features. As a result, only the general outlines of objects are perceivable with IR. Because IR light does not readily penetrate water, such sensors are useless underwater.

Infrared sensors provide a +2 bonus to all vision rolls in low light or darkness, and provide a +5 bonus when attempting to locate contrasting heat sources.

The light-gathering circuits allow the user to see in low-light conditions as well as nocturnal predators, removing all vision penalties caused by poor lighting conditions. This mode is useless in complete darkness.

Ultraviolet light penetrates water deeper than any visible light and so is a useful frequency for enhancing imagery underwater without artificial light sources. Using ultraviolet sensors underwater provides a +2 bonus to vision rolls in poor lighting.

Dimensions: 0.3 kilograms and 1.2 liters
Power Source: Standard cell with solar backup
Availability: Common
Cost: 770cs

HAND-HELD SONAR TRANSCEIVER

Sonar transceivers are used primarily for underwater navigation and exploration. They have an effective range of 250 meters and work by bouncing ultrasonic pulses off of their surroundings, forming images of these surroundings by interpreting the echoes. Sonar does not require light and cannot perceive color. However, sonar can give the user information about the density of objects. The user is also capable of hearing other ultrasonic sounds such as those made by certain mechanical and electrical devices. Standard transceivers can output to screens and holographic displays, but they can also be fitted with trode or jack interfaces.

Dimensions: 0.23 kilograms and 0.3 liters
Power Source: Standard cell
Availability: Uncommon
Cost: 375cs

SECURITY MONITORS

"Watchdogs," as they are commonly called, are small sensors designed to detect preset stimuli and then alert a remote receiver. Detectable stimuli include motion, heat, sound, vibration, light, radio, and radar. Units can be used singly or in sequence to monitor a perimeter. Most have spherical detection fields and line-of-sight ranges. Their sensitivities are adjustable, and they can function in either active or passive modes. They are typically armed by encoded remote and can be interfaced with other hardware, such as flood lights or automated weapons. Some models are specifically built to function underwater using sonar.

Dimensions: 0.21 kilograms and 0.33 liters
Power Source: Mini cell
Availability: Uncommon
Cost: 570cs each, 200cs for the control transceiver

SENSOR ARRAY

Sensors come in several configurations. Hand-held units are typically plugged into body or maincomps, and wrist and headband arrays can be hooked up to a trode or jacked in for use in HUD mode. The sensors usually include wide-spectrum, variable-magnification optics and an enhanced microphone. Other options include variable-frequency comm scanners, Geiger counters, global positioning units, barometers, and biomonitors.

In addition to its other uses, a sensor array provides a bonus to all applicable vision rolls, functioning like multi-spectrum binoculars, and the auditory pickups offer a +3 bonus to all hearing rolls.

Dimensions: 0.35 kilograms and 0.45 liters
Power Source: Standard cells
Availability: Uncommon
Cost: 1,800cs - 3,300cs depending on the options

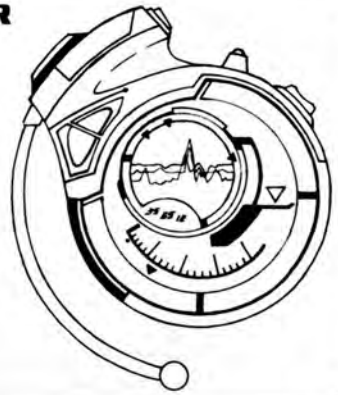
MEDICAL GEAR

BIOMONITOR

Biomonitors are used to quickly and accurately assess the medical status of a patient. When a biomonitor is pressed against soft, highly vascular tissue, electrical pickups and ultrasonics sample pulse rate, blood pressure, galvanic state, neural activity, blood gases, and hormone levels. A dedicated diagnostic program then prompts the user with the patient's conditions and treatment priorities. Use of a biomonitor in a first aid situation gives the user a +1 bonus to his First Aid skill rolls.

Dimensions: 0.34 kilograms and 0.3 liters
Availability: Common
Cost: 520cs

BIOMONITOR



COAGULANT PADS

Frequently called "bleeders" these are essential items in every first aid kit. Coagulant pads are thin sheets of surgical plastic with clotting factors, broad spectrum antibiotics, and surgical adhesive on one side. Using a bleeder on a wound is almost always sufficient to stop external bleeding and seal the wound against infection.

Application of a coag-pad is simple. The user simply strips away the plastic casing and presses the pad over the wound. The surgical adhesives securely bond the pad to the skin, even through blood or water. The most basic first aid course teaches the proper use of coagulant pads, and they often mean the difference between life and death. Coag-pads provide a +1 bonus to First Aid rolls for serious and critical wounds.

Dimensions: 2 grams/square centimeter.
Power Source: None
Availability: Very common
Cost: 1cs/10 square centimeters

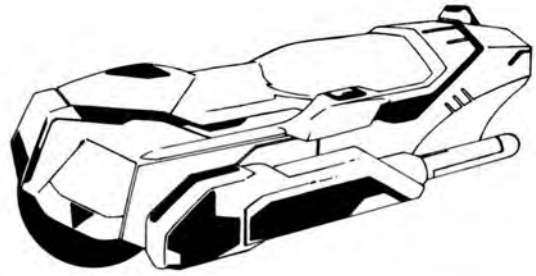
COLD-SLEEP CAPSULES

Induced hypothermic metabolic suppression canisters are a key technology in the colonization of Poseidon. "Coolers" are self-contained life-support systems designed to maintain an occupant in a state of drug induced, hypothermic coma, reducing the demands on ship-board resources. See the sidebar on page 192 for complete details concerning their structure and function.

Medical IHMS canisters are also used to keep critically injured or terminally ill patients alive until appropriate medical care can be obtained or developed. As with passengers in space, medical patients kept in suspension must also check for post-sleep syndrome upon revival (see page 196).

Dimensions: 2.8x1.3 meters, 340 kilograms, and 570 liters
Power Source: External power source, industrial cell backup
Availability: Scarce
Cost: 17,000cs

COLD-SLEEP CAPSULE



CEREBRAL CRYO-OXYGENATORS

CCO's can preserve brain viability in critically injured patients. Through intravenous lines installed in the main vessels of the neck, the blood circulating in the patient's brain is replaced with a hyper-oxygenated nutrient solution, while the patient's cranial temperature is lowered to reduce metabolic demands. A CCO can be installed in minutes by someone with surgical or trauma training.

Use of a CCO is always chancy and should be considered a last resort. Patients often fail to regain consciousness once relieved of a CCO, and many that do suffer mental problems ranging from memory loss to traumatic dysfunction. Additionally, the patient's somatic tissues begin dying almost immediately, and after a number of hours equal to 12 + (3 x Fitness), cell failure is terminal without subsequent and massive regeneration therapy. The technology is imperfect, and its application both messy and risky.

A CCO unit is rather bulky but completely self-sufficient, containing enough power and nutrient solution for 30 hours.

Dimensions: 8 kilograms and 5.6 liters
Power Source: Heavy cell
Availability: Rare
Cost: 7,700cs

CEREBRAL CRYO-OXYGENATOR

FIELD SURGERY KIT

This kit is usually carried by paramedics or doctors in the bush and contains the basics needed to deal with severe trauma. The integrated computer is a full-function bodycomp and contains basic medical and surgical databases, giving a skilled user a +3 bonus to related tasks.

Usually a hard-cased backpack, field kits contain:

3x – disposable contents of a standard medical kit
1 – ultrasonic hypodermic
1 – biomonitor
1 – handheld ultrasonic scanner
1 – surgical micro laser
1 – set, standard surgical instruments
4 – 0.5 liter cans of wound/instrument sterilization spray

Dimensions: 16.3 kilograms and 14. 2 liters
Power Source: Heavy cell
Availability: Uncommon
Cost: 8,800cs

STANDARD MEDICAL KIT

Medkits are ubiquitous, found in almost every vehicle, frontiersman's pack, or soldier's kit. They are small and easy to use, and only the stupid travel Poseidon without one. Most first aid kits incorporate an interactive access chip that provides even the untrained with a +2 bonus to First Aid rolls.

A standard kit comes in a hand case or web-gear pouch, and contains:

5 – 12x12 centimeter coagulant pads
1 – 20x20 centimeter coagulant pads
1 – ultrasonic hypodermic
1 – biomonitor
1 – 5-dose hypo vial, healing booster
1 – 5-dose hypo vial, pain inhibitor
3 – 5-dose hypo vials,broad-spectrum antibiotics/antivirals
1 – 0.5-liter tube, broad-spectrum antibiotic cream
2 – 5-dose hypo vials, anti-shock
1 – 0.5-liter tube, wound glue.
2 – inflatable splints, 1 arm, 1 leg
3 – 5-meter rolls, sterile bandage

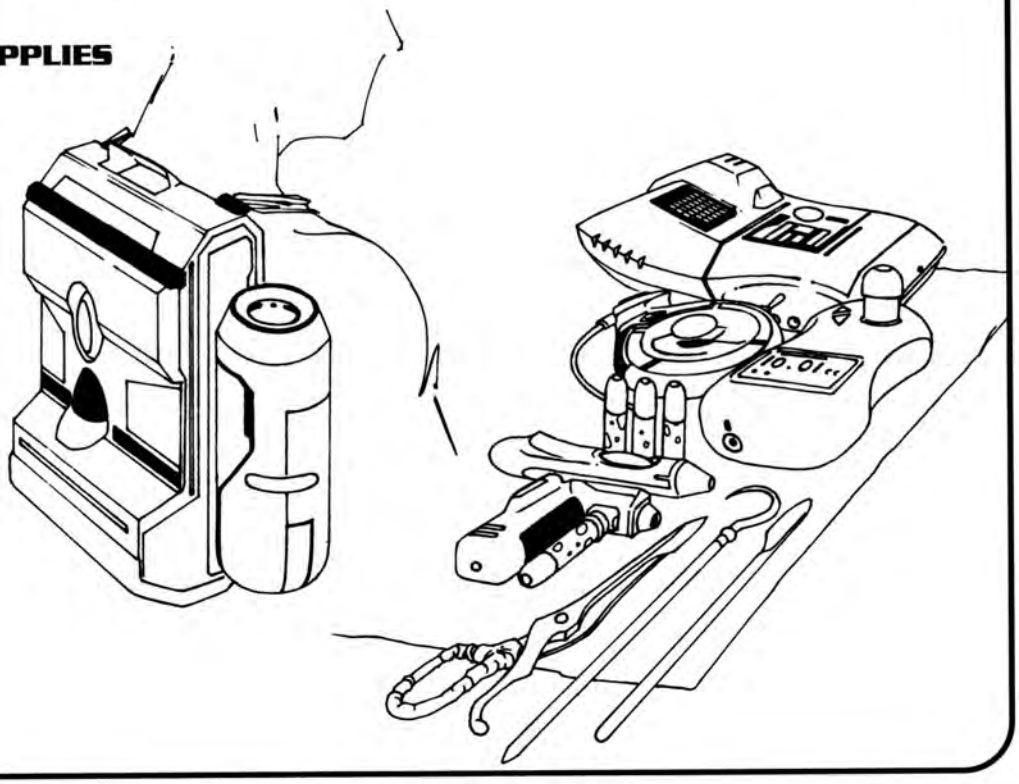
Dimensions: 3.6 kilograms and 1.8 liters
Power Source: Standard cell
Availability: Very Common
Cost: 1,600cs

ULTRASONIC HYPODERMIC

This small device administers drug injections painlessly and without intrusion using ultrasonic vibration. When pressed against the skin the vibrations increase the permeability of the dermis, allowing injected drugs to enter the bloodstream directly. The hypo is digitally controlled and administers drugs from modular vials. The hypo is slower than a traditional injection, however, requiring up to 30 seconds to administer a standard dose.

Dimensions: 0.2 kilograms and .25 liters
Power Source: Standard cell
Availability: Uncommon
Cost: 270cs

FIELD SURGERY KIT
and
MEDICAL SUPPLIES



WOUND GLUE

Wound glue is a convenient combination of surgical adhesive, antibiotics, and dormant, artificial dermis cells. Wound glue will seal simple lacerations, stopping bleeding, while helping to prevent infection and speed healing. The artificial skin cells, in the presence of biochemicals in the wound, will culture and begin to organically seal the wound, doubling the healing rate. Wound glue usually comes in, and is administered directly from, 0.05-liter squeeze tubes.

Dimensions: 1.2 kilograms/liter
Availability: Common
Cost: 35cs per tube

DRUGS

ANTIBIOTICS/ANTIVIRALS

There are hundreds of anti-biologicals. Some are specific to a given infection while others are broad-spectrum. On Poseidon, where unclassified infection is a way of life, new antibiotics are under constant development.

Form: Injection, tablet, ointment, or inhaler, depending on the type of infection
Dosage: Twice daily until infection clears
Availability: Common, legal
Cost: 5cs per dose

ANTI-SHOCK

Anti-shock can be a life-saving drug in emergency situations. When administered to a casualty suffering from trauma, anti-shock allows the player of the injured character to make a new trauma roll with a +2 bonus (see page 134). Anti-shock also serves as an effective broad spectrum anti-venom, giving the user a +1 bonus to Toughness for the purposes of fighting off toxins (see page 119).

Form: Injection or inhaler
Dosage: If a single dose does not work, subsequent doses are of no use
Availability: Common, legal
Cost: 10cs per dose

AUNTIE SUSIE

Originally developed in a Biogene pharmaceutical lab on Earth, Anti-Senescence Serum was intended as a synthetic version of the longevity therapy derived from xenosilicates. Despite promising results early on, researchers failed to design a safe and reliable therapy using the compound. Though Biogene Security remains at a loss as to how it happened, the specifications have since reached the streets and are now being used to manufacture the increasingly common, highly illegal drug known as Auntie Susie.

Auntie Susie is meant to arrest the aging process in a manner similar to traditional Long John therapy. Unfortunately, the substance remains extremely unpredictable, and using it is rather like playing Russian roulette. In theory, small sequences of artificial DNA act like genetic promoter sequences in the target cells, serving to activate intrinsic repair mechanisms, halting the aging process. In practice, however, the results are often debilitating and even lethal. Frequently, the artificial sequences override the expression of key genes, leading to the malfunction of target cells.

Typically, these malfunctions are marginal and can be treated with medical therapy. Occasionally the consequences are more extreme, however, as the artificial DNA sequences become incorporated into the target cells' chromosomes, initiating the development of cancerous tumors and somatic mutations. At best, these mutations are unpredictable, leading to broad-spectrum medical problems. At worst, they are sudden, painful, and lethal killers.

Despite these risks, there is a growing black market for Auntie Susie as those without the means to undergo reliable longevity therapy turn to this dangerous alternative. In some regions on Earth, the serum has become such a problem that Peacekeeper detachments have been assigned to assist the Justice Commission in the eradication of manufacturing and distribution centers.

Auntie Susie has just begun to appear in the black markets of Poseidon, and the drug has yet to become a widespread problem. Though longevity treatments are less expensive on the colony world, the substantially lower price and availability of this illegal alternative would most likely create a lucrative market. Local Justice Commission officials are already developing plans to halt the spread of this dangerous substance.

If a character chooses to risk using Auntie Susie, he must roll on the following table once for each dose he takes and suffer the consequences described.

1–7 The serum appears to work normally, enhancing the vigor of the user's physiology and arresting the aging process for approximately four months. At this time another dose, and another roll, is required to maintain the effect.

8 The physiological interference caused by the artificial DNA leads to one of several metabolic disorders that can only be treated with clinical therapy. Failure to obtain treatment leads to metabolic failure and death, typically in two to three months.

9 Somatic mutations lead to rampant and fast-growing cancers that spread quickly. Though treating such a condition is an expensive proposition, failure to do so typically results in death within four weeks.

10 The physiological response is quick and terminal. The user dies painfully within 12 hours despite any medical attention they may receive.

Form: Inhaler
Dosage: Once approximately every four months
Availability: Rare and highly illegal
Cost: 250cs per dose

HEALING BOOSTER

This drug is a genetic activator that promotes the production of key enzymes and hormones, temporarily doubling the user's healing rate. Similar to some of the functions of the symbiote biomod, page 175, this drug does nothing for those already carrying a symbiote.

Form: Injection
Dosage: Once/day until the injury is healed
Availability: Uncommon, legal with medical credentials
Cost: 55cs per dose

PAIN INHIBITOR

Basic pain killers are neural inhibitors that block impulses from pain receptors. These drugs allow users to ignore impairment penalties resulting from minor wounds and reduce impairment penalties for serious and critical wounds by 1. This drug can be psychologically addictive.

Form: Injection or tablet; injections function in seconds, pills in about 10 minutes
Dosage: A single dose lasts a number of hours equal to (5 – Fitness)
Availability: Common, legal with medical credentials
Cost: 45cs per dose

REFLEX SERUM

Reflex serum, or "juice" as frequent users call it, chemically stimulates the fight-or-flight reflex, and is therefore popular among soldiers, operatives, and certain criminal elements. Juice increases a user's Endurance, Reflexes, and Strength by 2 for a number of minutes equal to 100 – (30 x Fitness). When the drug wears off, however, the crash is quick and severe, and the same attributes are reduced by 2 for a time equal to the duration of the high.

Reflex serum is illegal in most places and carefully controlled. Conviction of a crime committed while under the influence of juice carries additional and severe penalties. Excessive use of reflex serum can also be physiologically addictive.

Form: Inhaler
Dosage: Premeasured doses act in seconds
Availability: Rare and usually illegal
Cost: 350cs per dose

LIFE SUPPORT

ARTIFICIAL GILL

An effective way for non-aquaforms to explore the depths is by using a gill pack. A gill pack is a small backpack device that contains a convoluted semi-permeable membrane that functions much like a true fish gill. The membrane, in combination with a small rebreather unit and a regulator, allows for roughly 20 hours of underwater activity. Gill pack users remain subject to depth and decompression limits.

Dimensions: 2 kilograms and 4 liters
Power Source: Standard cell with solar charger
Availability: Common
Cost: 250cs

ARTIFICIAL GILL

BACTERIAL LIFE SUPPORT EVA SYSTEM

Genetic engineering has eliminated the need for bulky life support systems on EVA suits. Tailored anaerobes are now cultured within the thick, multiple layers of the vac suit. These microbes convert exhaled carbon dioxide to oxygen as a byproduct of their metabolism, and this oxygen is harvested to support the user.

Bac packs, as these systems are commonly called, can function without servicing for up to 200 hours, but a user's integrated food, water, and sanitary reserves limit use of conventional systems to around 40 hours. Servicing the culture in a bac pack merely requires verifying the culture's health, flushing its accumulated waste, and restocking its nutrient supply. Bacteria life support systems are used in most late-model space suits, and a similar system is used by Martians when working on their planet's surface.

Vac suit functions are controlled by a computer integrated into the helmet. With the same capabilities as a standard bodycomp, these systems monitor and control the function of the suit and are able to run other loaded programs. Interfaces are typically voice-command and heads-up displays. Helmet options are numerous, but standard configurations include floodlights, flash suppression, light amplification, thermal imaging, and multi-band communications.

A bac pack provides the wearer with protection equivalent to an armor rating of 2, but any damage to the suit that exposes its interior to vacuum will cause the system to fail. Additionally, due to the bulky, confining, and cumbersome nature of the suit, all of a user's physical actions incur a –1 penalty.

Dimensions: 11 kilograms
Power Source: Heavy cell
Availability: Common
Cost: 2,700cs

DIVING MASK

On Poseidon, most diving masks are much more than airtight face plates. In addition to powerful headlamps, such masks can also be equipped with sonar and a heads-up holographic display connected to the diver's bodycomp. The sonar used in a diving mask produces a picture of the sonar data as a virtual image on the inside of the mask. This sonar only functions underwater and has a range of 100 meters.

Dimensions: 0.75 kilograms, 2.5 liters, and adjustable to fit
Power Source: Standard cell
Availability: Common
Cost: 50–450cs depending upon options

DIVING MASK

DRYSUIT

Drysuits are one of the most popular garments on Poseidon. A drysuit is a diving suit which can also be worn as comfortable clothing. Made of a variable-state material a drysuit can be either a loose-fitting jumpsuit with good ventilation or a close-fitting diving suit with excellent insulating properties. A low-powered electric current can rapidly switch the material from a baggy, open weave to a tight water-proof material. The jumpsuit is neutrally buoyant and contains a battery for powering the change and the integrated heating elements. Integrated solar cells on the back and shoulders recharge and supplement the batteries. Drysuits come in a variety of colors and patterns and are commonly worn as casual and work clothing in many communities on Poseidon.

Dimensions: 3 to 5 kilograms
Power Source: 2 standard cells with a solar charger
Availability: Very Common
Cost: 230cs for a basic suit, up to 1,000cs for elaborately patterned custom versions

GILL SUIT

Gill suits go a long way toward giving a normal human some of the aquatic freedom of aquaforms. A simpler, more reliable alternative to a gill pack and a drysuit, gill suits are made of numerous layers of osmotic fabric that perform as an artificial gill.

When immersed, the movements of the wearer's body activate the membranes, filters, and muscle-powered pumps within the suit. The suit extracts oxygen from the water and passes it to the integrated rebreather. Bladders within the suit's layers automatically inflate with or bleed off oxygen as pressure changes, to keep the suit and diver neutrally buoyant.

The rebreathers in gill suits can be fitted to use helium as a nitrogen substitute, greatly increasing the depth limits of the user, and thermal wiring in the suit's inner layers serves to keep the user warm even in the coldest water. Gill suits are more durable and more comfortable than gill packs, and they contain kinetic generators, which provide for the suit's minimal power requirements by harvesting power from the user's movements. With their integrated pumps, numerous pockets, D-rings, and fitting straps, gill suits appear rather utilitarian and little effort is made to make them fashionable.

In general, urban wannabees prefer the simplicity, fashion, and lower cost of gill packs and dry suits. People living on the frontier, always in and out of the water and far from replacement parts, tend to prefer the versatility and reliability of gill suits. They are uniquely serviceable, but in the larger settlements they mark the wearer as someone from the frontier.

Gill suit users are still restricted by decompression requirements, though with the helium option their maximum depth is increased to 500 meters. Additionally, due to their heavy construction, gill suits provide protection equivalent to armor rating 2 for the wearer.

Dimensions: 4.5 to 7 kilograms
Power Source: Kinetic generators
Availability: Common
Cost: 3,200cs

HARD SUIT

Hard suits are essentially one-person vehicles, and there are numerous designs for use in space or underwater. All hard suits are heavy, bulky constructs of plastic and alloy. Most have servo-assisted limbs and modular maneuvering systems. Vacuum models use compressed gas thrusters, and submersible units rely on small impellers or MHD propulsion.

Hard suits for space use bacterial life support while aquatic versions depend on artificial gills. Like bacteria suits, hard suits are limited to about 40 hours of use unless additional water and food supplies are provided for the user. Onboard computer capabilities and helmet accessories are similar to those of bacterial EVA suits. Radar and sonar are also common on vac and submersible versions respectively. The radar has a spherical horizon with a 10-kilometer range while the sonar is restricted to a 120° cone with a 100-meter range.

Submersible hard suits eliminate the problems of decompression and have a depth limit of 10,000 meters. However, they greatly restrict freedom of movement. In all hard suits, Agility is reduced by 2 , but Strength is increased by 2. If the servos are off, Agility and Strength are both reduced by 5.

The manipulating units on the arms of hard suits are usually modular, and can be fitted with a variety of optional devices—power tools, pinchers, cybernetic micro-toolkits, etc. Without fine manipulating devices such as micro-toolkits, hard suits reduce Dexterity by 5.

Hard suits provide the user with protection equivalent to an armor rating of 5.

Dimensions: 65 kilograms, but servos make the apparent weight only 15 kilograms
Power Source: Heavy cell
Availability: Uncommon
Cost: 60,000cs

There are recurring rumors that several cybernetics and defense firms are working on designs for lighter, faster, armored hard suits intended for military use. These prototypes are reputed to be multi-environment suits, with integrated weapons, life support, and first aid systems. This cybernetic battledress is designed to greatly enhance a soldier's Reflexes, Strength, Endurance, and survivability while providing them with the armor and armaments of a small tank.

Though battledress is not yet available on the open market, soldiers of the GEO Shock Troopers have reportedly tested prototypes in recent combat encounters.

Dimensions: Unknown
Power source: Unknown
Availability: Unavailable
Cost: Unknown

SURVIVAL GEAR

FILTER MASK

A filter mask protects the user from most airborne chemical agents. A filter combines activated charcoal and a miniature electrostatic precipitator to remove harmful particles from the air stream. Filter masks usually cover the user's nose and mouth and come with airtight goggles and adjustable fitting straps. Air filters can also heat or cool air to a comfortable temperature.

Dimensions: 0.3 kilograms and 1 liter
Power Source: Standard cell
Availability: Uncommon
Cost: 140cs

FILTER MASK

FIRE PASTE

Fire paste is a useful chemical putty that is used to start or fuel emergency fires. Fire paste comes in small blocks, each with an integrated igniter. To light a block, the user simply pulls a tab on the igniter; five seconds later the putty flashes alight. The paste will readily ignite other inflammables, and a single block will burn bright and hot by itself for almost 30 minutes.

Dimensions: 0.56 kilograms and 0.47 liters
Power Source: None
Availability: Very Common
Cost: 7cs

LOCATOR BEACON

A locator beacon is a small, high-powered radio transmitter that uses a battery and a solar charger to generate a continuous, pulsing telemetry signal intended to guide rescuers. Beacons are common on air- and watercraft and are carried by explorers, soldiers, and frontiersmen alike. Beacons are easily received by satellite monitors, but they are only useful if someone is listening—and if they give a damn.

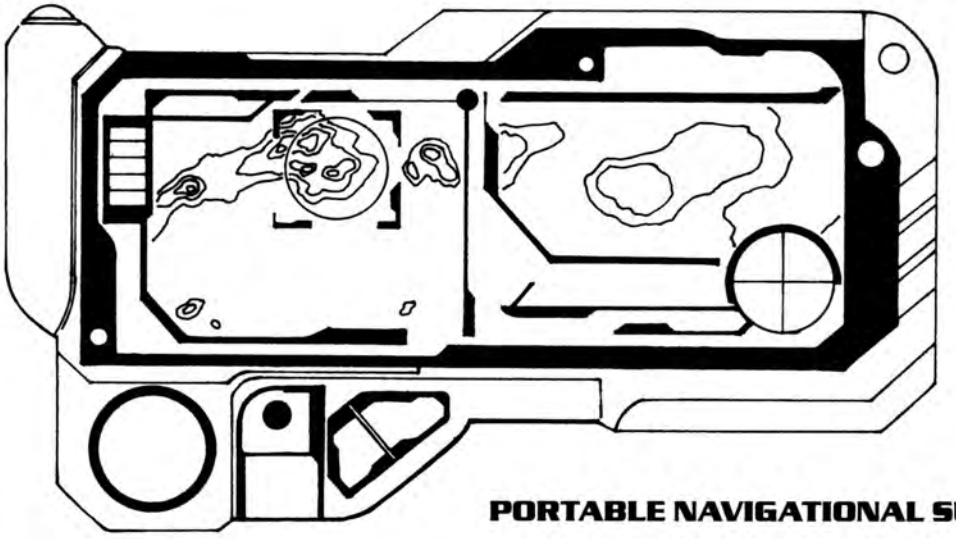
Dimensions: 0.7 kilograms and 0.65 liters
Power Source: Standard cell and solar charger
Availability: Very Common
Cost: 135cs

PORTABLE NAVIGATIONAL SUITE

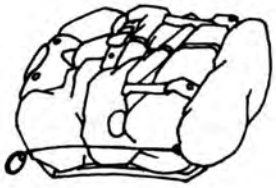
A portable navigational suite, or map box, is a small geographical positioning unit with a dedicated comp that can be uploaded with digital maps. The device also contains a digital compass and an inertial navigator. When functioning in unison, the components of a map box can accurately locate and track the movements of the user anywhere on the planet and plot them on the existing map database. An interactive chip also allows the user to make simple modifications to, or notes about, these maps. Output is usually through a zoomable holographic projector.

The GPS unit is accurate to within one meter but must receive satellite telemetry to function. Unfortunately, this is often problematic on Poseidon. The compass and inertial navigator can function autonomously.

Dimensions: 0.3 kilograms and 0.43 liters
Power Source: Standard cell
Availability: Common
Cost: 400cs



PORTABLE NAVIGATIONAL SUITE



RESCUE BALL

RESCUE BALL

Rescue balls are emergency devices used to survive loss of facility life support. R-balls are typically a meter and a half in diameter and contain a dormant bacterial life support system. A rescue ball comes packed into a small satchel. To activate it, the user pulls the ball from the satchel, climbs inside and zips the bubble shut. When the zipper closes, the device inflates and the bacteria system is activated. The power system also provides thermal control.

R-balls provide up to 80 hours of life support for a single adult, and contain powerful emergency radio beacons that activate upon inflation. There are rescue balls designed for both vacuum and undersea survival, and various options such as integrated first aid kits and salt-water stills are available.

Dimensions: 6 kilograms, 4.5 liters deflated, 5.5 cubic meters inflated
Power Source: Heavy cell
Availability: Common
Cost: 1,300cs

SURVIVAL GUIDE

Theoretically, these are intended to be easily accessable, interactive emergency guides to survival in the wilds of Poseidon. Unfortunately the only people who really know much about surviving on the planet are the natives, and none of them are into writing self-help programs. Though much of the information in the commercial guides is true, it is always woefully incomplete. It is also often completely wrong—and usually at the worst of times.

To model the dubious and unreliable information contained in commercial survival guides, every time players use one they must roll a single die. If they roll 5 or less, they manage to find some bit of information relevant to their inquiry. If they roll 6 through 9, they learn nothing. If they roll a 10, they get incorrect and potentially dangerous information. The nature and consequences of this misinformation are at the discretion of the game moderator. Most commercial survival guides come in tiny, dedicated bodycomps or universal dataspikes.

Dimensions: 90 grams and 0.12 liters
Power Source: Mini cell
Availability: Uncommon
Cost: 340cs

SURVIVAL GRENADE

Sort of a civilian flash-bang, this device is theoretically designed to frighten off even the most determined of Poseidon's predators. The devices are not lethal, though misuse can cost fingers and they have been known to start fires. A survival grenade has a pull tab and a three-second fuse. When detonated, the device creates a series of extremely loud bangs, whistles, and stroboscopic flashes. It also emits a noxious cloud of gas, supposedly undetectable to humans, but potent to other species. The devices are supposed to be effective both underwater and in the air, and their designers swear by them. Anyone who has spent much time in the wilds of Poseidon, however, only uses them during Planetfall celebrations.

Dimensions: 0.35 kilograms and 0.4 liters
Power Source: None
Availability: Scarce
Cost: 15cs

SURVIVAL PLASTIC

Survival plastic is made of tightly woven bioplastic fibers. The thin, cloth-like material is waterproof, durable, and almost tear-proof. One side is silvered, reflecting light and heat, and the other is camouflage-patterned.

Survival plastic usually comes in two large sheets, rolled and vacuum-sealed into a conveniently small belt pouch. The material is easily cut with a sharp knife or melted with a hot implement. A survival plastic kit also contains 100 meters of 300-kilogram-test bioplastic cord and a 0.3-liter tube of bioplastic molecular adhesive. Instructions for simple and effective uses are enclosed on small plastic cards, and commonly useful patterns are marked out over the surface of the material itself.

Survival plastic can be used to make shelters and rain ponchos, thermal blankets and sunshades. Survival plastic can be used to signal to, or hide from aircraft and satellites. It can be used to patch boat hulls, make splints, bandages, canteens, floats, fishing weirs and rope. It can even be used to build solar stills for purifying water. As simple as it is, survival plastic has been responsible for saving more lives on Poseidon than any of the high-tech survival gear a person might carry into the wilds.

Dimensions: 1.1 kilograms and 1 liter packed, 2 10x10 meter sheets unrolled
Power Source: None
Availability: Very Common
Cost: 25cs

WATER PURIFIERS

Water purifiers are as common as saltwater on Poseidon, and are valuable possessions. In the wilds they usually represent the difference between life and death. The simplest are large straws containing filters and ionized chemical scrubbers. The user simply puts one end into the water, the other in his mouth, and sucks. These are disposable and good for about 40 liters of water before the filters fail.

Larger purifiers can be gravity fed or pump driven, but the only real differences are output volume and filter life. The largest portable units run on solar panels and heavy-duty batteries, and are used in field camps and pilot colonies. They can process hundreds of liters per day and their filters and scrubbers are usually reusable after a chemical bath.

Water purifiers not only remove salts from seawater, but they also serve to remove many toxins and almost all of Poseidon's plentiful aquatic microbes.

Dimensions: Most single person survival purifiers are less than 0.2 kilograms and 0.4 liters
Power Source: Unpowered to heavy cells and solar panels
Availability: Very Common
Cost: 65cs for survival purifiers, 4,300cs for camp support purifiers

PERSONAL PROPULSION

MHD HARNESS

Two small, magnetohydrodynamic propulsion units are mounted on a form fitting torso harness, providing the wearer with fast, reliable, and virtually silent underwater propulsion. Steering is managed by subtle arm and leg movements and practice is required to become proficient. Depending on the user's skill and amount of streamlining, MHD harnesses can propel the wearer at up to 8 kilometers/hour.

Dimensions: 5 kilograms and 5.5 liters
Power Source: Heavy cell
Availability: Common
Cost: 1,100cs

MHD SLED

MHD sleds are a common means of underwater travel. They come in many different designs and with a variety of features. There are one-person tows and multi-person cargo sleds. Some are well streamlined and can move at over 15 kilometers/hour. Others are bulkier and much slower, but can handle hundreds of kilograms of cargo. Some have seats while others have only handles and drag the user through the water. Many have integrated navigational equipment as well. Most sleds are marginally buoyant without a load, and at the surface their speed is doubled due to reduced drag.

Dimensions: 8 to 100 kilograms
Power Source: Standard or heavy cells
Availability: Common
Cost: 750cs to 2,500cs, depending upon features

MANEUVER JETS

Maneuver jets are compressed gas propulsion devices for use in zero-g environments. There are various backpack configurations for use with EVA suits, as well as handheld models for use both inside and outside spacecraft and orbital facilities. Backpack units have multi-nozzle, variable thrust controls for maneuverability and contain enough compressed gas for 20 minutes of continuous operation at 0.3g acceleration. Handheld units must be aimed by hand for maneuvering, and contain enough gas for five minutes of operation at 0.1g acceleration.

Dimensions: 6 and 1.5 kilograms, and 25 and 1.5 liters, respectively
Power Source: Compressed gas
Availability: Uncommon
Cost: 750cs and 170cs, respectively

REMOTE VEHICLE TECHNOLOGY

REMOTELY PILOTED SUBMERSIBLES

Remotely piloted subs are used in countless applications on Poseidon. These robotic devices are typically simple and self-contained machines, driven by impellers or tiny MHD drives. Though designs vary, there are three basic versions.

The most common design is controlled from the surface via reinforced fiber optic cable. Through the cable, digital instructions are passed to the remote and sensor data is passed to the operator. These devices are versatile and efficient, and are limited to ranges and depths constrained only by the length of their tethers. This design is most commonly used in scientific and industrial applications.

Another version relies on sonar signals much like those cetaceans use to control their CICADAs. In certain circumstances this offers the operator greater maneuverability, but the design has its own limitations. Instructions must be given through a sonar interface and therefore operational range is limited to the range of the control output. This is typically about 1,000 meters.

The third version is an entirely autonomous, programmable design. These devices are typically quite simple and are commonly used by oceanographers studying Poseidon's seas. They are given course and survey instructions and set loose to explore, periodically surfacing to broadcast their collected data via uplink. More sophisticated versions of these robotic probes are common in military applications. Programmed to monitor perimeters, recon landing sites, or run patrols, these devices are becoming increasingly important in marine operations.

Remote submersibles can be fitted with all manner of sensor packages, manipulators, and communications suites, including synthesizers that convert human speech to cetacean sonar. Versatility, speed, and cost vary greatly depending upon the design. Hydrospan manufactures the most diverse and reliable line of submersible remotes. One of their most popular is the Hard Fish IV, a simple cable-controlled design outfitted with multi-band video, broad-range sonar imaging, and two cybernetic manipulators.

Dimensions: 18.3 kilograms and 20.7 liters
Power Source: Heavy cell
Availability: Uncommon
Cost: 2,150cs

CETACEAN TECHNOLOGIES

With the increased intellectual capabilities of cetaceans came an associated need to empower them with technology. In the years since their uplifting, an enormous variety of designs have been built and tested. Many were effective, but many were not. Aside from the difficulty inherent in designing a practical device for use underwater by a streamlined marine organism, the quirky preferences of cetaceans often proved more impractical than the designs.

Since the colonization effort on Poseidon, several cetacean technologies have become standard.

ARTIFICIAL GILL

This device is analogous in structure and function to the artificial gill pack for humans (see page 136). It allows cetaceans to remain submerged indefinitely, as their metabolic demands are so reduced when diving.

Dimensions: 2.3 kilograms and 4 liters for dolphins, 4.8 kilograms and 9 liters for orcas
Power Source: Standard cell
Availability: Scarce
Cost: 830cs

CICADA

When interacting with humans and technology, cetaceans are most hampered by two deficiencies—their lack of manipulating digits and their inability to leave the water. In an effort to mitigate these problems, engineers designed the Cybernetic Interactive Cetacean Activity Drone Accessory, or CICADA. There are various designs, but most share a core of common abilities and options.

The basic unit has two primary components. The first is a streamlined, remotely piloted aquatic sled. Because radio signals do not travel well in water, these sleds are typically controlled directly by sonar commands from the cetacean user. Their interactive range is therefore limited to the range of the cetacean's sonar.

A CICADA sled typically has an onboard, full function bodycomp, and can be programmed to carry out simple instructions. These drones typically have several retractable appendages, designed for both fine and heavy manipulation, and a six-liter cargo capacity. CICADA sleds are propelled by oversized MHD drives and so can keep pace with even the fastest cetaceans.

The second component is a much smaller, auxiliary drone designed for use above the surface. These drones are small, saucer-shaped VTOLs powered by three tiny lift fans. Though waterproof, these drones cannot function underwater. They float, and can be launched from the water, but under the surface they travel secured within the sled drone.

These hover drones are used for exploration and interaction above the surface. They are typically controlled through a sonic trode uplink interface, relayed through a floating sled, or an antenna raised to the surface from a sled. Control range is limited to five kilometers, unless patched through a signal relay or satellite. Basic units also have 360° holographic pickups and radar transceivers. They also contain a dedicated translation computer and voice synthesizer.

For half again the price of the various pieces of equipment, devices such as multi-spectrum binoculars, sensor arrays, map boxes, or even combat HUDs can be integrated into CICADAS. Cetacean military operatives often use CICADA sleds with mounted torp cannons and hovers with small-caliber firearms or stun guns.

Dimensions: 16.5 kilograms and 35 liters for the sled, 0.7 kilograms and 2 liters for the VTOL
Power Source: Heavy cell for the sled and a standard cell for the hover
Availability: Uncommon
Cost: 7,600cs for a basic model

CETACEAN WEAPON HARNESS

This device is an integrated sonic trode and weapons platform. Modular torp cannon, missile launchers, and mine layers can be carried on the harness. An orca outfitted with a pair of high-yield trode-guided torpedoes makes for an intimidating underwater patrol force. A squad of leaping dolphins, firing surface to surface missiles in mid arc, is equally effective.

The harness is made of woven industrial bioplastic and has two torp hardpoints on dolphin models and three on orca mounts.

Dimensions: 2.5 kilograms for dolphins, 8.8 kilograms for orcas
Power Source: Standard cell
Availability: Rare
Cost: 430cs and 830cs respectively

SONIC TRODE

Cetaceans, especially orcas, seem to universally abhor cybernetic implants, and often have a hard time dealing with humans who are heavily modified. As a result, cetaceans typically interface with computers and other hardware via a unique form of trode.

Sonic trodes use a vast range of subtle sonic vibration to interface with a cetacean mind. These trodes are mounted near the animal's melon where its vibrations can be readily perceived. Cetaceans "see" the information as they would their surroundings as they echolocate. Using subtle vocalizations of their own, cetaceans can then send input back to the trode.

Most sonic trodes also include full-function, integrated bodycomps. These computers provide cetaceans with normal use of programs, databases, storage, and processing power. Even with the computer, sonic trodes are small and streamlined. Along their bottom sides there is a layer of soft, spongy plastic that, when wet, sticks by suction to the cetacean's rubbery skin.

Due to the potential interference from ambient sounds and the quirky nature of the cetacean intellect, sonic trodes do not give cetaceans skill bonuses when operating hardware. They simply make it possible for them to make use of standard technology at their normal skill levels.

Dimensions: 0.23 kilograms and 0.22 liters
Power Source: Standard cell
Availability: Scarce
Cost: 1,650cs, or 2,000 with integral comp

MATERIALS

BIOPLASTIC

Bioplastic is the mainstay of modern materials technology. Hailed as one of the first truly universal applications of genetic engineering, bioplastic is produced by artificial microbes. Developed from bacteria, "plastrobes" shell themselves in layers of organic plastics. As a colony grows, the inner layers die while the outer layers continue laying down plastic, analogous to growth in coral reefs.

Bioplastic wash is a combination plastrobe colony/nutrient bath that is poured or injected into molds. In just under 12 hours, the microbes grow to fit the mold, converting the nutrients into bioplastic. In just under 24 hours the last of the colony dies and the plastic is fully cured. Raw bioplastic is an off-white but dyes of any color can be added during production. There is even one species of plastrobe that produces translucent bioplastic.

Commercial washes are available and favored by industry. On the frontier, however, bioplastic cultures are continuously tended and fed with various onsite nutrients. The resultant plastics therefore are of variable quality and production rates are usually much lower.

Shatter- and warp-resistant bioplastic is easily sawed or melted. Special adhesives have been developed that chemically bond bioplastic to itself. Most modular bioplastic construction is held together with these glues. On Poseidon, fungicides are usually added during production to prevent the various native microbes from degrading the material.

Bioplastic dominates the materials industry and is used to make everything from houses and vehicles to guns and cybernetic components. New applications and plastrobe species are under continuous development. Without the low cost and unique versatility of bioplastics, it is possible that humanity might still be confined to Earth.

Various species of plastrobes and specific nutrient additives produce a variety of bioplastic grades, each with specific advantages.

FLEX GRADE

Various nutrient supplements control the flexibility of bioplastic so that stock of any temper can be produced.

Dimensions: 0.45 kilograms/liter
Availability: Very Common
Cost: 7cs/100 liters
Armor Rating: 1 per millimeter of thickness

FOAMED PLASTIC

Certain species produce excessive carbon dioxide while growing, creating tiny gas pockets throughout the plastic. As a result, this plastic is much lighter than other grades, and is very common in boat and settlement raft construction.

Dimensions: 0.08 kilograms/liter
Availability: Very Common
Cost: 5cs/100 liters
Armor Rating: 1 for every two millimeters of thickness

INDUSTRIAL GRADE

Industrial grade bioplastic is produced by the smallest plastrobes, and consists of extremely fine fibers. Industrial plastic is very dense, slower growing, and more expensive. It is, however, essentially unbreakable. Industrial plastic is commonly used to manufacture starship and submarine hulls, armor, bullets, and machine parts.

Dimensions: 0.5 kilogram/liter
Availability: Uncommon
Cost: 15cs/100 liters
Armor Rating: 2 for every millimeter of thickness

STANDARD GRADE

Cheap and fast-growing, this is the most common type of bioplastic. Standard grade is hard and rigid and ubiquitous in construction.

Dimensions: 0.35 kilograms/liter
Availability: Very Common
Cost: 5cs/100 liters
Armor Rating: 1 for every millimeter of thickness

BODY ARMOR

COMBAT ARMOR

Combat armor is designed for high-risk military and security operations. Combat armor consists of laminated plastic/ceramic plates articulated into a full-body suit. This gear is expensive but well worth the money for combat situations. The armor is hot and heavy and uncomfortable. Most armor comes in a variety of camouflage patterns and includes a visored helmet, described below.

More expensive designs have integrated heating and cooling systems and phototropic implants. These implants cause the armor's surface to automatically match its surroundings, giving anyone visually searching for the wearer a –4 penalty. These versions also include integrated chemical protection suits that, with the airtight, filtered helmet, add an extra level of protection.

On rare occasions, combat armor has also been incorporated into EVA suits for use in space. Military boarding parties and orbital security forces favor this gear for obvious reasons.

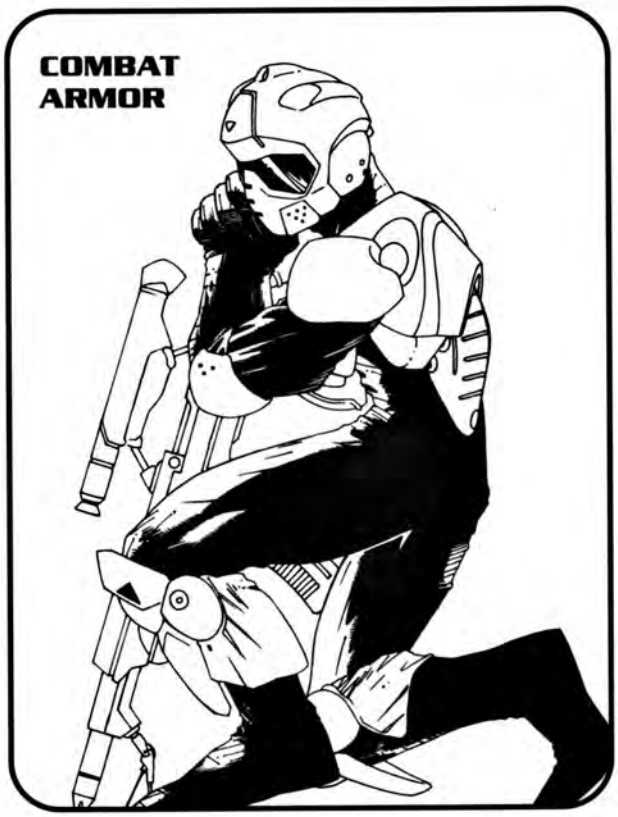
Though custom padding and fitting straps reduce the encumbrance of combat armor, it still gives the wearer a –2 Agility penalty.

Dimensions: 8 kilograms
Power Source: Unpowered or standard cell
Availability: Rare
Cost: 5,000cs for basic, 9,000cs for improved, and 2,000cs plus the cost of the suit for combat EVA gear
Armor Rating: 5

COMBAT HELMET

Combat helmets are made of mold-grown bioplastic and are therefore extremely tough. This gear protects the head and nape and includes a bullet resistant, slip-down visor. For the price of the given options, a combat HUD and an atmospheric filter can be included. With the filter and the optional neck dam, or when sealed to a chemical protection suit, the helmet will protect the wearer against most chemical agents.

Dimensions: 0.89 kilograms
Power Source: Unpowered
Availability: Common
Cost: 550cs plus options
Armor Rating: +1



PHOTOTROPIC BDU

Phototropic battle dress uniforms are heavy combat fatigues with several unique features. Their fabric is a weave of light industrial bioplastic fibers and therefore durable and tear-resistant, protecting the wearer against rocks, thorns, and even knife blows. Thermal circuitry in the weave keeps the wearer comfortable down to 10°C in air and 50°C in water. And, as in combat armor, phototropic implants cause the fabric to automatically match its surroundings, giving anyone visually searching for the wearer a –4 penalty.

Dimensions: 0.49 kilograms
Power Source: Standard cell
Availability: Common
Cost: 240cs
Armor Rating: 2

PERSONAL BODY ARMOR

Personal body armor is common and highly valued by law enforcement, private security, and "freelancers" alike. Body armor is made from densely woven, polymer reinforced bioplastic fibers. Multiple layers of this material and gel padding make the armor rather stiff, but very effective. Some designs incorporate removable plastic or ceramic plates to add additional protection. Various armor grades and coverages are possible.

HEAVY VEST

Thicker, bulkier, and more confining, heavy body armor is obvious but effective. Wearing this grade of armor reduces Agility by 1.

Dimensions: 1.5 kilograms
Power Source: None
Availability: Common
Cost: 500cs
Armor Rating: 3

LIGHT VEST

Lightweight and fairly comfortable, this grade can be readily hidden under clothing.

Dimensions: 1 kilogram
Power Source: None
Availability: Common
Cost: 300cs
Armor Rating: 2

REINFORCED VEST

Heavy body armor with integral plastic plating, this design cannot be worn under clothing. This armor is rigid and uncomfortable, and reduces Agility by 2.

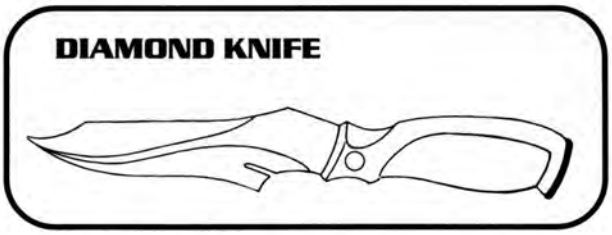
Dimensions: 3 kilograms
Power Source: None
Availability: Scarce
Cost: 830cs
Armor Rating: 4

MELEE WEAPONS

DIAMOND KNIFE

The ultimate blade, diamond knives are extremely popular with the frontiersmen of Poseidon. In the mid 21st Century, a process was developed to manufacture laminated industrial diamond that could be layered over metals and plastics. Typically used to produce long-wearing gears and fine machine parts, the process can also be used to produce fine-edged knives that never need sharpening.

Dimensions: 10 grams/centimeter of blade
Power Source: None
Availability: Common
Cost: 35cs/centimeter of blade
Damage Rating: 3



STUN GLOVES AND BATONS

Stun gloves and stun batons are taser-like weapons that deliver incapacitating electrical shock to a target. Designed to subdue without permanent harm, most stun batons are flexible and soft, intended only to stun and not damage.

These devices can only stun larger targets, though small organisms can be killed, and unshielded electrical devices can be shorted out by the discharge. These weapons function as close-combat versions of handheld stun guns (see page 147). Using stun devices in water is not recommended as they will have as great an effect on the user as on the target.

Dimensions: 45 centimeters and 150 grams for the baton, and 100 grams for the gloves
Power Source: Standard cell, 50 strikes per cell
Availability: Batons are common, gloves are rare
Cost: 60cs for batons, 130cs for gloves

FIREARMS

Most firearms in 2199 are made of high-strength plastics or alloys, and fire caseless, high-density plastic bullets. Most are semiautomatic and use binary chemical propellants. Two inert compounds are stored separately in a disposable reservoir clipped into the gun. When the weapon is charged, small amounts of the chemicals are mixed in an ignition chamber, forming an extremely volatile liquid. When the trigger is pulled, an electric current ignites the fluid and fires the bullet.

Binary propellant weapons have several advantages over historical firearms. They have fewer moving parts and are more reliable. They are lighter, and their ammunition magazines contain bullets only and so have a higher capacity.

A binary propellant reservoir typically contains enough propellant to fire 10 magazines worth of ammo. Propellant reservoirs for most weapons are disposable and are replaced much like ammo magazines. The propellant cassette is usually slotted in adjacent to the ammo magazine, but reservoirs are not large and so add little to the volume or weight of the weapon.

Some guns incorporate a revolver-type design for versatility. The space-saving advantage of binary propellant allows for up to four different forms of ammunition to be loaded into the cylinder at the same time. Touch, verbal, or digital interface commands spin the cylinder, allowing instant selection between the different ammo types. Cylinders for these multi-ammo weapons are disposable, and when spent, are simply replaced like the magazine in a semiauto.

Given the aquatic nature of Poseidon, most guns on the planet are waterproof if not entirely amphibious. The use of binary propellant also allows them some level of submersible function. If used underwater, however, the ranges for normal firearms are reduced to 10% of their normal values, and all damage ratings except for explosive ammo is halved.

Binary firearms contain a battery for igniting the propellant and have digital indicators for ammo and propellant levels. Note also that propellant reservoirs themselves can be dangerous devices if mishandled or used as improvised explosives.

In **Blue Planet**, all personal firearms are similar in construction and operation, differing only in the details of their capabilities, such as range, damage ranks, and ammo capacity. The specifications for the various classes of weapons are given below. Consider the values given for each group as averages for the class. Feel free to modify these numbers if the circumstance or imagination merits.

HANDGUNS

CONCEALABLE

These weapons are specifically designed to evade detection. They are extremely small, light, and free of metallic parts. They have limited range, ammo capacity and stopping power, but any attempt to hide or conceal such a weapon is made with a +2 bonus. The propellant is typically integrated into the ammo magazine and is only enough to fire the bullets of that magazine.

Dimensions: 0.40 kilograms and 0.40 liters
Power Source: Mini cell and binary propellant
Availability: Scarce
Cost: 350cs
Ammo Capacity: 12 rounds/magazine
Rate of Fire: 3
Range: Point Blank/5 Short/10 Medium/25 Long/40
Damage Rating: 5

LARGE CALIBER

Huge handguns, these weapons have considerable stopping power and are favored by law enforcement and military units. Unfortunately, criminals also prefer them.

Dimensions: 1.0 kilogram and 1.0 liter
Power Source: Mini cell and binary propellant
Availability: Common
Cost: 700cs
Ammo Capacity: 25 rounds/magazine
Rate of Fire: 3
Range: Point Blank/8 Short/12 Medium/30 Long/100
Damage Rating: 7

SMALL CALIBER

Designed for personal protection and small game hunting these guns are light and easily carried. They are effective weapons and very common.

Dimensions: 0.5 kilograms and 0.6 liters.
Power Source: Mini cell and binary propellant
Availability: Very Common
Cost: 450cs
Ammo Capacity: 35 rounds/magazine
Rate of Fire: 3
Range: Point Blank/10 Short/20 Medium/50 Long/150
Damage Rating: 6

CONCEALABLE HANDGUN

LARGE-CALIBER HANDGUN

SMALL-CALIBER HANDGUN

STUN GUNS

Stun guns are not really firearms at all. Instead these non-lethal weapons produce a sonic shockwave powerful enough to knock down a human-size target and cause disorientation, confusion, and temporary loss of hearing. Stunners do not typically cause traumatic damage, though injuries are possible at point blank range.

When hit with a stunner, characters must make a Fitness roll. If they fail, they are knocked senseless and all their actions are at a –7 penalty while they lay twitching uncontrollably. This effect lasts for a number of seconds equal to 100 – (30 x Fitness). If they succeed, they are shaken and deafened, but otherwise unaffected.

These weapons have a very limited range and their effectiveness drops rapidly with distance. At point blank range the target receives a –1 penalty to his Fitness roll. At short range the roll is unmodified. At medium range the target receives a +1 bonus, and at long range the target receives a +3 bonus. Heavy armor or environment suits also reduce the weapon's effect, providing an additional +2 bonus to the Fitness roll. These weapons also scatter somewhat, and they have a +1 bonus to hit at all ranges.

Larger versions of these weapons can be mounted on vehicles and are commonly used for crowd control. Because of their non-destructive design, stun guns are the weapon of choice by security forces aboard orbitals, spacecraft, and in the Lunar cities. They are the only guns not strictly controlled in these habitats. Though unlikely to cause lasting damage, stun guns easily shatter glass and can crack or otherwise damage similarly fragile objects.

Dimensions:
Handheld – 1.1 kilograms, 1.1 liters
Mounted – 3.9 kilograms, 3.9 liters
Power Source: 20 shots/standard cell for handheld, 200 shots/heavy cell for mounted versions
Availability: Handheld are common, mounted versions are rare
Cost: 450cs and 1,200cs respectively
Rate of Fire: 3
Range:
Handheld – Point Blank/3 Short/6 Medium/10 Long/15
Mounted – Point Blank/6 Short/12 Medium/18 Long/25

LONGARMS

ASSAULT RIFLE

These are rifles designed specifically for military use. They are light, reliable, and capable of fully automatic and burst fire.

Dimensions: 0.9 to 1.3 meters, 3.0 to 3.5 kilograms
Power Source: Standard cell and binary propellant
Availability: Uncommon
Cost: 1,300cs
Ammo Capacity: 100/magazine
Rate of Fire: 3 (5)
Burst Fire Value: 3
Range: Point Blank/15 Short/75 Medium/150 Long/500
Damage Rating: Single Shot 8, Burst Fire 11

HUNTING RIFLE

These weapons are the most common firearms on Poseidon. Old and new colonists alike, frontiersmen, explorers, and field workers always have a carefully maintained and loaded rifle close at hand. From native-built black-powder weapons to state-of-the-art semi-automatics, these guns are often all that stand between a cornered human and Poseidon's wildlife. The one thing they all have in common is enormous stopping power.

Dimensions: 1.2 to 1.6 meters, 2.0 to 2.5 kilograms
Power Source: Various
Availability: Very Common
Cost: 500cs to 1,300cs, depending on type and quality
Ammo Capacity: 1 to 20
Rate of Fire: 3, 1 per 5 rounds for black powder.
Range: Point Blank/10 Short/100 Medium/200 Long/600
Damage Rating: 9

SHOTGUN

Shotguns of various designs are common for hunting, personal protection, and military applications. They are particularly favored by law enforcement forces aboard orbital stations and in other pressurized habitats. Military-grade shotguns are often automatic and capable of firing a variety of special purpose ammo. Additionally, because of the scattering effect typical of shotgun ammo, shotguns receive a +1 bonus when using multi-projectile ammo.

Dimensions: 0.7 to 1.3 meters, 1.8 to 2.5 kilograms
Power Source: Standard cell and binary propellant
Availability: Common
Cost: 300cs, 1,000cs for military versions
Ammo Capacity: 30/magazine
Rate of Fire: 3
Burst Fire Value: 3 (military grades only)
Range: Point Blank/5 Short/10 Medium/30 Long/55
Damage Rating: Single Shot 7, Burst Fire 10

SNIPER RIFLE

These rifles are military-grade weapons designed to kill the enemy at a distance from a position of concealment. Primarily used in the GEO Armed Forces and Incorporate secrurity, sniper rifles also see action in law enforcement special operations teams.

Dimensions: 1.3 to 1.6 meters, 2.4 to 2.8 kilograms
Power Source: Standard cell and binary propellant
Availability: Uncommon
Cost: 1,500cs
Ammo Capacity: 30/magazine
Rate of Fire: 3
Range: Point Blank/15 Short/100 Medium/250 Long/750
Damage Rating: 9

SPEAR GUN

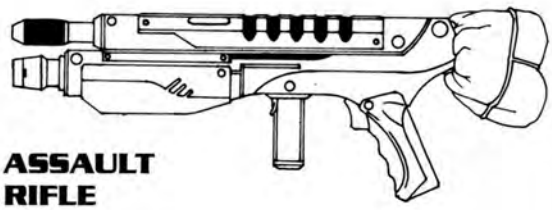
Spear guns are very common devices on Poseidon and are made in a variety of designs. Native spear guns rely on elastic slings, but most modern weapons are powered by compressed gas. Range and damage are limited for these weapons and they are primarily used for fishing.

Dimensions: 0.5 to 1 meter, 0.3 to 1 kilogram
Power Source: Elastics or compressed gas
Availability: Common
Cost: 100cs and 300cs respectively
Ammo Capacity: 1 and 5/magazine, respectively
Rate of Fire: 1
Range: Point Blank/2 Short/5 Medium/10 Long/15 (double ranges if fired above the surface)
Damage Rating: 5

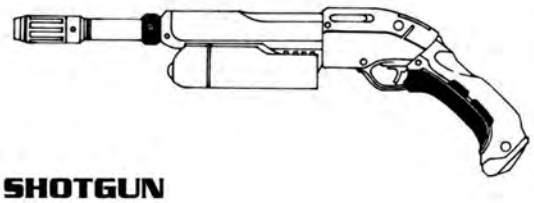
SUBMACHINE GUN

These weapons are popular with Incorporate security, special military units, and criminals and gangsters of every variety. Though their ammunition—and hence their stopping power—is equivalent to that used in small-caliber handguns, submachine guns offer the burst and full-automatic fire capabilities of assault rifles.

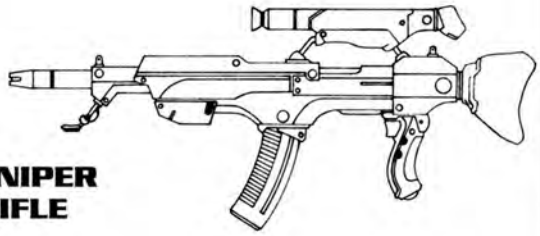
Dimensions: 0.4 to 0.8 meters, 2.0 to 2.5 kilograms
Power Source: Standard cell and binary propellant
Availability: Uncommon
Cost: 800cs
Ammo Capacity: 100/magazine
Rate of Fire: 3 (5)
Burst Fire Value: 3
Range: Point Blank/10 Short/20 Medium/50 Long/150
Damage Rating: Single shot 6, Burst Fire 9



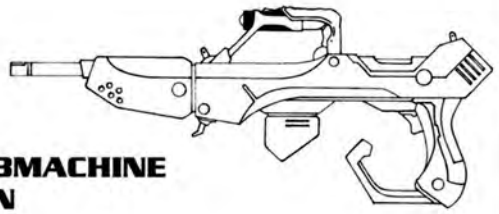
ASSAULT RIFLE



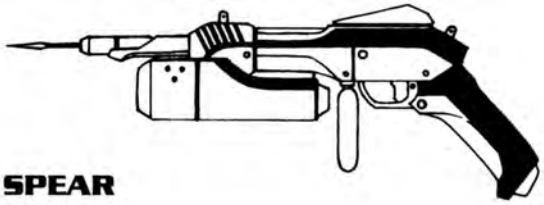
SHOTGUN



SNIPER RIFLE



SUBMACHINE GUN



SPEAR GUN

HEAVY WEAPONS

These weapons are commonly available only to military and law enforcement personnel of the GEO, Incorporate states, and national governments. On both Poseidon and Earth, however, there is a global black market trade in heavy weapons, and they often find their way into service with everything from terrorist organizations to organized crime.

ASSAULT CANNON

This class of weapon is meant only for military applications, and for good reason. It is incredibly destructive and exceptionally lethal. Most use a rotating, multi-barrel design that generates an insane rate of fire. These weapons are large and cumbersome, and almost always used with a mount or harness. Most require two batteries—one to power the barrel and one to run the integrated cooling system that prevents the barrels from melting during extended use. These weapons may only be fired in burst or full-automatic fire mode.

Dimensions: 1.4 meters, 21 kilograms
Power Source: Heavy cell and binary propellant
Availability: Rare
Cost: 4,000cs
Ammo Capacity: 1,500/magazine
Rate of Fire: 3 (8)
Burst Fire Value: 5
Range: Point Blank/20 Short/75 Medium/150 Long/300
Damage Rating: 13

AUTOCANNON

Like most slug throwers in 2199, autocannons are most often binary propellant weapons, and fire heavy, high-density rounds. These weapons most commonly provide close-range firepower for military emplacements and combat vehicles. They may only be fired in full-automatic fire mode.

Dimensions: 2.5 meters, 375 kilograms, and 12.5 liters
Power Source: External
Availability: Rare
Cost: 15,000cs
Ammo Capacity: 2,000/drum
Rate of Fire: (5)
Burst Fire Value: 5
Range: Point Blank/100 Short/500 Medium/1,500 Long/3,000
Damage Rating: 18

GRENADE LAUNCHER

As independent firearms or mounted piggy-back on other weapons, grenade launchers can turn a single soldier into walking artillery. These weapons fire a variety of ammunition and can quickly turn the tide in a firefight.

Dimensions: 0.7 meters, 2.4 kilograms, and 0.85 liters
Power Source: Standard cell and binary propellant
Availability: Rare
Cost: 1,500cs
Ammo Capacity: 3/magazine
Rate of Fire: 3
Range: Point Blank/10 Short/50 Medium/100 Long/500
Damage Rating: Variable by grenade type

HEAVY MACHINEGUN

These powerful weapons are always mounted on a rugged tripod or vehicle. While their rate of fire is somewhat lower than lighter weapons, a heavy machinegun fires a larger, more massive round and is generally more effective at long ranges. Heavy machineguns are standard armament on a variety of military vehicles, including main battle tanks. Heavy machineguns may only be fired in burst or full-automatic fire mode.

Dimensions: 1.5 meters, 40 kilograms, and 5.9 liters
Power Source: Standard cell
Availability: Rare
Cost: 10,000cs
Ammo Capacity: 500/drum
Rate of Fire: 3 (5)
Burst Fire Value: 3
Range: Point Blank/25 Short/100 Medium/300 Long/700
Damage Rating: 17

LIGHT MACHINEGUN

These support weapons can be effectively wielded by a single soldier and are capable of sustained automatic fire. When not mounted on a bipod or vehicle, they must be supported by a weapon harness. These weapons may only be fired in burst or full-automatic fire mode.

Dimensions: 1 meter, 6.2 kilograms, and 3.2 liters
Power Source: Standard cell
Availability: Rare
Cost: 6,000cs
Ammo Capacity: 500/box
Rate of Fire: 3 (8)
Burst Fire Value: 3
Range: Point Blank/20 Short/100 Medium/250 Long/500
Damage Rating: 12

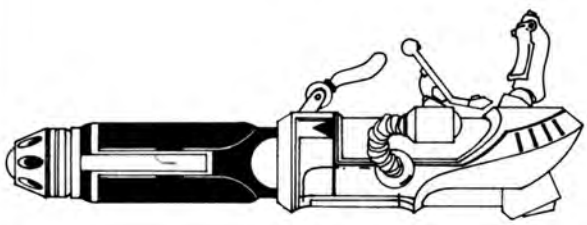
TORPEDO CANNON

Torp cannon are analogous to grenade launchers, but designed for use underwater. They fire self-propelled miniature torpedoes. The torps are powered by individual compressed gas reservoirs, and some versions contain onboard sonar guidance. Most torp guns are handheld, but some are designed for mounting on hard suits, sleds, or even mini-subs.

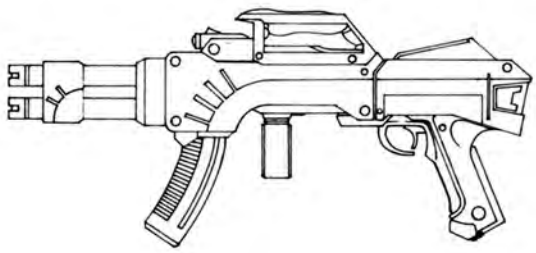
Most cannon torpedoes carry anti-armor charges similar to those for grenade launchers. These weapons have proved very effective against hard suits and minisubs.

Dimensions: 1 meter, 1.5 kilograms, 3.5 liters for mounted; 0.75 meters, 2 kilograms, and 3 liters for handheld
Power Source: Standard cells and compressed gas
Availability: Rare
Cost: 2,700cs and 3,000cs, respectively
Ammo Capacity: 12 for mounted, 4 for handheld
Rate of Fire: 1
Range: Point Blank/10 Short/30 Medium/60 Long/120
Damage Rating: 12

ASSAULT CANNON



LIGHT MACHINEGUN



FIREARM ACCESSORIES

AMMUNITION

Binary propellant ammo comes in disposable cassettes specific to the size and caliber of weapon. When spent, the cassette is ejected from the weapon as a useless plastic shell. Most guns fire hyper-dense plastic bullets that inflict damage by kinetic force. However, there are numerous special-purpose rounds originally designed for law enforcement and military applications.

Dimensions: 0.1 to 0.95 kilograms and 0.1 to 1.0 liters, depending on the caliber and number of rounds; 2.0 liters for assault cannon ammo
Power Source: None

ARMOR-PIERCING ROUNDS

These bullets use explosive tips or special composite construction to reduce the effectiveness of the armor shielding targets. Such designs reduce the rating of common armors by half (rounding down).

Availability: Scarce
Cost: 50cs/magazine

EXPLOSIVE ROUNDS

This ammo is nasty and carefully controlled ordnance. Although meant for military applications only, this type of ammo is often also available on the black market. Explosive ammo adds 3 to a weapon's damage rating. However, few non-military grade weapons will accept and fire explosive rounds, and they are not available for concealable and small handguns as the rounds are too small to incorporate a useful amount of explosive.

Availability: Rare
Cost: 230cs/magazine

FLECHETTE ROUNDS

This type of round is commonly used in combat shotguns. Multiple shatter-proof plastic flechettes serve to increase damage to soft targets, but are poor at penetrating armor. A great anti-personnel round for pressurized habitats, flechette rounds add 2 to the weapon's damage rating, but the rating of any armor is increased by 3. Because of their scattering effect, these rounds have a +1 attack bonus. For shotguns, this is in addition to the normal attack bonus.

Availability: Uncommon
Cost: 35cs/magazine

STANDARD ROUNDS

These are hyper-dense, plastic bullets.

Availability: Very common; for all ammunition types, multi-ammo cylinders are scarce, and heavy weapons ammo is rare
Cost: 5cs to 25cs/magazine, depending on caliber; for all ammunition types, multiply the cost by 3 for multi-ammo cylinders, and by 10 for heavy weapons ammo.

SUPPRESSION ROUNDS

Used for non-lethal engagements, these rounds are popular in pressurized habitats. Individual bullets are actually small pellets of a soft gel that spatter on impact, causing tremendous stinging pain but little actual damage. Bruises and small lacerations are all that can result unless a target is hit in the eye. Suppression rounds inflict no more than minor wounds. If hit, targets are stunned senseless by pain and shock for a number of seconds equal to 20 – (3 x Fitness). Stunned characters suffer a –5 penalty to all actions. The target may reduce the effects of this impairment if a Will roll is made. The player reduces the impairment penalty by the action value scored on the Will roll.

These rounds are particularly light and reduce the effective ranges of a weapon by half. Suppression bullets typically contain indelible florescent dye that serves to mark suspects who resist the effects of the rounds. Unfortunately, almost any rigid armor renders suppression rounds ineffective.

Availability: Scarce
Cost: 60cs/magazine

ASSAULT HARNESS

An assault harness consists primarily of an articulated, servo-assisted arm and straps on like web gear. The harness is used to support assault and heavy weapons, distributing the weight onto the user's torso and hips. It is designed specifically to arrest the recoil of automatic weapons. When disengaged, the harness holds the weapon at one of several optional ready positions, quick to hand. Use of an assault harness reduces recoil penalties by 2.

Dimensions: 1.7 kilograms, adjusts to fit
Power Source: Standard cell
Availability: Rare
Cost: 650cs

LASER DESIGNATOR

Inexpensive and durable, laser sights are popular on combat handguns and assault weapons. A laser sight is easy to use and works by reducing aiming time. Instead of having to aim for a complete action to receive an aiming bonus (see page 113), the shooter receives the initial aiming bonus and may fire in the same action. Additionally, a laser sight increases the maximum aiming bonus from +3 to +4. Laser sights can be mounted on most guns, and some handgun designs have integral designators. Sights are activated by sufficient pressure on a contact switch mounted on the weapon's grip.

Dimensions: 25 grams and 20 milliliters
Power Source: Mini cell
Availability: Common
Cost: 40cs

OPTICS

Various optics can be mounted on firearms, especially rifles, to make them more accurate. These devices range from simple telescopic sights to state-of-the-art night vision, range finding, holographic heads-up displays.

ELECTRONIC SCOPES

High-tech electronic scopes can support a variety of options. Light intensifiers eliminate penalties for poor lighting. Laser rangefinders automatically adjust the crosshairs, tripling a weapon's effective ranges. Laser motion calibrators provide data on target speed and vector, prompting the shooter when the weapon's lead matches the target's motion. This provides a +2 to-hit bonus at any range. Electronic scopes can also compensate for wind, temperature, elevation difference, and several other factors for which they can collect data. As with optical scopes, the shooter must aim for at least one action. However, such devices can make even a poor shot a deadly sniper.

OPTICAL SCOPES

These scopes are cheap and reliable and serve to double the effective ranges of a firearm if the shooter uses at least one action aiming. Simple scopes also reduce the penalty due to poor lighting conditions by one, as even simple lenses naturally gather light.

Dimensions: 70 to 300 grams and 0.5 to 1.0 liter
Power Source: Mini cell for electronic versions
Availability: Common for optical scopes, rare for electronic versions
Cost: 150cs for standard optics, 1,000cs to 3,500cs for the electronic version

TARGETING INTERLINK

The ubiquitous neural jack even has a use in combat. A tiny laser rangefinder/tracking system with an inertial sensor is mounted below the gun's barrel. This device has an interface cable that can be plugged into the user's jack. Output from the device can be customized, but typically a floating crosshair is laid over the user's field of view and tracks wherever the gun is pointed.

If the gun is aimed outside the user's visual field the shooter has the option of maintaining his own perspective or switching entirely to that of the gun. This makes the weapon an effective periscope in dangerous situations, and allows the user to aim around corners or over his shoulder without even looking. Other feed from the weapon provides data on ammo and propellant levels. In addition to the obvious advantages of this device, use of a targeting link gives the shooter a +3 to-hit bonus at any range. Trode versions of this device are available, but provide only a +2 bonus.

If combined with the programmable reflexes cybernetic modification and certain targeting programs, the interlink creates the perfect marksman. With this hardware combination a shooter only has to choose a target, and the reflex computer, working in tandem with the interlink, automatically aims and fires. As long as the target is within range and is visible to the user or the interlink, it is invariably hit, regardless of distance, motion, or size. For each shot, however, the shooter must make a Dexterity roll. An action value of –5 or worse means a glitch in the program caused a miss.

Uplink versions of firearm interlinks are available. They require the user to have a link-jack implant, but they eliminate the need for an interface cable. An uplink jack allows the weapon to be controlled at a distance and is a valuable option should the gun be turned against its owner. Trode interfaces are not of sufficient quality to support this sort of function.

GEO Marshals are said to favor this combination of hardware, serving to feed the rumors that they never miss. Ever.

Dimensions: 120 grams and 0.1 liters
Power Source: Mini cell
Availability: Scarce
Cost: 4,500cs, 6,500cs for the uplink version

GRENADES

Modern grenades include a variety of effective devices. Many forms are designed for non-lethal suppression. Others are extremely destructive, meant as military anti-personnel and anti-vehicle weapons. Most hand grenades use digital fuses and timers and can be quickly set for a delay of three seconds to one hour. Grenades can be thrown by hand or fired by launchers. Thrown grenades follow the throwing rules, page 52, to determine accuracy, and cannot be used in launchers. Launcher grenades must be fired from a weapon in order to arm. Deviation for launched grenades follows the rules used for thrown objects.

Grenades are primarily for military use only and access to them is usually well controlled. Though construction varies slightly between types, the following stats are averages. These stats also apply to the mini-torps used in torpedo launchers.

Dimensions: 0.3 kilograms and 0.4 liters for hand grenades; 0.17 kilograms and 0.15 liters for launcher grenades
Power Source: Mini cell
Availability: Rare
Cost: 90cs

DESTRUCTIVE GRENADES

ARMOR-PIERCING GRENADES

These launcher-only grenades are designed for use against heavily armored targets. AP grenades use a two-stage explosive. The first is a shaped breaching charge, engineered to penetrate the armoring material. The second is the destructive charge, which theoretically penetrates the breach before detonating. Using armor-piercing grenades reduces a target's armor rating to half its normal value.

Damage Rating: 9

CONCUSSION GRENADES

Of particular use underwater where they can cause significant hydrodynamic shock, concussion grenades are useful for blasting open doors and damaging structures.

Damage Rating: 8

FRAGMENTATION GRENADES

These weapons are designed to blast shrapnel in all directions. They are meant as anti-personnel weapons and can be very effective.

Damage Rating: 10

INCENDIARY GRENADES

These weapons burst upon detonation, spraying a burning compound over a two-meter radius area. The compound burns hot enough to melt iron but burns away in about 30 seconds. However, any inflammable materials the fluid touches are instantly ignited and will continue to burn (see burn rules, page 119).

SUPPRESSION GRENADES

Suppression grenades are designed to subdue target personnel by various chemical means. The chemical cloud produced by these grenades is usually sufficient to affect a $20m^3$ area.

ADHESIVE GRENADES

Adhesive grenades, or "goo-goos," are rare but sometimes-useful devices. On impact they burst, spattering a film of thick fluid over a five-meter radius area. In the presence of oxygen, the fluid becomes adhesive, bonding instantly and unbreakably to anything it contacts. The goo remains sticky and the movements of targets within the blast radius hopelessly bond them to themselves and their surroundings. The adhesive can be dissolved with a spray canister of a specially formulated solvent.

FLASH-BANG

This unique grenade "explodes" with a disorienting flash and a sonic bang that has the same range and effect as a handheld stun gun (see page 147). This is therefore the grenade of choice inside pressurized facilities.

NAUSEA GRENADE

The gas released by this weapon is a contact agent that causes extreme nausea. Even the hardiest target will succumb to instant vomiting and debilitating disorientation. Any actions taken by an affected target are at a –5 penalty. A successful Will roll will reduce this penalty to –2. As this is a contact agent, a filter mask is useless, and only an airtight chemical or EVA suit will protect a target.

SLEEP GRENADE

Targets inhaling this gas quickly pass out, and remain unconscious for a number of minutes equal to 100 ± (10 x Fitness). Upon awaking, victims of sleep grenades suffer pounding headaches. The gas is colorless and almost odorless, and so can be quite useful. Respiratory filters or gas masks are sufficient for avoiding the effects of this gas.

SMOKE GRENADE

Smoke grenades produce a thick, non-toxic cloud of colored smoke. Most smoke grenades block only visible light, but prismatic smoke scatters all wavelengths from radio to ultraviolet, rendering it opaque to all sensors except for sonar.

VEHICLES

There are thousands of different vehicles in service throughout Earth and the Colonies, from patrol hoppers to native catamarans. The following listings can be used as templates for several popular vehicle classes. As with other equipment in **Blue Planet**, there are certain conventions used to describe the capabilities of vehicles.

DESCRIPTION

This is a description of the typical construction and role of a particular vehicle. In a world where technology is always being improved, there is always variation between designs. These descriptions present the average capabilities, functions, and statistics for each vehicle.

DIMENSIONS

These values represent the average size and mass of the described vehicle.

POWER SOURCE

This indicates the vehicle's type of power plant. Most are powered by hydrogen fuel cells.

AVAILABILITY

This is a description of the relative availability of a vehicle. There is no connotation of legality, only of abundance. A given vehicle may be abundant and still be illegal. Note also that vehicles are typically scarcer in the Colonies than they are on Earth.

Very Common

The vehicle is easy to find, and can be bought almost anywhere.

Common

The vehicle is available in many places and can be obtained with minimal difficulty.

Uncommon

The vehicle is somewhat unusual and can be obtained only from specialized dealers or through factory orders.

Scarce

The vehicle is difficult to find and may require special knowledge or contacts to obtain.

Rare

The vehicle is very difficult to find because of such factors as production difficulty, expense, or legality.

COST

This represents the standardized relative value of a vehicle, in corporate scrip, with no regard to its legality or availability. Legally restricted or hard-to-find vehicles will fetch higher prices, regardless of their standard cost. Because of the extreme variety of circumstances in **Blue Planet**, game moderators should consider availability, legality, and the character's situation before setting a final price for a given vehicle.

FUEL EFFICIENCY

This lists the number of kilometers a vehicle can travel using a single liter of fuel.

RANGE

This lists the number of kilometers a vehicle can travel at its cruise speed on a single tank of fuel.

SPEED

This lists the vehicle's cruising and top speed in kilometers per hour. The number before the slash is the vehicle's cruising speed and the number after the slash is the vehicle's top speed.

COMBAT SPEED

This lists the vehicle's movement in action sequences, listed as a number of meters per action round.

CREW

This is the number of people required to effectively operate the vehicle.

PASSENGER/CARGO CAPACITY

This is the number of passengers or the amount of cargo the vehicle can transport.

STANDARD ACCESSORIES

This lists the typical accessories with which a vehicle of the given type is likely to be equipped. Complete descriptions of vehicle accessories can be found on page 161.

ARMAMENT

This lists the typical weapon systems with which a vehicle of the given type is likely to be equipped.

ARMOR

This is the armor protection provided by the vehicle's frame or actual military-grade armoring materials that have been incorporated into its design.

DURABILITY

This is the vehicle's Durability rating, which determines its ability to withstand serious and critical damage (see page 121).

MOTORCYCLE

Ground vehicles of any kind are extremely uncommon anywhere on Poseidon, due to the obvious terrain disadvantages they face. Motorcycles and especially scooters, which are fairly common in the large settlements of Poseidon, are the only exception to this general rule.

Dimensions: 1.9 meters long, 150 kilograms
Power Source: Fuel cell
Fuel Efficiency: 20 kilometers/liter
Range: 200 kilometers
Speed: 72/216
Combat Speed: 60
Availability: Common
Cost: 5,000cs
Armor: 2
Durability: –2
Crew: Driver
Passenger/Cargo Capacity: 1 passenger, no cargo
Standard Accessories: Onboard computer, security system

HOVERCRAFT

Hovercraft are a very common method of transporting cargo on Poseidon. They are turbofan-driven ground effect vehicles powered by hydrogen fuel cells. The average vertical lift for a cruising hovercraft is one meter, and their inability to traverse rugged terrain or steep inclines limits their usefulness on the colony world. However, hovercraft can negotiate relatively flat surfaces and can climb slopes as steep as 40°. All hovercraft, for both safety and versatility, are designed to float when landed on water.

APC HOVERCRAFT

These vehicles are in service with GEO and Incorporate military and security personnel, and are used as light, combat troop transports.

Dimensions: 15 meters long, 8 meters wide, 12 metric tons
Power Source: Fuel cell and 8 turbofans
Fuel Efficiency: 3 kilometers/liter
Range: 900 kilometers
Speed: 72/144
Combat Speed: 60
Availability: Rare
Cost: 500,000cs
Armor: 9
Durability: 4
Crew: Pilot
Passenger/Cargo Capacity: 20 soldiers and equipment
Standard Accessories: Auxiliary fuel tank, CAT system [3], gunner's turret, launch pod [4], onboard computer, radar suite [2], security system, targeting computer.
Armament: Autocannon linked to gunner's turret and CAT system, multipurpose missiles

HEAVY HOVERCRAFT

Dimensions: 20 meters long, 12 meters wide, 15 metric tons
Power Source: Fuel cell and 12 turbofans
Fuel Efficiency: 6 kilometers/liter
Range: 1200 kilometers
Speed: 72/144
Combat Speed: 60
Availability: Uncommon
Cost: 100,000cs
Armor: 6
Durability: 3
Crew: Pilot
Passenger/Cargo Capacity: 80 passengers or 10 metric tons of cargo
Standard Accessories: Auxiliary fuel tank, onboard computer, radar suite [1], security system

LIGHT HOVERCRAFT

Dimensions: 15 meters long, 8 meters wide, 10 metric tons
Power Source: Fuel cell and 8 turbofans
Fuel Efficiency: 8 kilometers/liter
Range: 1,600 kilometers
Speed: 86/173
Combat Speed: 72
Availability: Common
Cost: 75,000cs
Armor: 4
Durability: 2
Crew: Pilot
Passenger/Cargo Capacity: 50 passengers or 5 metric tons of cargo
Standard Accessories: Auxiliary fuel tank, onboard computer, radar suite [1], security system

JUMPCRAFT

Jumpcraft or "hoppers" are the most common form of transport on Poseidon. Jumpcraft are vertical take-off and landing aircraft, but lack the traditional flight surfaces of true VTOLs. Instead, jumpcraft rely solely on the lift generated by multiple high-performance turbofans spaced evenly about the frame.

Jumpcraft can traverse any terrain on Poseidon and can also climb above surface storms when necessary. Hoppers have a typical operational ceiling of 5,000 meters, dependent upon atmospheric pressures. Jumpcraft can also operate from the surface of the water. Most designs imported to, or manufactured on, Poseidon are amphibious, a decided advantage on the waterworld.

ASSAULT JUMPCRAFT

This vehicle is the evolutionary offspring of modern jumpcraft and traditional military weapons platforms. Extremely versatile, these jumpcraft have become the all-purpose alternative to traditional ground support aircraft and mobile artillery.

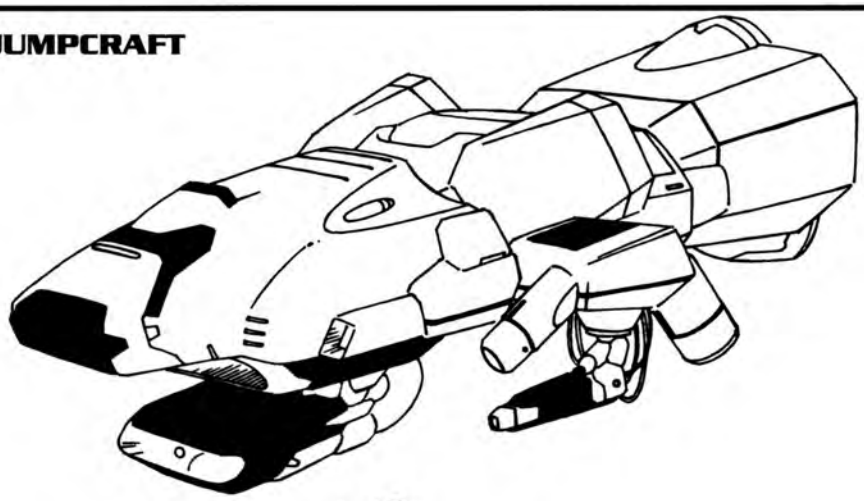
Dimensions: 12 meters long, 7 meters wide, 10 metric tons
Power Source: Fuel cell and 8 HO turbofans
Fuel Efficiency: 5 km/liter
Range: 1,000 km
Speed: 216/360
Combat Speed: 180
Availability: Rare
Cost: 1,000,000cs
Armor: 8
Durability: 3
Crew: Pilot and gunner
Passenger/Cargo Capacity: None
Standard Accessories: Auxiliary fuel tank, CAT system [3], ECM suite [3], gunner's turret, HO turbofans, onboard computer, radar suite [3], security system, targeting computer, VR cockpit
Armament: 2 autocannons, 4–6 missiles

CARGO JUMPCRAFT

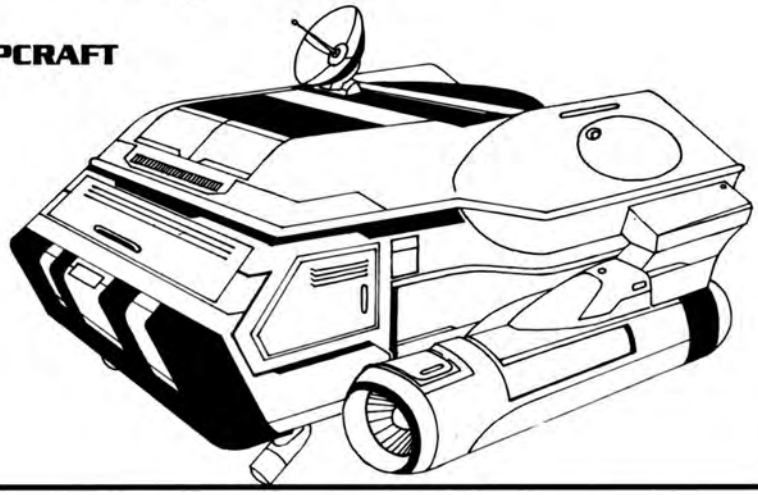
Cargo jumpcraft are typically used on Poseidon to transport cargo over long distances or to locations where the terrain is difficult for—or inaccessible to—surface ships or hovercraft. They are powered by eight to 12 industrial turbofans.

Dimensions: 12 meters long, 7 meters wide, 10 metric tons
Power Source: Fuel cell and 8 turbofans
Fuel Efficiency: 8 kilometers/liter
Range: 800 kilometers
Speed: 144/288
Combat Speed: 120
Availability: Uncommon
Cost: 250,000cs
Armor: 4
Durability: 2
Crew: Pilot
Passenger/Cargo Capacity: 20 passengers or 2 metric tons of cargo
Standard Accessories: Evac pods, onboard computer, radar suite [1], security system

ASSAULT JUMPCRAFT



UTILITY JUMPCRAFT



JUMPBIKE

This class of vehicle is one of the most extreme machines on Poseidon. Amounting to a dangerously fast personal aircraft, jumpbikes come in a variety of designs, but share some common characteristics. Most versions are sleek and streamlined, with the driver riding hunched over or semi-reclined behind a wrap-around cowling.

Tiny wing-like control surfaces allow control at higher speeds, and a set of stabilizing gyros give the craft some basic stability. Otherwise, there is little to this vehicle class but frame, fans, fuel cell, and farings. The safety harness is optional...

Dimensions: 2.3 meters long, 1.1 meters wide, 150 kilograms
Power Source: Fuel cell and 2 turbofans
Fuel Efficiency: 15 km/liter
Range: 150 km
Speed: 144/468
Combat Speed: 120
Availability: Uncommon
Cost: 25,000cs
Armor: 2
Durability: –2
Crew: Pilot
Passenger/Cargo Capacity: None
Standard Accessories: Onboard computer, security system

PATROL JUMPCRAFT

This variant of the utility jumpcraft is in service with GEO law enforcement and military personnel, as well as Incorporate security.

Dimensions: 5 meters long, 3 meters wide, 3 metric tons
Power Source: Fuel cell and 4 HO turbofans
Fuel Efficiency: 6 kilometers/liter
Range: 900 kilometers
Speed: 288/432
Combat Speed: 240
Availability: Uncommon
Cost: 250,000cs
Armor: 7
Durability: 2
Crew: Pilot and co-pilot
Passenger/Cargo Capacity: 6 passengers or 600 kilograms of cargo
Standard Accessories: Auxiliary fuel tank, CAT system [3], ejection system, gunner's turret, onboard computer, radar suite [2], security system
Armament: Autocannon linked to gunner's turret and CAT system

UTILITY JUMPCRAFT

This class of jumpcraft is the most common found on Poseidon. They are typically powered by three to six turbofans, spaced about the frame. Utility jumpcraft are used to carry everything from heavy mining gear to Incorporate security teams.

Dimensions: 6 meters long, 4.5 meters wide, 2 metric tons
Power Source: Fuel cell and 4 turbofans
Fuel Efficiency: 9 kilometers/liter
Range: 900 kilometers
Speed: 216/360
Combat Speed: 180
Availability: Common
Cost: 50,000cs
Armor: 5
Durability: 1
Crew: Pilot
Passenger/Cargo Capacity: 8 passengers or 800 kilograms of cargo
Standard Accessories: Evac pods, onboard computer, radar suite [1], security system

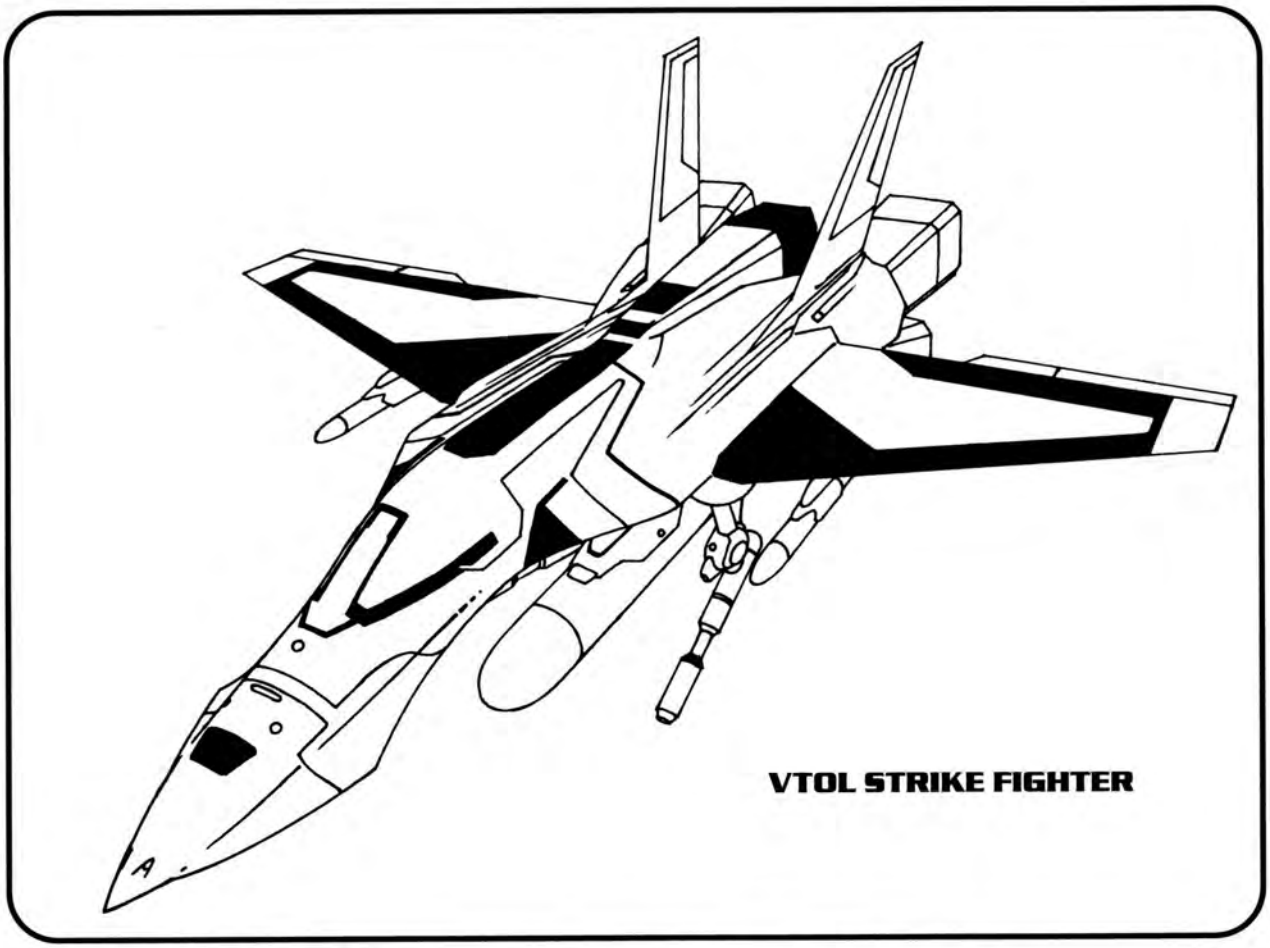
VTOL AIRCRAFT

VTOLs are traditional fixed-wing jet aircraft with vertical take-off and landing capability. The development of sophisticated computer control and navigation systems has made these aircraft accessible to the public but expense prohibits widespread civilian ownership. VTOLs are powered by one or more hydrogen turbojets capable of vectored thrust.

UTILITY VTOL

These small, utility aircraft are used to transport passengers and light cargo when speed is of the essence.

Dimensions: 18 meters long, 12 meters wide (wingspan), 12 metric tons
Power Source: 2 Hydrogen turbojets
Fuel Efficiency: 6 kilometers/liter
Range: 1,200 kilometers
Speed: 432/864
Combat Speed: 360
Availability: Uncommon
Cost: 250,000cs
Armor: 5
Durability: 0
Crew: Pilot
Passenger/Cargo Capacity: 10 passengers or 1 metric ton of cargo
Standard Accessories: Evac pods, onboard computer, radar suite [2], security system



VTOL STRIKE FIGHTER

VTOL STRIKE FIGHTER

This class of VTOL is the most common combat aircraft found on Poseidon. It offers an excellent combination of stealth and low-altitude maneuverability, both necessities on the modern electronic battlefield. These aircraft are effective in both interceptor and ground-attack roles.

Dimensions: 15 meters long, 9 meters wide (wingspan), 9 metric tons
Power Source: Hydrogen turbojet
Fuel Efficiency: 4 kilometers/liter
Range: 2,000 kilometers
Speed: 1,080/3,600
Combat Speed: 900
Availability: Rare
Cost: 1,500,000cs
Armor: 7
Durability: 1
Crew: Pilot
Passenger/Cargo Capacity: None
Standard Accessories: CAT system [5], ECM suite [5], ejection system, onboard computer, radar suite, security system, targeting computer, VR cockpit
Armament: Rotary cannon linked to CAT system, air-to-air and air-to-ground missiles

SUBMERSIBLES

In 2199, the vast majority of submersible craft are powered by magnetohydrodynamic (MHD) propulsion. The basic component of an MHD system is the mag-tunnel, a tube lined with superconducting magnets running the length of the vehicle. When an electric current is passed through the tunnel and its powerful magnetic field, seawater, as the conducting medium, is propelled down the length of the tube by the laws of electromagnetism. The flow of water serves to propel the craft forward or back, according the orientation of the fields.

MHD systems are extremely silent, highly efficient, and very reliable. Standard fuel cells are used to power the system in smaller craft, but fusion reactors are employed in larger subs.

CETACEAN POWER SHELL

In an effort to provide cetaceans with superior speed, range, and functional capabilities, engineers at Hydrospan have developed a line of MHD sleds for use by both dolphins and orcas. The devices are essentially part hard suit and part submersible. The user slips into the form-fitting forward cowling which snugs securely about the anterior body. The oversize MHD drives are positioned just below the user's tail and provide tremendous speed and power. Sensitive mechanical linkages relay the pilot's own instinctual body movements to the fin-like rudder surfaces, allowing subtle control of the fast and nimble craft.

Power shells are essentially sleek mini-subs that lack a pressure hull. They therefore increase a cetacean's speed, endurance, and cargo capacity, but not his depth limits. Standard designs provide artificial gill life support and a variable suite of sensory equipment and computer power. Interfacing with the onboard systems is usually accomplished through neural jacks or sonic trodes.

Most designs sport hardpoint attachments for small cargo pods or weapon systems. The dolphin versions typically have three, while orca shells can have up to four. Because power shells are inherently streamlined, each occupied hardpoint reduces both of the craft's speed ratings by 10%.

Most power shells are constructed of various composites of bioplastic and ceramics. Dolphin shells are powered by industrial batteries, and orca shells by small fuel cells. It is a matter of public record that the GEO has contracted for a series of military-grade power shells with integral weapon systems and armored cowlings. It will not be long before paramilitary power shell models are available on the open market.

Dimensions: 320 kilograms and 4 meters long
Power Source: Industrial cell and MHD drive
Range: 500 kilometers/charge
Speed: 100/252
Combat Speed: 84
Availability: Uncommon
Cost: 80,000cs
Armor: 3
Durability: 0
Passenger/Cargo Capacity: None/200 kilograms divided into 3 cargo pods
Standard Accessories: Onboard computer, security system, sonar suite [2]

SUBMERSIBLE INTERCEPTOR

This is the standard fighter sub in 2199, serving as an integral part of both GEO and Incorporate military operations on Poseidon. This class of sub is the cutting edge in marine engineering, exploiting the latest in streamlining hull designs. Interceptors are typically powered by multi-tunnel MHD systems, making them exceptionally fast, stealthy, and maneuverable. Fighter subs typically have a safe operating depth of 2,000 meters.

Dimensions: 3 meters long, 6 meters wide (wingspan), 1.2 metric tons
Power Source: Fuel cell and MHD drive
Fuel Efficiency: 8 kilometers/liter
Range: 800 kilometers
Speed: 144/288
Combat Speed: 120
Availability: Rare
Cost: 500,000cs
Armor: 6
Durability: 2
Crew: Pilot
Passenger/Cargo Capacity: None
Standard Accessories: ECM suite [3], ejection system, onboard computer, radar suite [4], security system, sonar suite [4], targeting computer, VR cockpit
Armament: Torpedoes

RESEARCH SUBMERSIBLE

This class of submersible is very common on Poseidon. The variably configured subs are typically cramped, but very effective in their role. Research subs are can reach depths of up to 15,000 meters and come equipped with a variety of scientific equipment and sensors.

Dimensions: 12 meters long, 2.7 meters in diameter, 1.5 metric tons
Power Source: Fuel cell and MHD drive
Fuel Efficiency: 16 kilometers/liter
Range: 3,200 kilometers
Speed: 14/28
Combat Speed: 12
Availability: Common
Cost: 200,000cs
Armor: 4
Durability: –1
Crew: Pilot
Passenger/Cargo Capacity: 4 passengers or 400 kilograms of cargo
Standard Accessories: Onboard computer, radar suite [1], security system, sonar suite [2]

UTILITY SUBMERSIBLE

This class of submersible is used to carry cargo and passengers through the Storm Belt and to undersea facilities. The passenger compartments of these submersibles are notoriously uncomfortable, and most people make an effort to avoid long voyages in them. Most cargo submersibles are designed to operate at depths no greater than 1,000 meters. However, a few more durable designs service exceptionally deep seafloor habitats.

Dimensions: 21 meters long, 5 meters in diameter, 12 metric tons
Power Source: Fuel cell and MHD drive
Fuel Efficiency: 12 kilometers/liter
Range: 3,600 kilometers
Speed: 28/57
Combat Speed: 24
Availability: Common
Cost: 500,000cs
Armor: 5
Durability: 0
Crew: Pilot and co-pilot
Passenger/Cargo Capacity: 30 passengers or 3 metric tons of cargo
Standard Accessories: Onboard computer, radar suite [1], security system, sonar suite [2]

WATERCRAFT

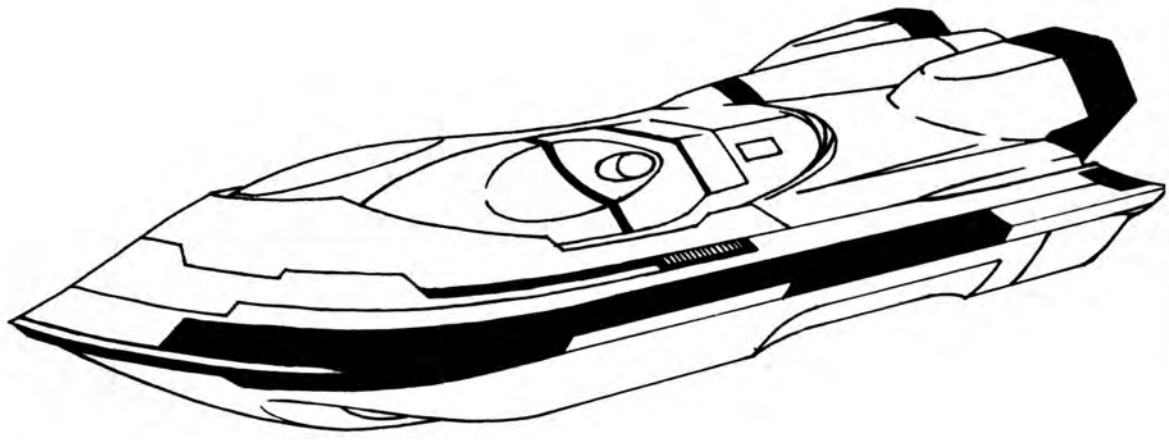
For obvious reasons, watercraft are among the most common vehicles on Poseidon. They are used for everything from recreation to the long-distance transport of passengers and cargo.

HYDROFOILS

These craft are used for recreation, short-range transportation, and certain military applications. Hydrofoils feature multiple fin-like structures that lift the hull from the water at higher speeds. This greatly reduces drag, increasing speed and efficiency. Hydrofoils are the most common variety of light powerboat on Poseidon, but larger cargo hydrofoils are becoming increasingly common as Poseidon's planetside manufacturing base continues to grow.

Dimensions: 3.5 meters long, 2.5 meters wide, 1.3 metric tons
Power Source: Fuel cell and water jet propulsion
Fuel Efficiency: 10 kilometers/liter
Range: 500 kilometers
Speed: 72/144
Combat Speed: 60
Availability: Common
Cost: 20,000cs
Armor: 3
Durability: 0
Crew: Driver
Passenger/Cargo Capacity: 4 passengers or 500 kilograms of cargo
Standard Accessories: Evac pods, onboard computer, radar suite[2], security system

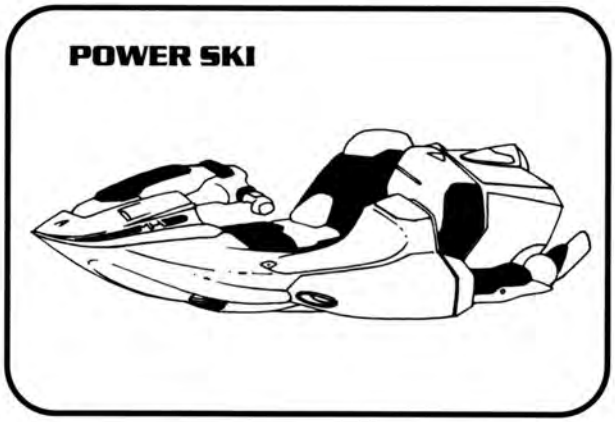
HYDROFOIL



POWER SKI

Powered by a small MHD drive, these aquatic recreational vehicles are seldom used as serious transportation on Poseidon. They are, nonetheless, common in Haven Harbor and anywhere else water sports enthusiasts are found.

Dimensions: 2.5 meters long, 1.4 meters wide, 120 kilograms
Power Source: Fuel cell
Fuel Efficiency: 10 kilometers/liter
Range: 100 kilometers
Speed: 43/86
Combat Speed: 36
Availability: Common
Cost: 7,500cs
Armor: 2
Durability: –2
Crew: Driver
Passenger/Cargo Capacity: 1 passenger, no cargo
Standard Accessories: None



SAILBOATS

Various sailing vessels are found on Poseidon, from native catamarans, to luxury sailing yachts, to high-performance hypersails.

Hypersail

Rather than conventional cloth sails, these craft use vertical wing-like structures that function much like airplane wings. The air movement that creates the lift is caused by the wind, rather than the motion of the craft as in traditional airplanes. This lift pushes the boat's keel against the water, propelling the craft forward.

Hypersails come in a variety of designs, but most are extremely reliable and computer controlled. This allows a single sailor to operate even multi-sail systems with complete efficiency.

Dimensions: 15 meters long, 5 meters wide, 3 metric tons
Power Source: Hypersail
Fuel Efficiency: Not applicable
Range: Unlimited
Speed: 28/43
Combat Speed: 24
Availability: Uncommon
Cost: 75,000cs
Armor: 3
Durability: 0
Crew: 1 sailor
Passenger/Cargo Capacity: 12 passengers or 1.5 metric tons of cargo
Standard Accessories: Onboard computer, radar suite [1]

Native Catamaran

Catamarans are the most common small sailing craft among the natives of Poseidon, favored for their speed and efficiency. Though native vessels are typically constructed of relatively primitive materials, they are nevertheless often technically sophisticated and quite seaworthy.

Dimensions: 6 meters long, 4 meters wide, 200 kilograms
Fuel Efficiency: Not applicable
Range: Unlimited
Speed: 14/21
Combat Speed: 12
Availability: Common
Cost: 5,000cs
Armor: 2
Durability: –1
Crew: 2 sailors
Passenger/Cargo Capacity: 6 passengers or 600 kilograms of cargo
Standard Accessories: None

VEHICLE ACCESSORIES

Vehicles in **Blue Planet** may be equipped with a vast array of accessories, and new features and equipment are in constant development. Examples of the most standard equipment have been listed in the vehicles' descriptions. Any of these craft may be equipped with additional accessories, subject to availability and the game moderator's approval.

ARMOR

The body and chassis of an armored vehicle are constructed of military grade ceramic-composites. Every level of armor added to the vehicle reduces fuel efficiency by 2 kilometers/liter.

Cost: 10,000cs per armor rating

AUXILIARY FUEL TANK

All vehicles can be equipped with additional fuel capacity. If excessive fuel capacity is added, however, the vehicle's cargo and passenger capacity is significantly reduced.

Cost: 350cs per 50 liters.

COMPUTER-ASSISTED TARGETING SYSTEM

The CAT system offers a +1 to +5 bonus to the Heavy Weapons skill of a character firing any assisted weapon. CAT systems may only be used with unguided weapons.

Cost: Bonus rating x 10,000cs + 10,000cs for each weapon type. For example, it would cost 40,000cs for a CAT system [3] that will control twin autocannons, and 50,000cs for a CAT system [3] controlling twin autocannons and a rotary cannon.

ECM SUITE

Electronic countermeasures systems are used to defeat guided missile target "lock-on." The ECM suite's rating determines the vehicle's ECM rating for the purposes of target acquisition. ECM ratings range between 1 and 5.

Cost: 10,000cs x Rating

EJECTION SYSTEM

Ejection systems are commonly used in military VTOLs, jumpcraft, and fighter subs. Aircraft versions are zero-zero systems, meaning that the vehicle can have a speed and altitude of zero and the system can still function safely. Aircraft ejection systems integrate the features of evac pods, and submarine ejection systems integrate the functions of rescue balls. The ejection system itself typically launches the flight deck seats from the cockpit, with the crew still strapped in their safety harnesses. Parachutes safely drop aircraft systems to the surface, while those from submarines float quickly upwards.

Cost: 5,500cs

EVAC POD

Evac pods are self-deploying emergency life rafts and are common on most modern vehicles on Poseidon. E-pods are similar to rescue balls and are equipped with water filters, emergency rations, and standard medical kits. Some pod designs are manually activated and others are deployed automatically. Most emergency ejection systems have integrated e-pods.

Cost: 1,000cs (two-person), 3,000cs (six-person)

GUNNER'S TURRET

An unguided vehicle weapon mounted in a gunner's turret may be fired by a gunner inside the vehicle. The turret offers a 360° field of fire and significant protection for the gunner. It is powered by independent servos and responds to either manual controls or cybernetic interface. The gunner's station limits the amount of space available for passengers or cargo by about 20%, and it is typically integrated with a CAT system.

Cost: 10,000cs plus the cost of the CAT system

ONBOARD COMPUTER

All late-model vehicles come equipped with interactive access chips and an onboard computer that can control most of the vehicles' functions. The onboard computer can be used to pilot the vehicle remotely, as long as the operator has the appropriate equipment, the system's access codes, and a communications link to the vehicle's computer. This system can often function as a personal computer as well and comes standard with a communications software suite, radio-communications, satellite uplink, and GPS unit. These computers also typically contain expert diagnostic programs and extensive technical databases to facilitate maintenance and repairs. Many vehicles that have high processing requirements, such as those used in scientific research or by the military, are equipped with a standard maincomp.

Cost: 2,000cs

RADAR SUITE

This sensor package uses high-frequency radio waves to determine the range, position, velocity, and other characteristics of surface vehicles and aircraft. Most vehicle radar systems have a line-of-sight range of between 50 and 250 kilometers, depending on their rating. Radar suites may have a rating between 1 and 5.

Cost: 5,000cs x Rating.

SECURITY SYSTEM

Most security systems are multipurpose expert programs that monitor access-control functions and intrusion countermeasures. Numeric combination keypads and fingerprint scanners are typically responsible for access-control, while motion detectors, infrared scanners, and fiber-optic cameras detect intrusion. When intrusion is detected, a standard audiovisual alarm will be triggered. If the vehicle is also equipped with an onboard computer, the system will notify the owner and appropriate local authorities.

Cost: 1,000cs

SONAR SUITE
This sensor package is used to detect and identify underwater objects, including submerged vehicles. The system can be used passively to listen for sounds in the surrounding environment, or actively, transmitting sound waves that reflect off of distant objects. Most sonar systems have a range of between 10 and 50 kilometers. This range is doubled if active sonar is used. Sonar suites may have a rating between 1 and 5.

Cost: 5,000 x Rating

TARGETING COMPUTER
Targeting computers are used for target acquisition and fire control, and are necessary to fire guided weapons.

Cost: 50,000cs

VR COCKPIT
The limitations of the pilot's canopy on both the airframe and stealth capabilities have resulted in its obsolescence in almost all military aircraft. The VR cockpit offers a 360° field of vision, as well as a seamless integration of data output from the aircraft's sensor and computer systems. The VR cockpits in high-performance military aircraft are typically direct neural interface systems. VR cockpits are also used extensively in military submersibles.

Cost: 100,000cs

GUIDED WEAPONS
These weapon systems are designed to be effective at significant ranges against vehicles moving at high speeds. Before guided weapons can be fired, the target must be aquired by a targeting computer. Target aquisition requires a successful Electronics roll by the attacking vehicle's pilot or gunner. The attacking vehicle's Radar or Sonar rating, as appropriate, is a target number bonus on this roll; the target vehicle's ECM rating is a target number penalty. If the target is acquired, the attacker may fire at will and the weapon will hit its target unless the operator of the target vehicle makes an evasive maneuver. This usually requires a successful Piloting or Driving roll. The target vehicle's ECM rating is a target number bonus, while the weapon's Guidance rating is a penalty. If this roll fails, the weapon hits the target vehicle.

Guided weapons may be fired from man-portable launchers, vehicle hardpoints, and a variety of other weapons delivery systems.

INFANTRY MISSILE LAUNCHER
These weapon systems include a huge variety of multipurpose, infantry support missile launch systems. Missile launchers typically consist of one to four launch tubes and a targeting system. They can launch either surface-to-surface or surface-to-air missiles. The Radar rating (used for target acquisition) is based on the launcher itself, while Guidance is based on the missile.

Dimensions: Variable by missile type and number of launch tubes
Power Source: Standard cell
Availability: Rare
Cost: 5,000cs per launch tube
Radar: 3

MULTIPURPOSE ANTI-VEHICLE MISSILE
These are man-portable and vehicle-launched weapons designed to attack aircraft, ground vehicles, and surface vessels. The vast majority are internally guided, fire-and-forget weapons.

Dimensions: 1 meter, 15 kilograms, 4.4 liters
Power Source: Solid rocket propellant
Availability: Rare
Cost: 5,000cs
Guidance: 10
Range: 10 kilometers
Damage Rating: 20

TOPEDOES
These weapons are self-propelled, guided systems that operate underwater and are designed to detonate on contact or in close proximity to a submersible or surface ship. They are typically launched by submarines, surface vessels, and aircraft.

Dimensions: 3 meters, 180 kilograms, 16 liters
Power Source: Industrial cell and MHD drive
Availability: Rare
Cost: 10,000cs
Guidance: 10
Range: 10 kilometers
Damage Rating: 20

BIOTECH

CHAPTER 06

BIOTECHNOLOGY

Over the past century humanity has used advancing technologies not only to refashion itself, but to cross technological and genetic thresholds, essentially becoming entirely new species. The earliest efforts involved various cybernetic implants and surgical alterations. While these were—and remain—remarkably useful for various specialized applications, it was quickly realized that organic modifications were both more versatile and more efficient. With this increased focus on organic modification, genetic engineering came into its own.

Genetic engineering in its simplest form is the alteration of genetic code to produce specific, desired metabolic changes in living cells. These changes can be as basic as altering a metabolic pathway, or as complex as completely redesigning the anatomy and physiology of a developing embryo.

In **Blue Planet** there are three general types of biotechnological modifications—cybernetic surgery, genetic redesign, and genetic modification.

Cybernetic surgery integrates refined surgical techniques, cybernetic devices, and human physiology to achieve specific performance goals. Because of the power of Long John, cybernetics are often considered primitive and obsolete. Prevalent as this sentiment is, cybernetics remain a common, and in many circumstances, very effective form of modification.

Genetic redesign requires the restructuring of large portions, if not all, of an organism's genetic code. A preexisting genome is typically used as a starting point—completely artificial organisms are rare. Genetic redesign is technically demanding, time consuming, and extremely expensive. However, the potential is limited only by imagination, especially since the advent of Long John.

Genetic modification is the simplest and most affordable form of genetic engineering, and with the introduction of Long John therapies, it has gained the potential of actual genetic redesign. Genetic modification usually involves surgical alteration and implantation of tissues and organs custom designed for specific purposes. Gross anatomical changes are accomplished by surgery and physiological changes are initiated by transform viruses. These artificial viruses alter small portions of host-cell metabolism to alter the performance of those cells. Together, these techniques can accomplish almost as much as true redesign. Genetic modification, or biomod, is less expensive and less technically demanding, and therefore far more practical for most applications.

By 2080 biomod technology had advanced enough that the first colonists sent to Poseidon were well adapted to their new aquatic home. Such early biomods, however, were expensive and non-hereditary. Additional genetic code had to be integrated into the female colonists' ova and male colonists' spermatagonia so that the modifications would breed true, passing the new body forms on to their offspring. The descendants of the original colonists on Poseidon are therefore actually genetic redesigns, or true genies.

With the discovery of the potential in Long John, genetic redesign and modification have gained almost limitless potential. It has become possible to create almost any desired change, from traits as simple as hair color to those as complex as species. The only limitations are expertise and cost, and numerous biotech companies are working frantically to produce a synthetic version of Long John that will allow mass-marketing of this technology. Currently, out-patient modifications are usually done in biomod salons or clinics. More extreme modifications typically require sophisticated government or commercial genetic engineering facilities.

CYBERNETIC MODIFICATION

Cyberware consists of electro-mechanical devices that are integrated into living tissues to enhance ability and performance. The heart of all cyberware made in 2199 is the Neural Interface Circuit or NIC. An interface circuit is essentially a high-speed microprocessor that is wired with artificially grown nerve fibers. These fibers are subsequently implanted into a subject's central nervous system, where the NIC acts as a two-way translator, converting nerve impulses into digital code and code into corresponding impulses.

All cyberware depends on a neural interface circuit of some sort. However, operation of implants through an NIC is identical to executing normal physical and mental actions. Implants respond with the speed and ease of thought, and with a normally functioning interface, the user feels as if he is simply using another part of his own body.

Strictly electrical implants with low power requirements use superconductors and body heat to generate the current they need to function. Such devices have essentially limitless power. Larger, highly mechanical implants, like cybernetic limbs, have significantly greater power requirements and are most often powered by dedicated myo-electrical analog tissues implanted along with the cyberware. Though continuously energized, cyberware powered in this way remains restricted by the normal muscular endurance of the user.

IMPLANT COMPUTERS

The ultimate in personal computing, implant computers are state-of-the-art processor/storage units that are integrated directly into the cognitive centers of the brain. These implants enhance the functionality and storage capacity of the brain, giving the user instant access to stored data and software applications. Many computer implants are meant for specific functions and capable of only certain hardwired tasks. Others are true microcomputers, functioning based on loaded data and software. Most implant computers are surgically mounted within the abdomen, attached to the bones of the pelvis. The NIC interfacing the computer, and the jacks or ports feeding into it, are usually mounted in the skull and connected to the computer by micro fiber-optics.

IMPLANTED CALCULATOR

This device allows users to solve even the most complicated mathematical equations with the speed of thought. Daily, practical applications for this implant are few, but for a number of professionals, such as starship and shuttle pilots, or various scientists, it can be a valuable asset. This implant has no external ports.

Healing Time: 2 weeks
Cost: 10,000cs

IMPLANTED MICROCOMPUTER

This expensive device allows the user to perform data processing and software applications with the speed and ease of thought. Such implants have 100 terabytes of onboard storage, an integrated neural jack, and a dataspike interface port.

Access to raw data is very different from access to learned skills or practiced training. The data obtained from an implant computer, like data contained in a library, provides information and knowledge, but not skills or ability. When roleplaying the use of an implant computer, consider whether knowing information as if it were a part of one's memory is all that is required, or if specialized skill and training is also necessary to accomplish the given task.

Implanted computers use the same software run by other forms of personal computers. Players must specify the programs and databases stored in their implants, and are restricted by that content until able to upload new data. Remember, too, that many software applications are very expensive, and being able to run a certain program is not the same as being able to afford it. Cost, function, availability, and size of various programs and databases are left to the discretion of the game moderator.

For one-half their normal costs, in addition to the basic price of the microcomputer, the hardware and programs for any or all of the specialized implant computers described here may be included with the microcomputer implant.

Healing Time: 3 weeks
Cost: 50,000cs

IMPLANTED SENSORY RECORDER

This implant computer is tied directly into the sensory nerves of the user. Everything the user experiences can be recorded with this device. The recorder may be activated at will, and the user can play back and edit these recordings by simple thought. The device's storage capacity of 50 terabytes is capable of recording up to 100 hours of sensory stimuli. A recording implant can also be used to experience sensory recordings made by others. Users can down- and upload recordings into a dataspike using the implant's single spike port. Remember that recording implants capture sensory information only—emotions and thoughts are not recorded. If the user also has an uplink jack, it is possible to broadcast sensory data to other receivers, or even to another uplink jack.

Playback-only versions of this device have become increasingly popular and are a growing part of the entertainment industry. Production of commercial stimulus recordings is a growing business and 'stims' for all subjects and tastes are hot commodities.

Healing Time: 2 weeks
Cost: 20,000cs, 5,000cs for playback only

IMPLANTED TRANSLATOR

An implanted translator is a small processor which is integrated into the auditory and speech centers of the user's brain and translates languages at the speed of thought. Users comprehend any language in the device's database as well as their native language, and the device translates their own thoughts into correct speech in the desired language. A standard translator can be programmed with up to three languages.

While extremely useful, this device does not entirely substitute for actually learning the language. Users still think in their native language, and the translations provided by this device are noted for being somewhat flat and generic. Implanted translators generally translate poetry, moving speeches, and other complex, emotionally loaded language in a very dull and bland fashion.

Healing Time: 2 weeks
Cost: 20,000cs

NEURAL JACK

A neural jack is a small, shallow socket usually mounted in the base of the customer's skull. This port is used to directly interface with external, computer-controlled devices. The operating programs may be part of the device's software, or the user may run programs stored in an implanted computer. Most complex electronics, computers, and vehicles are equipped with neural control ports, and direct interface is accomplished though standardized fiber-optic cable.

A jack allows users to access or operate a device as if it were part of their own bodies. They experience data received from the device as if they were sensory stimuli or memories, and they give control commands as if they were simple acts of muscular coordination. Neural jacks allow for perfectly integrated use of even the most sophisticated hardware.

Interfacing through a neural jack provides a +2 bonus to all associated task rolls. This represents the improved coordination, detailed sensory input, and refined control a user gains through mental integration with the device. Since neural jacks eliminate the need for physical action on the part of the user, all actions initiated through a jack are essentially instantaneous. In game terms this means that a character acting through a jack receives a +2 bonus to initiative. This rapid action is limited to actions through the neural jack, and by the physical capabilities of the device being controlled.

A more versatile version of the neural jack exists that includes a radio modem. This uplink jack, or link-jack, allows the user to interface with any device fitted with an uplink transceiver. The range of such remote links is dependent on terrain and satellite access, but is typically 25 kilometers line of sight.

Healing Time: 1 week
Cost: 8,000cs, 11,000cs for an uplink jack

Installing a neural control port in a device costs between 800cs and 1,200cs, depending on the complexity of the device. Installing an uplink transceiver costs an additional 700cs.

PAIN INHIBITOR

Pain inhibitors, or PIs, are biodigital implants that do just what the name implies. These relatively simple devices intercept neural input from pain receptors, eliminating the sensation of pain. PIs are integrated within the neural pathways that deliver impulses to the pain processing centers of the thalamus. When stimulus exceeds preset levels, the implant shunts the excess impulses. This results in the user feeling only minor discomfort, regardless of the level of stimulus.

Because pain is an evolutionary adaptation against bodily harm, elimination of the stimulus is inherently dangerous. Therefore, the shunted signal is interfaced with tactile or even auditory centers, where the excess nerve impulses are perceived in an alternate form. This allows the user to sense and react to the magnitude of possible injury without having to deal with the potentially debilitating effects of the pain itself. Learning to gauge the severity of an injury based on this alternate perception is a slow process and requires specific training.

Shunting the impulses at the point of the thalamus also eliminates the autonomic responses associated with pain, such as hormone release and the metabolic shock pain can induce. The elimination of incapacitating pain and the body's physiological responses too it can be lifesaving advantages. Traumatic injury can be temporarily ignored, allowing the user to do first aid on himself, to move, or even to continue fighting after suffering horrendous wounds. Pain inhibitors are therefore common modifications among soldiers, covert operatives, and frontiersmen—anyone with a dangerous profession.

The pain inhibitor biomod allows an individual to ignore impairment penalties for light wounds, and reduces the impairment penalties for serious and critical wounds by 1.

Healing Time: 4 weeks
Cost: 27,000cs

PROGRAMMED REFLEXES

This piece of cyberware requires a dedicated processor and a special NIC in the user's brain stem or upper spinal cord. This implant uses programmed routines to turn selected actions into reflex. The computer analyzes sensory input and user thought patterns, initiating preprogrammed reflex responses based on these variables. Only simple, physical actions can be enhanced in this way, and all such artificial responses must be pre-programmed and uploaded to the processor through its single interface port.

The reflex patterns programmed into the implant may be deactivated by a simple mental command, but if active, the responses will execute if the proper trigger stimuli are received. This can be embarrassing in the least and very dangerous at worst. For this reason the implant is uncommon, used mostly by pilots, soldiers, athletes and others whose lives or livelihoods depend on specific, anticipated reactions.

To use this implant, a player must provide the game moderator with a list of their programmed reflexes, and the stimulus or thought patterns that

initiate them. A Marshal character may choose to program ducking and drawing a weapon if he is threatened with one, or a pilot might program emergency procedures. Then, when such situations arise in play, the player does not need to spend an action to execute the programmed response. The character makes the response instantly and without error at the beginning of the action round. After the response is made, the player can roll for initiative normally, and act again during the round. For playability, such implants may support only 10 programmed responses at any one time.

Healing Time: 3 weeks
Cost: 65,000cs

PROGRAMS

Programmed Reflexes is a sophisticated cybernetic implant, but it is only as effective as its programming. To date, few quality programs have been developed, and most have come from back-room studios and fly-by-night hacks—that is until now. Lavender Organics, the pioneer in neuro-computer integration, has introduced a popular and reliable selection of programmed reflex routines.

Cost: 500cs for uploader and one program, 425cs for each additional program.

Autoload

This program was designed with military and law enforcement personnel in mind. The routine prevents those embarrassing moments caused when a firearm runs out of ammunition unexpectedly, or a person forgets to reload a spent weapon. While active, this reflex compels the user to count the rounds (or bursts) fired, so that he is always certain of his ammo status. Additionally, when the user fires the last round from a clip, he is subject to a compulsion that forces him to reload before doing anything else.

Balance

This routine improves the user's Agility by hardwiring his physical responses to imbalance. This reflex is integrated with the sensory nerves from the user's inner ear and the motor responses from his cerebellum. The effect is triggered when stimuli from the user's inner ear indicate he has begun to lose balance. The cerebellum initiates nominal responses, but short circuits the cognitive interference that can sometimes hinder the body's natural response to imbalance. This reflex provides a +1 bonus to the user's Agility rolls, but only when the action depends primarily on balance. Use of this programmed reflex in zero-g environments may result in seizures and physical injury.

Defender

This programmed reflex is a favorite among law enforcement personnel, martial artists, bouncers, and anyone else with a need to defend themselves in hand-to-hand encounters. This routine makes blocking melee attacks an instinctual response. The program is categorized based on a variety of different attacks and their associated defenses. When visual stimulus convinces the user's implants that the user is being assaulted, the routine selects the most appropriate of a suite of possible defenses and initiates that response. Because of the variety of attacks and their complimentary defenses, this program occupies two of the available slots in the user's implant—one for unarmed and the other for armed combat. This reflex allows the user to parry up to three attacks in close combat with no penalty.

Quick Draw

This program was originally developed at the request of the GEO Marshal Service and is now available for the first time on the public market. This reflex forces the user to execute an instinctual fast draw of a holstered sidearm when confronted with a variety of stimuli. As with all programmed reflexes, the response is instantaneous and does not require an action. Common trigger stimuli for this reflex are gunfire, animal attack, or being held at gunpoint. Players may select any such stimuli they wish, but must provide the game moderator with a descriptive list.

Sleepwalker

This program is uniquely useful in certain occupations and is favored by military personnel, guides, wardens, and government operatives. This routine monitors the auditory stimulus received by the sleeping user's ears, and correlates them with a library of sound profiles. If the sound matches a trigger profile, the implant instantly wakes the user. Common trigger profiles include footsteps, rustling vegetation, heavy breathing, or soft voices. The basic program can accommodate 10 classes of sounds, and players must provide the game moderator with a list of their trigger profiles.

SENSOR AND TECHNICAL CYBERWARE

INFRARED SENSORS

Infrared sensors are generally implanted in pairs for binocular vision, just under the skin of the cheeks. This configuration is fully concealed and is popularly known as "vipers." Infrared sensors allow the user to perceive both visual IR and thermal IR, or heat. These sensors make it possible to see objects by the heat they generate or reflect, and to see significant heat sources behind thin barriers. Users can also track warm-bodied animals by the heat left in their footprints for several minutes after their passing, depending upon ambient temperature and terrain conditions.

The quality of the images produced by IR sensors is always grainy, making it impossible to distinguish detailed surface features. As a result, only the general outlines of figures or objects are perceivable with IR. Also, because IR light does not readily penetrate water, such sensors are useless underwater.

Infrared sensors provide a +2 bonus to all vision rolls in low light or darkness, and provide a +5 bonus when attempting to locate heat sources within lower temperature surroundings.

Healing Time: 2 weeks
Cost: 15,000cs

IMPLANTED RADAR

This device gives the user the ability to produce and receive low-powered radar waves. The implant is mounted just below the skin, as a band around the customer's skull, and has a full 360° range. The output can be concentrated to a 120° arc in any direction if the user wants more detailed or more distant perception.

The resolution of this radar is such that objects smaller than .5 cm in size are invisible. Fine surface features are therefore impossible to distinguish. Radar does function in total darkness, and can easily penetrate fog and smoke, but it does not work underwater. Implant radar has a range of 20 meters in the 360° mode, and 100 meters in the 120° mode.

Healing Time: 2 weeks
Cost: 18,000cs

IMPLANTED MICRO-TOOLKIT

This device consists of a wide alloy wristband with many small, retractable robotic arms, probes, fiber optic micro-cameras, and similar integrated micro-tools. There are several configurations of this device available, and once the basic interface is implanted, users can switch among the various toolkit packages at will.

The two most common toolkits contain electronics and medical/surgical tools. Specialty models for biochemistry, mechanical repair, and artistic applications exist as well. Depending on the model, this device gives the user a +2 bonus to all task rolls that are facilitated by the specific tool set.

Healing Time: 2 weeks
Cost: 15,000cs; additional tool sets cost around 1,500cs

SPYWARE

Spyware is the popular name for a complex of cybernetic implants that is used in security and surveillance applications. Spyware includes a suite of specialized infrared and electrical field sensors which support software designed to monitor and evaluate blood-flow variation and galvanic response in the surface tissues of target subjects. These sensors therefore serve as an effective lie-detector.

These sensors also grant a user the benefits of vipers, as well as the ability to detect small electrical currents flowing in hidden wires or operational electronic devices. The range of detection for such currents is five meters.

Spyware incorporates a wide-band transceiver that functions as a bug detector, as well as an electrical jammer capable of blocking low-power transmissions within a range of 15 meters. Spyware also includes integrated versions of implanted radar and the implanted sensory recorder.

The sensory interpretation programs in the spyware implant add a +1 bonus to the user's Awareness when anticipating or interpreting the actions or intent of another person. This modification has no effect on the character's individual sense scores. Spyware also allows a player to use an Awareness roll to determine if an individual is lying. Highly skilled liars are able to partially control the physiological symptoms of lying and so may impose penalties on this roll.

Healing Time: 4 weeks
Cost: 75,000cs

ANATOMICAL CYBERWARE

Occasionally, there are people who are unable or unwilling to make use of either cultured tissue implants or regrowth. In these cases, many opt to use cybernetic replacements. Such replacements are almost always powered by electro-muscular analogs and are quite functional.

There is a wide variety of cybernetic replacement parts. Some versions are indistinguishable visually or tactilely from the original. Others are grossly distorted modifications designed for specific functions. Most, however, are obviously cybernetic but remain quite functional, and in some cases, serve even better than the originals.

Ordinary cyberware merely duplicates the original function of the lost organs or limbs. Improved cyberware can add bonuses to specific actions. Improved replacement sensory organs can add up to a +2 bonus to sensory rolls. Replacement hands afford a +1 bonus per hand to Dexterity. Improved arms can add +1 per arm to Strength, and improved legs can add two meters per action to the character's scramble and sprint movement rates if both legs are replaced. Radically designed cybernetic limbs are available, but are very expensive. Their cost and function are left to the discretion of the game moderator.

It is possible to include any of the options available in the sensory visor, page 130, in cyber eyes. While still rather rare, cyber-eyes are the most common replacement cyberware, and many GEO and Incorporate agents have highly sophisticated optical implants.

Cybernetic replacement parts are generally 1.5 to 2 times the mass of the original structure. As a result, limb replacement imposes a –3 penalty on Aquatics skill, and unassisted floating is impossible.

Healing Time: 2–4 weeks, depending on the degree of replacement
Cost: 10,000cs/hand, 13,000cs/eye, 15,000cs/limb. Add 2,000cs to any replacement cyberware to make it visually indistinguishable from the organic original, and 5,000cs to each cost for improved versions. Depending on the options included, cyber eyes may be as much as 5,000cs each.

GENETIC REDESIGN

Before the discovery of Long John, genetic redesign was very difficult and very expensive. In the era from 2050 to 2180 only four notably successful genie types were created: aquaforms, hybrids, spacers, and transhumans. These four projects were all large-scale ventures in which governments or corporations were uniquely motivated to spend extraordinary time and effort to create the desired genetic templates.

AQUAFORMS

Aquaforms are amphibious humans. The aquaforms were originally created as biomods in 2080 by a joint venture involving the UN and the GenDiver Corporation in support of the Poseidon colonial effort. Two varieties of aquaforms were created in this early effort. Technically known as Diving Reflex Analogs and Systemic Osmoforms, they are better known commonly as divers and squid, respectively.

Divers were modified to share many characteristics with marine mammals. They have collapsing respiratory systems and increased levels of more efficient red blood cells. They can hold their breath for almost an hour and have a depth limit restricted only by temperature, swimming speed, and oxygen debt.

Squid have true gills hidden in folds of flesh that run from below the ears, down the neck, between the shoulder blades to the middle of the back. These gills are covered by folds of skin and muscle that seal tight when the body is not immersed in water. Squid also have collapsible respiratory systems, but have a depth limit of about 500 meters, due to pressure effects on their metabolism.

Both types of aquaforms were modified in a variety of ways to enable them to become fully amphibious. Divers and squid both have slightly elongated feet, with long, webbed toes. Their feet remain quite suitable for dry land, however. Their fingers are webbed as well, to the second joint, and with spread hands, this vastly improves their swimming efficiency. They have nictating membranes, sealing nostrils, and skin tolerant of long immersion in salt water. In addition, divers and squid can both drink and metabolize sea water without harm. Both divers and squid tend to be smooth but thick-skinned, with minimal body hair. They also possess a notably thicker fat layer, enabling them to tolerate temperatures down to 5°C.

The original aquaforms were actually primitive biomods —adults modified by surgery, tissue grafts and retroviruses. Their new body forms, therefore, could not be passed on to their progeny without additional modifications. To simplify and minimize these demanding and expensive reproductive modifications, the aquaform genes were spliced into the ova and spermatagonia of the colonists. This means that any child a female colonist might have, even with a pure-strain father, will be an aquaform.

Aquaform Modifications:

+1 Fitness
+1 Endurance
+3 Aquatics Skill
+1 Meter/Action to swimming pace

HYBRIDS

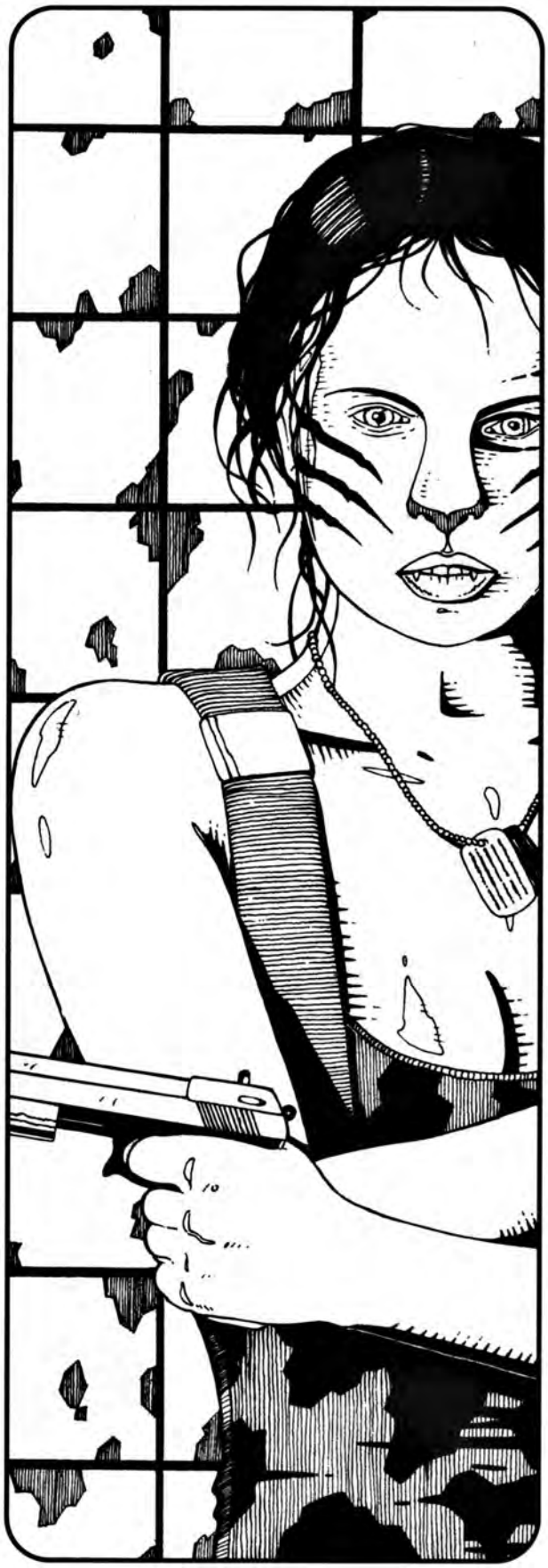
These beings were first created in 2065 as part of a secret program by the United States, Germany, and the Biogene Corporation in an attempt to produce an unstoppable super-soldier. The rudimentary state of genetic engineering at the time made it easier to simply blend together genes from various species rather than attempt to design an entirely original being. Many different combinations were tried, but with the uncertainties of the science, most failed. Several forms did meet with moderate success, but only two were viable enough to support the program. Each was based on splicing human characteristics with those of other animals—one based on various great ape characteristics, and one based on feline traits.

The first type, commonly known as Silvas after their designer, are twice as strong as an average human and possess superior endurance. However, they possess other ape-like characteristics as well, such as extremely thick, fur-like body hair and ape-like facial features. The second type, known unavoidably as Cats, have slit pupils, cat-like fur, and claws. They are also notably stronger and more agile than ordinary humans, but have very poor color vision. Additionally, both forms have problems with fine manual dexterity and minor speech impediments caused by their fang-like canines.

The project may have been technically successful but planners had failed to anticipate that their new soldiers might not want to be soldiers. As rebellious sentiment swept through the ranks it became apparent that keeping the hybrids under control would eventually become impossible. Word also leaked about the project, and under increasing political and public pressure, combined with the hybrids' unrest, the work was abandoned.

Just over 1,500 hybrids, the vast majority Silvas and Cats, had been created. In a UN arbitrated settlement, Biogene turned the research facility in which they had been reared over to the hybrids. Located on several thousand hectares of semi-arable land in central Africa, the facility became a sort of hybrid reservation. As best they could, the small hybrid nation established a self-sufficient colony, but extreme public prejudice and lack of resources made life difficult. Then, with the onset of the Blight in 2090, life became impossible.

Trained as soldiers and now unable to support themselves, the hybrids made a desperate offer to the newly established Global Ecology Organization. They offered to serve in the Peacekeeping Force. Hopelessly undermanned, the GEO accepted their offer. The hybrids served with distinction, and even became symbolic of the ecological struggle against the Blight. Despite their favorable press and best efforts, the hybrids were unable to overcome public fear and prejudice, so when the Blight ended, their future seemed bleak.



Recontact with the colony on Poseidon, however, changed everything. In exchange for past service, and as a demonstration of its commitment to human rights, the GEO offered to sponsor a hybrid colonial effort on Poseidon. Births within the hybrid population itself had raised their numbers to over 6,000, and almost to a person, they accepted the GEO offer.

One of the first modern colonial efforts on the planet, the hybrid colony has expanded from its original site to include almost a dozen satellites. Hybrids have become synonymous with life on the frontier, and culturally, seem to finally have found peace. Though now almost 12,000 strong, the hybrids are still a small portion of the total population on Poseidon. However, they remain an important component and are a close-knit group. Though most are content to work in support of the hybrid colonies, many others live and work throughout the Poseidon frontier, and are therefore a common and highly visible part of life on the new world.

Silvas are large and heavily built, averaging around 1.75 meters in height and 85 to 110 kg in weight. They have profuse, fur-like body hair and distinctly ape-like facial features. Silvas have deep resonant voices but have trouble pronouncing certain sounds as they have very large, prominent canines.

Silva Modifications:

+3 Build
+2 Fitness
–1 Dexterity
–1 Presence
+1 Endurance
+1 Toughness

Cats tend to have sleek and lithe bodies, completely covered with fine soft fur in a variety of patterns and colors. Their large mobile ears and slit pupils give them the natural equivalent of the amplified hearing and night vision biomods. Cats also have non-retractile claws on both their hands and feet. However, Cats have poor color vision as well as short, intimidating, but rather useless fangs. These fangs give them slurred, somewhat lisping speech.

Cat Modifications:

+2 Build
+2 Agility
–1 Dexterity
–1 Presence
+1 Reflexes

Damage Rating (Claws): 2

SPACERS

Spacers were created by the Martian government, with aid from the Lunar interests, in 2102. They were created as part of an effort to enhance Martian and Lunar utilization of the asteroid belt. Spacers have metabolic modifications to maintain their health in zero-g, increased radiation resistance, and increased temperature tolerance. They also have double-jointed legs and prehensile feet with opposable grip. Spacers are effectively four-armed humans who are well adapted to the confined and low-gravity habitats of space.

Spacers can endure temperature ranges from 5 to 45°C. Their modified feet are almost as dexterous as human hands, providing them with a +2 to Dexterity when all four extremities can be used at the same time. Spacers can stand and walk in earth-normal gravity, but find it tiring and uncomfortable. Spacers are somewhat more comfortable on Luna due to its lower gravity, but they still prefer zero-g. In a gravity well, spacers are able to move at a maximum of scramble pace.

Approximately 60,000 spacers, as well as 70,000 other Belters, have moved to the Serpentis System and have set up mining, trading, smuggling, and similar operations in the asteroid belt, as well as on the system's smaller moons.

Spacer Modifications:

–1 Build
+1 Fitness
+1 Endurance
+1 Agility
+1 Toughness

TRANSHUMANS

First created in 2074 by Lavender Organics, transhumans, or alphas, are usually children of the rich. Unlike most genies, alphas appear to be perfectly ordinary though invariably fit and attractive humans. Alphas possess innate immunity to most diseases and conditions, including cancer, arthritis, and tooth decay. Alphas heal twice as fast as normal humans and without scarring. They have no anatomical vestiges, no genetic defects, and need only 4 to 6 hours of sleep per night. They possess the equivalent of the improved blood oxygenation biomod, and their natural life span is in excess of 120 years without additional medical aid. This life span can be raised to over 160 with modern medicine and with access to longevity therapy, it is almost certain that they will be fully immune to the effects of aging. It is unknown exactly what percentage of children and young adults are alphas, but the numbers are rumored to be as high as 50% among the wealthy and upper-level Incorporate classes.

Transhuman Modifications:

+1 Build
+1 Fitness
+1 Awareness
+1 Presence
+1 Endurance

GENIES AND BIOMODS

There is no reason genies can not undergo further modifications. However, genies cannot gain more than an additional +1 bonus from biomods on any attribute already modified by their genie heritage. Additionally, because of their exotic heritage, all biomods for hybrids must be specially designed and cost 50% more than normal.

GENETIC MODIFICATION

Because Long John has made it possible to extensively modify adult humans, the emphasis of biotechnology has shifted from cybernetics and genies to genetic modification. Almost any modifications originally requiring genetic redesign can now be achieved though biomods. And, since such modifications can also be made to breed true, their growing prevalence is slowly, but permanently, changing the overall composition of the human species.

Simple biomods have been in use since the early 21st century. However, the technology for creating sophisticated biomods has only developed since the advent of Long John. In the past 15 years, genetic modification has become more popular and more widely used than any form of cosmetic surgery or cybernetics. A person can now truly change race, sex, and—within limits—species. The sick can be healed and the old can become young in a world where the human form is limited only by the imagination.

The biomods listed below represent common, established genetic modifications. Characters can also have most biomods customized. However, such enhancements will cost at least twice as much as any similar existing modification and are limited to minor changes. New and radical biomods may also be designed, but are often prohibitively expensive and can have unforeseen side effects. The creation and use of such modifications is always at the discretion of the game moderator.

MEDICAL BIOMODS

The most common use of biomods and Long John is in various medical applications. Long John allows doctors to perform medical miracles previously only dreamed of.

LONGEVITY THERAPY

The dream of eternal life may finally be realized. Prior to the discovery of Long John, the average life span for healthy, unmodified humans had risen to just over 100. Now, those who can afford it can live much longer. Because of the recent development of this treatment, the exact life span recipients can expect is unknown. However, minimum estimates range from 250 to 300 years. There are indications, however, that the extended life spans of regular Long John users may be even greater.

As more is learned about the nature of xenosilicates, this therapy becomes more refined. Currently, each treatment metabolically arrests the aging process, but treatments must be received every 10 to 12 months. Though longevity therapy restores youthful appearance and vigor by rejuvenating certain metabolic processes, it only slows the aging process—it does not actually reverse it. Subsequent treatments are necessary to maintain the effects granted by the therapy. Longevity treatments remain quite expensive due to the large amounts of Long John required.

Cost: 50,000cs per treatment

REGENERATION

The genetic manipulations allowed by Long John give modern doctors the power to heal and repair almost any disease or injury. Damaged limbs and malfunctioning organs can be fully, perfectly regenerated. Diseases, injuries, and burns can be fully cured, eliminated, or healed. Skin, muscle, bone, glands, nerves, *everything* can be regenerated or replaced. In some cases the replacement tissue is implanted and grown in place. In other cases the replacement structure is grown in a lab, and implanted later.

Cost: 2,000–150,000cs, depending upon the extent of regeneration

METABOLIC BIOMODS

The various metabolic biomods are some of the most popular available. They are simple to perform and take effect rapidly.

ANTI-POISON

This biomod renders the user immune to most ingested poisons and allows the user to safely eat spoiled food and other toxins. The subject is also resistant to most animal venom and plant toxins. The user is not immune to acids or other corrosive agents, but any simple chemical toxins are usually metabolized without harm. Users also possess all the benefits of the salt tolerance modification. This biomod is rather uncommon, and the only regular market for it is as a safety measure among the politicians and corporate heads of Luna, as well as the frontiersmen of Poseidon. This modification gives characters a +3 bonus to their Toughness for purposes of determining the damage rating of poisons, venom, or toxins. See the poison damage rules on page 119.

Transformation Time: 2 weeks
Cost: 8,000cs

IMPROVED BLOOD OXYGENATION

This biomod increases the oxygen delivery capability of the subject's blood. Individuals with this biomod have increased endurance and are able to hold their breath for up to 10 minutes, even while physically active. This biomod also gives the subject a +1 bonus to Fitness and Endurance.

Transformation Time: 1 month
Cost: 6,000cs

MIND-JOB

A mind-job is a specialized, sometimes illegal, version of multiglands that alters the personality of the user. Legal mind-jobs are prescribed by licensed psychiatrists as a way to help patients permanently overcome problems with anger, depression, or some forms of addiction. Illegal mind-jobs are the subjects of numerous horror and suspense holo-vids, in which unsuspecting individuals are kidnapped and subtly altered so that their personalities are permanently changed.

Illegal mind-jobs do occur in real life, but they are rare. Fortunately, while a person's emotional makeup can be radically altered, it has so far proved impossible to use mind-jobs to instill loyalty or to completely brainwash a subject. A hedonistic free-thinker can be turned into a grim fanatic, but those performing the mind-job would have no way to ensure they would be obeyed. In effect, a mind-job can cure or produce a wide variety of minor or major neuroses or psychoses. Though part of legitimate psychiatric care, mind-jobs have a bad reputation, and people often react negatively to anyone known to have had one.

Legal Mind-Job

Transformation Time: 1 week
Cost: 4,000cs

Illegal Mind-Job

Transformation Time: 1 week
Cost: 15,000cs or more

RESPIRATORY FILTER

This biomod allows the user to breathe highly polluted atmospheres and other contaminated air without harm, as long as sufficient oxygen is present and there are no corrosive compounds in the air. This biomod is fairly expensive and is generally only used by emergency

workers and others whose profession brings them into regular contact with contaminated atmospheres.

Transformation Time: 2 weeks
Cost: 9,000cs

MULTIGLANDS

This biomod gives the subject's endocrine system a greater range of response and provides the user full control over these responses. The subject controls the output of all hormones, like adrenaline and endorphins, and therefore can control key aspects of physiology, such as the fight-or-flight response and emotional state.

Proper use of this biomod requires extensive training, but it remains a very popular modification. It is used by a wide variety of individuals, including those in business looking for a way to out-perform their competition, mystics who wish to truly know their bodies, mercenaries and spies who want an extra edge, and jaded thrill-seekers who see it as a new way to get high.

This level of control allows the user to experience any emotion on demand, to prevent undesired emotions, to hallucinate, and to experience the full effects of most common recreational drugs at will. Multiglands also give users a permanent +1 bonus to Will, due to their chemical control over their mental states. Emotional control allows the user to experience the effects of the combat drugs described on page 134–135. Control over hormone production also allows the subject to effectively block pain, allowing the user to reduce all impairment penalties for injury by 1. Users of this biomod have such fine control over their mental state that they are excellent liars and receive a +2 bonus to Fast-Talk skill.

It is also possible to use multiglands to temporarily increase Awareness, Reflexes, Endurance, or Strength by 1. Increasing one or more characteristics takes 30 seconds of concentration, and no characteristic can be increased for longer than a number of minutes equal to 50 + (10 x Endurance). After users stop boosting their attributes, the characteristics to 1 below their normal level for a period roughly equal to the time they were boosted.

Transformation Time: 1 month
Cost: 17,000cs

SALT TOLERANCE

This specialized biomod is very popular on Poseidon and allows the user to drink salt water, safely eliminating the excess salt.

Transformation Time: 2 weeks
Cost: 5,000cs

IMPLANTED BIOMODS

Implanted biomods are modifications that are grown in the laboratory and then surgically implanted into the subject. Physiology requires that all implanted biomods must be grown specifically for each customer. Most implanted biomods involve a combined use of surgical alteration, tailored retro-viruses, and Long John therapy.

ELECTRO-MUSCULAR ANALOGS

Electro-muscular analogs, or myo-lecs, are muscles modified to generate electric current, much like many species of Terrestrial fishes. All cyberware too demanding to be powered by body heat is powered by myo-lecs. Note that though cyberware itself does not fatigue, using myo-lecs is as demanding of metabolic resources as normal muscles. Therefore, heavy use of myo-lec powered cyberware can quickly tire the user.

Specially designed myo-lecs can also be used as a defensive measure, much like taser weapons. Such defensive myo-lecs must be integrated with metallic discharge points imbedded in the skin, usually on the fingers or hands. Contact with the target must be clean, otherwise the user risks shocking himself as well. Use of such weapons underwater or in wet conditions is therefore dangerous. Most myo-lec defenses are only capable of stunning targets, though small organisms can be killed and unshielded electrical devices can be shorted out by the discharge. See the electrical shock damage rules on page 119.

Power Myo-lecs

Transformation Time: As per associated cyberware
Cost: Included in the price of associated cyberware

Defensive Lecs

Transformation Time: 2 weeks
Cost: 7,500cs

IMMUNOLOGICAL SYMBIOTE

One of the most common biomods is the immunological symbiote. A symbiote is simply a colony of artificial amoebas designed to reinforce an individual's immune and repair systems. Symbiotes are specific to an individual and non-transferable.

Symbiotes serve to enhance the host's immune system by devouring infectious organisms. Symbiotes also help keep their host healthy by scavenging cholesterol plaques from arteries, strengthening weakened blood vessels, destroying pre-cancerous cells, and speed healing by producing various chemicals that assist in cell regeneration.

Preparing a symbiote for a specific individual takes two or three days. An individual with a symbiote heals twice as fast as a normal person, and can expect a 25% increase in life span. Symbiotes

eliminate allergic reactions and asthma and make their host immune to cancer and most infectious diseases. The bonuses from having a symbiote are fully compatible with those from all other biomods. Symbiotes also give their hosts a +1 bonus to their Fitness score and increase their resistance to radiation damage.

Healing Time: Immediate
Cost: 10,000cs

SENSORY BIOMODS

Sensory biomods enhance and supplement a customer's natural senses, adding capabilities to the user's existing senses. Genetically modified sense organs function as normal organic systems, so extremely strong sensory stimuli can overload enhanced senses, rendering them temporarily useless. No permanent damage results unless the stimulus is strong enough to cause physical trauma.

AMPLIFIED HEARING

This biomod significantly enhances the subject's sense of hearing. It offers a +2 bonus to all hearing rolls.

Transformation Time: 3 weeks
Cost: 4,000cs

ECHOLOCATION

There are two kinds of biomod echolocation. Standard echo only functions underwater, with a range of about 30 meters. Improved echo may be used in both air and water. This improved variation has a range of 40 meters in air and 100 meters underwater.

With echolocation, users bounce ultrasonic pulses off of their surroundings, forming images of these surroundings by interpreting the echoes. Echolocation does not require light and cannot perceive color. However, echo can give the user information about the interiors of thin-walled objects. For example, the user can tell if a barrel is empty or full of water. The user is also capable of hearing other ultrasonic sounds such as those made by certain mechanical and electrical devices.

Individuals with this biomod have a slightly enlarged larynx for producing ultrasonics, and small bulges behind enlarged external ears to house modified inner ear structures. Echolocation allows the user to replace all close-range vision rolls with hearing rolls. Note that the amplified hearing biomod will not provide a further bonus to these hearing rolls.

Transformation Time: 3 weeks
Cost: 6,000cs for basic, 9,000 for improved

ENHANCED SMELL

This biomod gives the user a sense of smell equal to that of an average Terrestrial dog. The user can identify individuals by their scent, and can track by smell as long as the trail was made within the last several hours and has not been otherwise obscured. This biomod gives the user a +3 bonus to all chemical sense rolls.

Transformation Time: 3 weeks
Cost: 5,000cs

EXTRA SENSORY PERCEPTION ENHANCEMENT

Following the success of certain psychological experiments of the early 21st Century, researchers discovered that specific neuro-transmitters were associated with high levels of ESP activity. In 2068, in one of the first successful biomods, the US and British government developed a way to increase the ESP capacity of subjects by genetically boosting the levels of these neurotransmitters. The initial plans were for a secret corps of trained psychics who could pry information from the minds of their enemies and perform other such valuable psychic tricks. The reality was much less spectacular. This biomod, combined with months of specialized training makes subjects more empathic, but the traditional fictional powers of telepathy, telekinesis, and teleportation have proved to be fictions beyond the reach of science.

By 2081, both governments realized that the ESP program was unlikely to produce anything more than meager results. Both governments discontinued funding, and the program passed into the hands of a group of parapsychologists and experimental subjects who remained dedicated to exploring the mysteries of ESP. This group, called the Rhine Foundation, slowly continued its work, managing to find the funds to continue giving their most promising subjects the expensive modifications.

With the introduction of Long John 100 years later, the expense of the ESP biomod fell drastically, and its reliability was significantly improved. Now, the ESP biomod and the accompanying training is available to anyone who is willing to pay the Rhine Foundation for the service.

It is now known that the majority of ESP is simply the human brain combining unconsciously perceived sensory information, together with conscious knowledge and shrewd guesswork. This biomod increases the subject's intuition score by 2, without affecting his overall Awareness score.

After the biomod and the training have been completed subjects can:

Sense Imminent Danger
Subjects receive an intuition roll with a –5 penalty whenever they are about to walk into an immediately hostile or dangerous situation. The game moderator will make this roll and will only mention the result if the roll is successful. Normally, subjects will simply be aware that they are in imminent danger, but will have no clues as to the actual source of the danger. There is only one roll for any single event, so it is impossible to localize the threat.

Basic Empathy
Whenever the subject is trying to consciously sense how another person or animal is feeling, the game moderator will make a roll against the subject's Awareness. Success will give the user some insight into the target's state of mind. The higher the action value the more specific the insight, as determined by the game moderator. This ability only works on individuals who the user can clearly perceive. All rolls are final, regardless of the result. A subject may attempt to discover someone's emotional state again once it has changed, but they may not attempt to re-roll any failures.

Transformation Time: 2 weeks, and 4 months of intensive training
Cost: 30,000cs

NIGHT VISION
The user can see in low-light conditions as well as nocturnal predators. The user's pupils can be slit like a cat's, or just extremely variable in size. Night vision removes all vision penalties caused by poor lighting conditions. However, even night vision remains useless in complete darkness.

Transformation Time: 3 weeks
Cost: 5,000cs

TELESCOPIC VISION
This biomod gives the subject's eyes variable magnification up to 5X. Telescopic vision gives the user a +2 bonus on distance-hampered vision rolls.

Transformation Time: 3 weeks
Cost: 5,000cs

FULL-BODY BIOMODS
Full-body alterations can involve radical modifications to the entire anatomy and physiology of the subject. These changes are the most expensive and time consuming modifications. While the transformations can be set in motion rather quickly, it can take many weeks or months for the various cells and systems of the body to adapt and integrate the implanted tissues. Such changes often involve major discomfort, including severe aches in muscles and joints as the tissues alter. Transformations of this type usually involve extensive surgery and an extended stay in a modification lab. It can take up to six months for the body to fully heal and adapt, and several more for the subject to be fully adjusted to the changes.

All existing varieties of genies can now be produced as biomods. See page 170 for full descriptions of the common forms. These transformations are among the most common full-body biomods, since the risks and problems associated with these physical forms are well known. Many other full-body transformations are available, but transformation into radically different forms can be prohibitively expensive and may have unexpected side effects.

ACCELERATED NEURONS
Pilots, security personnel, athletes, criminals, and other "professionals" who rely on their reflexes to survive often opt for the accelerated neurons, or quick nerves, biomod to give them an edge. This modification enhances major neural pathways so that nerve impulses travel faster and with greater coordination. This modification does raise the metabolic energy demands of its recipients, requiring them to both eat and drink about 20% more than previously.

Modifications:

+1 Agility
+1 Dexterity
+1 Reflexes

Transformation Time: 2 months
Cost: 35,000cs

AQUAFORM
With modern biomods it is possible to transform adult humans into both types of aquaform. These modifications give the subject the same abilities as true genie aquaforms.

Divers (Diving Reflex Analogs)

Transformation Time: 4 months
Cost: 22,000cs

Squid (Systemic Osmoforms)
This transformation is both more time consuming and more expensive than the transformation into a diver, but is still popular on Poseidon.

Transformation Time: 5 months
Cost: 28,000cs

BODY SCULPTING

Body sculpting is the ultimate in plastic surgery. An ugly white man can become a beautiful oriental woman or an underweight wimp can become a muscle-bound bruiser. Most people use these transformations to become taller, thinner, or otherwise more beautiful. However, it is also possible to create body-types and forms which have never existed before and to mix and match the attributes of various racial groups and even various animal species. Changing facial features, weight, skin color, and other superficial features is quite easy and common, involving only minor modifications. Elaborate and drastic changes are more difficult, requiring major expense and considerable time.

Changes in height, especially reductions, require extensive surgery and retro-virus therapy. It is generally impossible to reduce height by more than 15cm or to increase it by more than 20cm. Similarly, changing a large person with a wide or heavy framed bone structure into a slight, narrow framed person also involves extensive surgery and viral therapy. The reverse is somewhat simpler to achieve but is still not easy.

There are also illegal uses for such transformations. If someone possesses a sample of an individual's genetic material, a bit of skin or a drop of blood, it is possible to transform another person into an almost exact duplicate of that individual. Using surgery and retro-virus therapy, the disguised individual can pass finger- and retinal-print scans, and with some practice can also pass voice analysis. In effect, the copy becomes physically identical to the original. The potential illegal uses for such transformations are obvious, and capturing or even detecting identity criminals can be very difficult. The only way to detect such a modification is to perform extensive genetic comparisons between the suspect individual and the original.

Basic Body Sculpture

This transformation can add or subtract a maximum of 2 levels to Presence. Other, more radical, cosmetic and anatomical modifications can have a variety of effects, bonuses, and penalties. If a player chooses to develop such a custom modification, its availability, function, and cost are at the discretion of the game moderator.

Transformation Time: 2 weeks to 3 months depending on the extent of the alterations
Cost: 5,000–55,000cs depending upon the degree of modification

Body Duplication

Cost: 70,000cs or more

GEO SHOCK TROOPER

Shock Troopers, or supertroopers, are the elite of the GEO Peacekeeping Force. Highly trained commandos, supertroopers have extensive genetic and cybernetic modifications, and the supertrooper transformation is severe and obvious. Supertroopers are heavy framed and tall, and they have a noticeable plastic sheen to their hairless skin. The transformation adds up to 40kg to their weight, much of which is obvious in their increased musculature.

Early model supertroopers, pre-Long John, were the products of extreme cybernetic modification and were often more machine than human. The modern supertrooper transformation involves biomods which increase muscle mass and efficiency, adding to strength and stamina. Alterations to metabolism help improve healing rate, and supplementary organs provide redundancy, reducing the effects of wounds and injury. The supertrooper modification also integrates various other biomods in the transformation. These integrated modifications are equivalent to an immunological symbiote, night vision, telescopic vision, amplified hearing, enhanced smell, improved blood oxygenation, respiratory filter, and accelerated neurons.

The supertrooper transformation also increases bone density, as tailored viruses cause bone tissues to deposit high-strength organic polymers in and around the existing skeleton. As a result, the bones of a supertrooper are effectively unbreakable. Supertroopers also have integrated dermal armor. Tissue grafts and viral infection transform their skin into a damage resistant organic polymer. This armored dermis is obviously not natural, nor as soft and flexible as ordinary skin. However, it provides natural armor with a rating of 2. Supertroopers assigned to Poseidon usually undergo additional modifications to give them the abilities of the diver aquaform. Note, however, that such modification will not further increase endurance, as supertroopers already have the improved blood oxygenation biomod.

Supertroopers are fitted with numerous cybernetic modifications as well. Spyware, an implant computer, the programmed reflexes implant, a GPS receiver, and a link-jack are common enhancements.

Supertrooper Modifications:

+2 Build
+2 Fitness
+1 Agility
+1 Dexterity
–1 Presence
+1 Reflexes

Transformation Time: 6 months
Cost: 500,000cs (available to select GEO personnel only)

HYBRIDS

While it is possible to transform someone into any variety of hybrid, this is done very rarely, since few people wish to voluntarily join their ranks. Many hybrids, however, have given into prejudice and have received biomods to turn them into "ordinary" humans. Such ex-hybrids are typically regarded with scorn by other hybrids.

Transformation Time: 4 months
Cost: 40,000cs

MYO-SKELETAL ENHANCEMENT

A limited, semi-legal version of the supertrooper conversion is available and is used by various government militaries, private security forces, and mercenary groups. Many criminals have taken advantage of its availability as well. Popularly known as "bruisers," recipients of this biomod are notably larger than ordinary humans. They receive the improved blood oxygenation biomod, and have the same nearly unbreakable bones as supertroopers. This transformation also adds up to 25kg to the recipient's mass.

Myo-Skeletal Enhancement Modifications:

+2 Build
+1 Fitness
–1 Presence
+1 Endurance

Transformation Time: 5 months
Cost: 150,000cs

SPACER

Many Martian and Earth-born individuals seeking their fortune in the depths of space or the rocks of the Belt undergo this transformation. Biomod spacers have the same abilities as true spacer genies.

Transformation Time: 3 months
Cost: 25,000cs

TRANSHUMAN

This transformation is very popular among those who can afford it. Biomod alphas have the same abilities as true transhumans.

Transformation Time: 1 month
Cost: 25,000cs

FUTURE HISTORY

CHAPTER 07

The world of **Blue Planet** is a complex setting rooted in a carefully drawn extrapolation of historical events and trends. Every effort has been made to seamlessly incorporate the fictional events and developments of the future into the fabric of Earth's present and past. Insofar as the world of **Blue Planet** is one possible future, it is the legacy of a developing human civilization that dates to the end of the last Ice Age.

For all practical purposes, though, the **Blue Planet** story begins in the last quarter of the 21st Century. In 2075, two astronomers discovered a wormhole on the remote edge of the Solar System. Three years later, a robotic probe traversed the wormhole and discovered a new star system on the other side, one with a habitable planet in its second orbit. This monumental discovery launched the Athena Project—the colonization of the waterworld, Poseidon—and irrevocably changed the course of human history.

THE ATHENA PROJECT

The Athena Project was born when the *Prometheus II* made its historic traverse of the wormhole in 2078. The colonization of the Solar System was already well under way through the combined efforts of several space programs, including NASA, the ESA, and the UNSA. The principal objective of the UNSA was a manned mission to Serpentis II, or Poseidon as the new planet was called.

The UNSA reached its goal two years later when *Argos 12* touched down on the surface of the distant world. The Argos astronauts found a planet that was, in most respects, perfectly suited to human habitation. Poseidon had a pristine oxygen-nitrogen atmosphere, temperate regions with a comfortable and stable climate, and a well-developed ecology. And yet, this world was not quite an Eden: its few landmasses accounted for only three percent of the planet's surface, and many of them were characterized by dangerous levels of tectonic activity; its cyclonic storms were monsters many times larger than Earth hurricanes; its two moons were capable of driving horrendous tides; and its complex ecology was hostile and savage.

Early in the six-week mission, field tests established that the genetic basis of life on Poseidon was fundamentally indistinguishable from that on Earth. The biospheres of both worlds were based on DNA. This meant that terrestrial plant and animal life could be successfully introduced to Poseidon, and human beings could survive on indigenous food sources. This implied that large-scale human colonization was feasible, as there would be no need to ship foodstuffs through the wormhole or terraform the topsoil for agriculture.

In 1996, evidence of ancient life on Mars was discovered in a meteorite that had fallen to Earth billions of years earlier. Seventeen years later, a rather primitive unicellular organism was discovered by an ESA probe on Europa, one of Jupiter's moons. Both discoveries fueled speculation on the possibility of the interplanetary dispersion of life. The discovery of DNA-based life on Poseidon 80 years later seemed to support these conjectures. Was it possible that a piece of Poseidon's crust, dislodged by some impact billions of years ago, could have traversed the wormhole and seeded life in the Solar System? The odds against such an event are astronomical.

When the returning *Argos 12* team landed at Delphi Station on Ceres and reported their discoveries, the future of humankind was changed forever. The results of the mission fueled a renaissance in the biosciences, but it also offered powerful motivation for a major colonization effort. The colonization of the Solar System was continuing unabated, but none of its planets were likely to ever support large human populations. They were simply too hostile, too unforgiving, and the technological infrastructure necessary was both demanding and expensive. This new world, however, was as well suited to human habitation as Earth, and did not share the legacy of environmental degradation that had driven humanity into space in the first place.

Within one month of *Argos 12*'s return, the UN General Assembly, in cooperation with several national governments, approved initial funding for the Athena Project, a five-year plan for the colonization of Poseidon. The UNSA contracted with Dundalk Shipbuilding for the construction of a massive, fusion-powered colony ship—at that time the largest, most technically sophisticated spacecraft ever built. In addition to transporting the colonists, their equipment, and their supplies through the wormhole, the ship's modular components would provide the colony's heavy infrastructure before full-scale industrial development could be initiated.

The UN mission planners also contracted with GenDiver, a little-known biotechnologies firm, to provide certain modifications for the Athena Project colonists. Though the techniques of that time were quite limited and prohibitively expensive, the UN hoped to provide the colonists with every advantage. This included a series of modifications that would enhance the colonists' overall strength and physical fitness. The colonists would be capable of extended strenuous activity, possessing highly developed, adaptive immune systems, a broadband resistance to a host of conventional ailments and diseases, and the ability to tolerate climatic extremes.

The colonists would also undergo more radical genetic and microsurgical modifications to adapt them to a semi-aquatic existence, adding broad versatility to their abilities. Colonists capable of tending and harvesting aquacultural facilities without technological assistance would be more

productive and would eliminate the need for an entire class of marine technology and equipment, along with the support personnel and parts needed to maintain it. The same advantages could be realized in crucial areas such as construction, field research, search and rescue, and exploration.

The Athena Project would create the first aquaforms: the first truly amphibious humans. The plans called for the development of two distinct variants, known technically as diving-reflex analogs and systemic osmoforms. Both variants received extensive restructuring of the extremities. Webbing was added to both hands and elongated feet to improve aquatic mobility. The aquaforms were given nictating membranes, sealing nostrils, thicker subcutaneous insulation, and a redesigned dermis resistant to prolonged exposure to salt water. The digestive systems of the aquaforms were also modified allowing for safe metabolism of saltwater. Finally, the aquaforms were given enhanced erythrocytes and myoglobin analogs, greatly improving the oxygenation of their blood and their aerobic performance.

Diving-reflex analogs, or divers, were modified to share many characteristics with marine mammals—collapsing respiratory systems, specialized nitrogen-absorbing tissues, and tailored enzymes that limit the elevation of dissolved nitrogen in the bloodstream. These modifications allow divers to operate safely at significant depths without danger of nitrogen narcosis. Divers are capable of holding their breath for close to an hour, and have depth limits restricted only by temperature, swimming speed, and oxygen debt.

Systemic osmoforms, or squid, were surgically implanted with true gills. These organs run from behind the ears to the middle of the back and are covered with layers of skin and muscle that seal tight when the body is not immersed in water. Like divers, squid also have collapsible respiratory systems, but have an effective depth limit of 500 meters, due to pressure effects on the metabolism of their gill systems.

Considering the limited genetic engineering techniques of the time, and their prohibitive expense, most of GenDiver's modifications were accomplished through sophisticated microsurgeries and hormone therapies. However, in spite of the cost of such an endeavor, one crucial genetic modification was performed upon the gonads of the colonists. The ova of females and spermatagonia of males were modified to include artificial genetic code that would pass genetic versions of their predominantly surgical aquaform modifications on to their offspring via the X chromosome. This level of genetic targeting and micromanipulation was but one of the hundreds of technological breakthroughs that characterized the Athena Project, and would, in itself, be considered Nobel Prize winning work. The colonization of the waterworld was to be facilitated tremendously by an elite group of native colonists who knew the planet and were ideally suited to life in its largely marine environments. This innovative technique assured the colony a continuing aquaform heritage, without financially crippling an already fiscally ambitious undertaking.

In 2082, the UNSA selected 5,000 candidates and 1,000 alternates from an estimated pool of more than 500,000 qualified applicants. Without exception, the candidates represented the highest echelon from all key professions —military personnel, professional astronauts, administrators, scientists, technicians, engineers, computer specialists, and medical professionals. The Athena Project's mission roster also included almost 500 genetically uplifted cetaceans. The cetaceans would exert a powerful influence on the development of the colony throughout its history.

In late 2085, construction was completed on the colony ship and it was christened the *UNSS Cousteau* in honor of the 20th Century pioneer in marine research and exploration. Hundreds of metric tons of supplies and equipment were loaded onboard the *Cousteau* during the following months. This equipment included three fusion-powered orbital landers capable of atmospheric flight, weather and communications satellites, surface and air vehicles, computer equipment, tons of light machine tools, construction and agricultural machinery, fully equipped, modular scientific laboratories, pharmaceutical supplies, medical equipment, and the habitation modules and cryogenic facilities required to support the colonists during their long voyage to Poseidon.

The cost to the United Nations of the initial phase of the Athena Project was enormous. The massive sums of money injected into vital sectors of the global economy, including genetics, pharmaceuticals, heavy industry, manufacturing, and construction, resulted in a period of unparalleled global economic growth, but was accompanied by spiraling inflation and interest rates. When preparations for the colonization effort were completed, the resulting shock to the global economy caused an immediate and severe recession, as markets vanished, prices plummeted, and industrial enterprises were compelled to lay off millions of employees in desperate downsizing efforts.

Many historians argue that the Athena Project's incredible drain on world resources and disruption of global economic stability was largely responsible for the failure of world governments to contain and control the devastation wrought by the Fischer Virus in the early years of the Blight. Others argue that, without the countless spinoff technologies introduced by the Athena Project, especially biotechnology, the Blight might not have been defeated at all.

On May 19, 2086, the *Cousteau* left Earth orbit and accelerated toward the wormhole. When the ship arrived in orbit around Poseidon on December 12, it truly did mark the beginning of a new era for the Athena Project colonists. Approximately 100 colonists were revived from cold sleep, primarily astronauts, administrators, and medical personnel. For almost three weeks, the crew made detailed surveys of the planet from orbit, identified a site for the first colonial settlement, ran computer simulations of the colonization plan, and prepared for planetfall. On January 3, 2087, the *Calypso*, one of the *Cousteau*'s landers, splashed down in the blue waters of the new world.

In the months that followed, tons of equipment, modular structures, and the remainder of the colonists, most still in their coolers, were transported to the planet's surface. Most of the colonists' energies were devoted to the initial construction of Haven, the first colonial settlement. The construction of Haven on an islet off the coast of Argos Island in the Pacifica Archipelago was a massive undertaking: buildings were raised, biocrete roadways were laid, water and sewage systems were constructed, communications networks were established, piers and breakwaters were built, agricultural projects were initiated, and solar-powered hydrogen-cracking facilities were put into place. The project tested the colonists' extensive training and determination, as well as the most sophisticated technological resources ever assembled by human beings.

The building of Haven also tested the colonists' ability to cooperate and work together. The Athena Project mission planners back on Earth had been understandably concerned about the emergence of factions and political infighting during the early stages of the colonization effort. The problem was complicated by the fact that many of the colonists, a cross-section of Earth's technical and scientific elite, were often used to a great deal of personal independence and autonomy in their professional pursuits. The success of the Athena Project, however, was entirely dependent upon the colonists' ability to cooperate and organize their efforts efficiently.

Ultimately, the mission planners' fears proved to be misplaced. For the colonists, the Athena Project had gained a significance—an almost palpable presence—far greater and more powerful than any one individual. As soldiers are united by a common bond of camaraderie in time of war, so were the colonists drawn together in this historical endeavor. The administrators and logisticians handed down assignments, and the colonists implemented them as quickly, professionally, and efficiently as they were capable. A magnificent but often implacable adversary, Poseidon offered endless challenges, and the Athena colonists faced each one together.

Though the construction of Haven was an ongoing project, it eventually reached a threshold when the settlement became self-sufficient. At this point, the colonists were free to turn their attention to other efforts, most notably the exploration and scientific investigation of their new world. Systematic studies of the planet's climate and weather, tectonic activity, and ecology were launched. The planet's surface was thoroughly mapped from orbit, and exploratory missions were dispatched to several of the waterworld's major landmasses and archipelagos. Robotic research submersibles with sophisticated sonar-mapping technology were launched to begin charting the hidden terrain of the deep-ocean floor.

The colonists also attended to the necessities of procreation, a challenge that was all the more complex because of its emotional and political sensitivity. Marriage, while not unheard of, was somewhat uncommon in the early years of the colonization effort, a cultural trait that would continue throughout the history of the colony. The fact was, the colony's cooperative ethic tended to emphasize professional relationships, often at the expense of more traditional, personal ones. Thus, colonists tended to spend the vast majority of their time, and develop the closest personal relationships, with those with whom they shared their specific tasks and projects. This often resulted in whole groups of colonists developing very strong personal ties, rather than individual couples. As a result, procreation in the earliest days of the Athena Project was usually the result of very open, informal pairings or was accomplished through the in-vitro fertilization of frozen embryos brought from Earth. This medical technology was largely responsible for the colony's ability to sustain itself without developing a politically unstable reproductive "division of labor."

PROMETHEUS II RETURNS
Wormhole Described as "Shortcut to the Stars"

CommCore/TimesNet News Archive/Science and Technology/03.13.78 — Over the past three years, people the world over have been following the unfolding drama of the space-time wormhole that was discovered in the outer Solar System billions of kilometers from Earth. Dr. Josef Ben-Gurion, the Nobel Prize–winning physicist who leads the UN Space Agency team charged with investigating this remarkable phenomenon, claims that the wormhole was created during the first second of the Big Bang, the cosmic explosion that marks the birth of our universe.

"In the early 20th Century," Ben-Gurion explains, "Albert Einstein constructed a mathematical model of the geometry and topology of four dimensional spacetime on large, cosmological scales. At very small, submicroscopic scales, the domain of quantum mechanics, this topology is in constant flux, a 'quantum foam' of violent particle fluctuations. At these ultra-small scales, the topology of space-time is riddled with wormholes, most of them so small and short-lived that we could never identify them. However, in the earliest moments of the universe, quantum black holes with incredibly small masses are created. The gravitational forces of these black holes 'squeeze' the nearby vacuum and create a zone of negative energy capable of stabilizing a primordial wormhole. We believe it is this process that explains the Masters-Vishenko wormhole that was discovered in the outer Solar System."

The wormhole was first detected when the effects of its gravitational forces on the trajectories of comets from the Oort cloud were analyzed by two astronomers, John Masters and Yuri Vishenko, three years ago. In January of 2075, Masters and Vishenko published a paper in *Physical Review Letters*, a reputable scientific journal, which presented evidence for a massive, non-luminous object approximately 783.17 Astronomical Units (AU) from the Sun. One AU is the mean distance between the Sun and the Earth, or 149,597,870 kilometers. By comparison, Pluto, the outermost planet of the Solar System, is a mere 39.44 AU from the Sun. At that time, popular explanations for this

The care and raising of the colonists' children, of course, was a far more formidable challenge, one that could not be circumvented by technological resources. Ultimately, the colonists approached this challenge as they did all others—through cooperation. From the earliest days of the colony, the care and education of children was a collective responsibility. At first, this was accomplished primarily through a voluntary program whereby groups of two or more colonists would apply together to adopt a child that had been conceived in the medical labs of Haven. Without exception, there were always far more qualified applicants than there were available children. Quite often, this program was supplemented by the far less formal efforts of some groups of colonists. For example, a woman that was part of a field research team cataloging the flora and fauna of an island archipelago would bear a child, and the rest of the team would then shoulder the responsibility for the child's care and upbringing. In the years that followed, as new settlements were founded across the planet, this responsibility became a communal one shared by all members of a settlement.

The founding of the Athena Project colony marked the greatest technological accomplishment in human history and represented the historical peak in the United Nation's power to harness the technological, economic, industrial, and human resources of the entire world. And, if a global population can truly be said to share a common morale, it too had soared to new heights. For all the mistakes human beings had made in their history —the wars, the injustices born of human greed and intolerance, the wholesale destruction of the environment that followed humanity's rise to technological maturity—the species seemed poised on the threshold of a new era. If human beings could build a home for themselves under the light of an alien sun, it seemed there was nothing that could not be accomplished.

The reality of Earth's future, of course, was to prove far less utopian than the optimistic visions of the late 2080s. Already, the gene engineers at Fischer Foods were beginning the development of a new virus designed to protect rice crops from a variety of troublesome parasitic infestations. Less than five years later, the Fischer Virus would be loosed in the Mekong Delta, and humanity's greatest achievement would be overshadowed by the specter of imminent extinction.

THE BLIGHT

In 2088, the Vietnamese government contracted with a US agricultural science and biotechnology corporation, Fischer Foods, for the design of an effective viral counteragent for parasitic fungal infections threatening rice crops in the Mekong Delta. In 2090, this tailored virus was released into the environment, and the course of human civilization was changed forever.

The first catastrophic crop failures occurred in southern Laos and northwestern Kampuchea. Upon discovery, scientists with the UN Food and Agricultural Organization named the unknown disease the Mekong Rice Blight. Within days, international teams of scientists ranged the field in search of samples, while others desperately sought to positively identify the blight and its origins.

Had Fischer Foods stepped forward, admitted responsibility, and disclosed its research and technical data to the FAO, it is possible that the Blight may have been contained in Southeast Asia. However, fearing that it would collapse under the economic weight of the inevitable legal actions, Fischer chose to cover up its involvement and even interfered with the early collection of field data.

As a result, it was a full 14 months before Meing Xu Yuen, an FAO microbiologist, isolated the original Fischer trial strain. When the origin of the virus became widely publicized, Fischer was forced to cease operations and file for bankruptcy protection in the United States. The corporation continued to deny any involvement. Tragically, the virus proved too mutagenic to combat with standard means and the crucial early efforts to contain the disease failed. Within a few short years, no region of the world would remain uninfected by the virus.

The Fischer Blight was brought to reign in 2116 and fully eradicated by 2120. Rumors abound of samples kept in government storage, of original samples taken in the field by the United Islamic Republic, India, China, or the current specter of the hour. In the subsequent 80 years, the Earth has followed the slow road to recovery, one step at a time. In 2090, just before the Blight struck, the world population had risen to approximately 10.5 billion. By 2120, it had fallen to 4.8 billion, a figure that last matched the world population in 1986. Since 2120, the population has increased slowly, under strict GEO regulations limiting the number of children per family in member nations to two.

EUROPE

The European Community lost approximately half of its inhabitants during the course of the Blight Years, and given this region's relatively low birth rates, has been slower to recover than the rest of the world. While some in Europe, as in North America, remained relatively untouched by mass-starvation, few escaped the national and ethnic conflicts that flared back to life in the struggle to acquire and retain foodstuffs. As many as two-thirds of the deaths that occurred in Europe between 2090 and 2120 have been attributed to violence.

phenomenon in the tabloids and CommCore newsgroups ranged from black holes to alien spacecraft. Scientists were quick to point out that none of these sensationalist hypotheses at all matched the data that Masters, Vishenko, and other astronomers had collected.

In February of 2076, after analyzing data collected from the Gravity Wave Array, a network of incredibly sophisticated deep-space satellites capable of detecting disturbances in a gravitational field, Dr. Ben-Gurion and his team at the UNSA suggested that the phenomenon could be a stable "Lorentzian wormhole." The team claimed that this was, so far, among the few hypotheses that could satisfactorily explain all of the observational evidence accumulated.

Early the following year, a fusion-powered probe, the most sophisticated uncrewed spacecraft of its day, was designed by the aerospace engineers at the Jet Propulsion Laboratory and launched by the UNSA. After nearly a year of travel at speeds approximately 1.5% that of light, the *Prometheus II* reached the source of the anomalous gravity waves and began transmitting data back to Earth. At this distance, it took these radio signals traveling at the speed of light more than four days to reach the World Space Center in Earth orbit. Ben-Gurion's team concluded that this data could be satisfactorily reconciled with the current theoretical models of space-time wormholes.

As expected, optical imaging of the wormhole opening itself proved very difficult. From high-resolution video footage collected by the *Prometheus*, the wormhole appeared to be a featureless, black sphere approximately 13.8 kilometers in diameter, only vaguely identifiable against the background starlight. Scientists claim that the visible phenomenon recorded by the probe is actually the aperture of the wormhole, only one part of the entire structure. The sphere is a kind of three-dimensional cross-section of a four-dimensional flaw in the fabric of space-time. While the wormhole is a region of very high space-time curvature with strong gravitational forces, the *Prometheus* discovered that these tidal forces fell to levels at the object's center that might permit the passage of a spacecraft.

Once the *Prometheus II* completed its initial data collection, UNSA controllers initiated the next phase of the mission. Last week, on November 25, 2078, at 9:43 Greenwich Mean Time, the *Prometheus II* accelerated into the center of the black sphere. The probe was programmed to transmit a continuous signal during its voyage through the space-time tunnel, but the signal was lost as it entered the mouth of the wormhole. This was, again, as scientists had expected—it was predicted that the intense electromagnetic fields within the aperture of the wormhole would make the transmission of any electronic signal impossible.

After five days of interminable waiting, the UNSA mission team received the first signals from the returned *Prometheus*. The probe had exited the wormhole on the fringe of the Lambda Serpentis System, some 35 light-years distant from Earth. After a full 24 hours, during which its sophisticated sensor arrays dutifully collected extensive data on this far-away star system, the *Prometheus* returned through the wormhole to the outer Solar System. At a press conference from the World Space Center yesterday, an excited and animated Dr. Ben-Gurion, surrounded by his colleagues, made the following announcement.

"On March 8, 2078, the *Prometheus II* mission team at the World Space Center began receiving data transmissions from the probe, which had been sent through the Masters-Vishenko wormhole five days previously. After careful analysis of the data, we have concluded that the wormhole links our own Solar System with the Lambda Serpentis System, approximately 35 light-years away. It does not appear that the traverse has damaged the probe in any way. Among the extensive data collected by the *Prometheus* is strong evidence for an Earth-like world in the second planetary orbit of Serpentis. We are told that the UN Security Council is meeting to formulate a response to this monumental discovery, which we at the World Space Center believe will have a dramatic impact on the course of human history. Against all improbability, humankind has discovered a shortcut to the stars."

The political face of Europe proper would no longer be recognizable to anyone born before the Blight. Bosnia, Croatia, France, Herzegovinia, Italy, Russia, Spain, and Turkey no longer exist. Many of these countries have fallen into anarchy, while the rest are warded by the GEO and a collection of Incorporate states.

Of the vestigial nation-states that survived, only Germany, the Scandinavian nations, Switzerland, and the United Kingdom remain relatively unchanged, though severely depopulated. The badlands that the Balkan peninsula has become still regularly flares into armed conflict, either with the GEO, or more often, among the ethnic groups that refuse to come to peaceful terms. While overall less violent, the cities of Italy have returned to almost medieval ways, shutting their gates at night and manning the walls, waiting for the coming of dawn. The Low Countries literally lost ground to the invading North Sea when their dikes were breached through terrorist sabotage. Of all of Europe, only Iceland remained untouched by violence during the Blight Years.

To the north, Russia is no longer a threat to China, Europe, or anyone else. Reeling from the disintegration of the USSR, Russia managed to survive and begin to rebuild itself in the early 21st Century, as many nations supported her in hopes of containing the growing power of the United Islamic Republic. Russia did not, however, have the necessary resources or infrastructure to survive the Blight. The first to second the Emergency Resolution that placed the UN and the rest of the world under GEO control, Russia suffered horrendous losses during the Blight Years, as entire cities were wiped out when crops failed and winter set in. Once the Fischer Virus had been eliminated, the Russians began stoically rebuilding with GEO support, though they have not yet forgiven their once-enemies-turned-allies, the United States, for President Thomas Kesslar's refusal of their pleas for emergency aid.

Balkan Europe suffered similarly, though to a somewhat lesser degree than did Russia, primarily because the political instability in the region had never settled into a state of peace, and the rationing of resources had long been a fact of life. The citizens of these states were among the best prepared to deal with the famines and the first Westerners to employ slash-and-burn tactics to combat the spread of the virus. Despite these measures, the Balkans look like the warzone they have been, on and off, for the last 200 years. The corpses of hamlets line roads pocked with craters, feral dogs prowl abandoned cities in packs, and bandit gangs prey on the weak and vulnerable. The horror of unending war has already eclipsed memories of the Blight.

THE AMERICAS

Of the inhabited continents, the Americas numbered among the least affected by the Fischer Blight. Only Australia/Oceania suffered less direct losses. However, even with only a 35% population loss, 760 million North and South Americans died during the 30-year outbreak.

Mexico, Central America, and the Caribbean were hit the hardest when the US stopped exporting food. Long an unstable region, governments from Havana to Santo Domingo to Panama collapsed, as 143 million people perished. Puerto Rico was quickly granted statehood and support from the US in 2095, and much of the former Haiti and Dominican Republic are governed by the Morris-Reynolds Incorporate city-state at Port-au-Prince.

Despite the United States' xenophobic response to the Blight, 185 million US citizens died, most of them as the result of the anarchy, violence, and ethnic unrest that washed through America's cities in the wake of the famine. Canada and Quebec, which became separate states in 2014 then reunited in 2096, escaped much of the devastation, losing only 54.2 and 31 million, respectively. Of all the nations of North and South America, Canada was also the least affected by social chaos and violence.

In South America, the Blight hit the nations east of the Andes the hardest, decimating the agricultural industries of Argentina, Brazil, and Uruguay. Colombia, with the exception of the Biogene city-state at El Dorado, drowned in a tidal wave of anarchy and violence. Chile escaped the brunt of the destruction only through mobilization of the Chilean Army, which managed to save several non-infected crops through the use of slash-and-burn tactics. Relief efforts, primarily from the Catholic Church, buoyed the desperate battle against the Blight, and are probably all that kept much of South America from utter annihilation. Nevertheless, approximately 350 million South Americans perished during the Blight Years.

Since the end of the Blight, most of the Americas have rebounded with vigor. The United States and Canada have established colonies in the Solar System, and both have a growing presence on Poseidon. Chile retains its Independent status, while Ecuador and Bolivia have led GEO agricultural production in South America. Mexico, Central America, and the Caribbean number among the poorest of the GEO's wards, and guerrilla fighting breaks out often throughout Central America, though the GEO does maintain a strong force in Panama to protect the canal.

In the aftermath of this announcement, speculation and conjecture are rampant in both scientific and popular forums. A poll conducted by TimesNet indicates that 73% of the public believes the wormhole is an artifact created by an advanced extraterrestrial intelligence.

"The scientific community is scrambling for a way to explain the wormhole, but the fact is, it's just extremely improbable that it is a naturally occurring phenomenon," said Dr. Michael Wang, a SETI astronomer. "It is true that we have strong evidence for the existence of primordial wormholes, but it is just too much of a coincidence to find a stable one linking two star systems with life-supporting worlds. We also have no satisfactory explanation for the size of the object or the stable distribution of mass and relative velocity between its ends. It was demonstrated in the late 20th Century that a sufficiently advanced technology might be capable of constructing a traversable wormhole, and I think it's pretty clear that this has now been verified."

While current models of quantum gravity suggest that a primordial wormhole would have been initially stabilized at a very small mass-scale, the wormhole's mass would increase as it swallows matter from the dense vacuum of the early universe. However, just as an end of the wormhole would gain mass as it swallows matter, the other end would lose mass as it ejects the matter swallowed by its counterpart. Scientists have expected that the end of a primordial wormhole positioned in a region of space with a lower matter density than the other might have continued to lose mass until it eventually became characterized by a negative value. Astronomers have been searching for such "gravitational negamasses" for more than 80 years, and several likely candidates have been discovered in the galactic halo that surrounds the Milky Way.

Scientists have also suggested that it is very improbable that the two ends of a primordial wormhole would have had a similar history of relativistic velocity. The cosmic explosion at the birth of our universe began an inflationary period in which all matter in the universe is propelled outward. We can detect the immense velocities with which distant galax-

ies are moving away from our own because of the way that light from these galaxies is redshifted by their relative velocity, a kind of cosmic "Doppler effect."

The two ends of a primordial wormhole, it is claimed, would have been hurled away from each other at relativistic speeds by the early expansion of the universe. The implications of this possibility are enormous: due to the effects of time dilation, the two ends of the wormhole would connect not just two different points in space, but two different points in time. One could travel one direction through the wormhole into the future, and the other direction into the past.

Other scientists argue that this possibility is simply irrelevant in the case of the Masters-Vishenko wormhole. The two ends of the wormhole are so close together that it is unlikely they would have experienced a history of relativistic velocity. Additionally, because a traversable "time tunnel" would likely permit gross violations of causality, the principle which requires that a cause precede its effect, our current models of quantum gravity suggest that vacuum fluctuations in the mouth of a wormhole would begin to build at the "Cauchy horizon," the point at which the wormhole's geometry became "timelike." These fluctuations would quickly destabilize the wormhole, causing it to collapse before any enterprising humans could use it as a time machine. In other words, physicists claim, we could only hope to discover a traversable wormhole the ends of which had not experienced a divergent history of relativistic velocity. In any case, they insist, whether created by superaliens or the quantum forge of the Big Bang, the Masters-Vishenko wormhole certainly does not permit any kind of time travel.

While scientists at the UNSA and around the world have hailed the discovery of the wormhole as an unparalleled opportunity to improve our understanding of the universe, public opinion, it seems, is less willing to accept a natural explanation of the wormhole's origin. It is being widely hailed as conclusive evidence of alien visitations to Earth and used in support of claims ranging from UFO sightings, to crop circles, to livestock

AFRICA AND THE MIDDLE EAST

The Blight was most severe in sub-Saharan Africa, where it destroyed countless species of grasses, grains, and fibrous plants. While the destruction of their agricultural resources crippled many countries beyond recovery, others, like Zimbabwe and South Africa, rode out the Blight through the judicious management of their natural resources. In 2199, the nations of the "New Africa" boast the highest per-capita income growth rate in the world, as they have parleyed their natural wealth into technological and industrial development.

At the same time the New Africa began its rise to prominence, much of the rest of the continent descended into chaos. When the Blight wiped out the crops of the coastal nations along the Gulf of Guinea, they too tried to utilize their resources to trade for food and Western medical support. Their efforts failed, however, and when civil war broke out in Niger in 2107, then quickly spread to neighboring countries, most of the world wrote western Africa off the map. In the wake of the Blight, the resources necessary to maintain extended conflict were unavailable, and a constant state of low-to-mid-level conflict remained characteristic of the region throughout the century. The instability further hampered GEO efforts to control the Blight, and the region has yet to fully recover from the combined devastation of war, poverty, famine, and plague.

The Mediterranean African nations suffered acutely under the lash of the Blight. Libya, for years losing a battle with the Sahara, had essentially ceased to exist as a political entity when its economy collapsed after the exhaustion of its petroleum reserves in 2056. The Nile river valley suffered greatly, as the Fischer Virus devastated its primary cash crops of cotton and rice. Egypt, Sudan, and Ethiopia suffered immense losses, in terms of both life and exportable trade crops. The UIR, the dominant economic power in the region, had long-standing trading relationships with these nations, but the countries of North Africa found themselves with very little to offer.

The hybrids on their reservation in Tanzania were threatened with immediate extinction when the Blight spread to central Africa. Shunned by its neighbors, some of them prosperous members of the New Africa, and with dwindling support from the UN, the hybrids pledged their support to the newly formed GEO and volunteered for military service with the Peacekeeping Force. In the course of their service and dedication, the hybrids became symbolic of the GEO's efforts to combat the Blight. In 2176, over 95% of the hybrid population participated in a GEO-sponsored colonization effort on Poseidon. In 2199, the reservation has been abandoned and control has reverted to the GEO.

Several Middle Eastern nations, long used to being able to trade for and import foods as necessary, have faded back into the desert sands. Others, such as Syria and Jordan, were peacefully annexed by the United Islamic Republic. The UIR was remarkably successful in protecting the fertile lowlands along the Tigris and Euphrates, and was among the most successful nations on Earth in its technological mobilization of alternatives to grain crops in agricultural production. In 2199, the UIR, which stretches from Palestine to Afghanistan, from Kazakhstan to the Persian Gulf, is one of the wealthiest and most powerful Independent nations of Earth.

ASIA

While 639 million died in Africa and nearly 680 million in Europe, the Blight's devastation of Asia was more extreme than in any other region of the world. With almost 3.5 billion dead, entire Asian peoples ceased to exist. The suffering caused by famine was exacerbated by the Second Indo-Chinese War. In 2101, Chinese forces invaded India and Pakistan when the Chinese government claimed that it had uncovered "irrefutable evidence" that the Blight had been caused by a virus designed at a biological warfare facility in Jaipur. The violence quickly spread when the opportunistic UIR moved forces into neighboring Afghanistan. The protracted conflict continued until the summer of 2118, as none of the participants were able to mobilize the necessary resources to force a satisfactory conclusion. Just two years later, in 2120, violence would flare up again, as China annexed the Korean and Indochinese peninsulas. Chinese forces appeared to be massing in Burma for another attack on India, but were withdrawn when both India and the GEO threatened nuclear retaliation should the Chinese cross the border.

In the aftermath of the Blight, the Chinese have tinted their expansionism with a return to traditional insular, almost xenophobic, attitudes. Closing the borders to foreign influence and trade, save for access through designated ports such as Hong Kong and Guangzhou, China in 2199 echoes 18th and 19th Century attitudes toward Western foreigners—keep them out. Political and military tensions in the "Asian Triangle" formed by the UIR, India, and China continue to be higher than those in Central Europe during the Cold War of the 20th Century.

AUSTRALIA AND OCEANIA

Australia is among those nations that failed to survive the Blight Years. The aborigines have largely faded into the Outback, and the English cities clinging to the coasts of New South Wales and Western Australia have either perished, been reorganized under GEO or Incorporate governments, or survive on the treacherous margins of the Free Zones.

mutilations. Conspiracy theorists argue that governments and space agencies have known about the wormhole for years, and that they've been withholding this knowledge from the public, and people from all over the globe have reported "close encounters" with the creators of the wormhole.

"The Space Lords came to me and told me it was time for us, for all humankind, to take our place among the star-spanning civilizations," said Steve Dickens of Olympia, Washington. "They explained that they sent a telepathic message to Masters and Vishenko, telling them to 'follow the comets to the stargate.' I sensed that they were infinitely wise and powerful, supremely benevolent. I believe they are angels."

This kind of "ET hysteria" is sweeping the globe, as humanity lifts its eyes in collective awe to the stars. In the coming years, we expect to discover once and for all if the wormhole is an artifact of some hyperadvanced civilization, or simply one more surprise sprung on us by a very old and remarkable universe.

By the time the Fischer Blight crossed the South China Sea into the East Indies, the island nations had prepared for the worst. The Blight faltered, however, and never reached the level of lethality in the Pacific Islands that it attained on the mainland. Scientists have even speculated that some unidentified, natural competitor may have slowed and weakened the virus. In any event, while Oceania suffered the least of any region on Earth, on a relative level, their losses equaled those in Asia—nearly one person in two died as a result of the Blight. In some cases, entire islands were depopulated during the 30-year pandemic. Since then, the Pacific Island nations have slowly returned to normal. The GEO has stepped in to fill the roles of departed French and British protectors, and the United States provides what assistance it can to its remaining territories.

ANTARCTICA

Antarctica is the only continent of Earth that was unaffected by the Blight, and then only because the scientific community there was evacuated in 2098. Though research stations have been reestablished on Antarctica, no project on the scale of the SnowDome experiment of the 21st Century currently exists. On the whole, the continent has been abandoned.

EARTH ORBIT

Like Antarctica, Earth Orbit was largely spared from the Blight because most of its residents were evacuated to Earth or Luna. A few stations were able to continue operations, either because their hydroponic gardens made them self-sufficient or through trade with Luna. However, while more than 75% of Earth's space stations were abandoned during the Blight, all of them remained intact and most were fully repopulated by 2150.

LUNA, MARS COLONY, AND THE ASTEROID BELT

Unable to spare food shipments planetside, the several million residents of Earth's Moon looked on in horror at the devastation caused by the Fischer Blight. Unwilling to expose themselves to infection from the virus, the residents of Ibrium City declared the Earth quarantined and denied entry to any ship or cargo hailing from Earth during the crisis. Moon-grown plants, seed stock, and replicated DNA allowed for the preservation and reintroduction to Earth of several varieties of grains, grasses, and fibers eradicated by the Blight. African cottons and several species of rice would have been lost without the Moon's support efforts.

Mars Colony, still struggling when the Blight hit, suffered immensely during the Blight Years. Following the Moon's quarantine of Earth, Mars reluctantly followed suit. As many of the shipments destined for Mars were routed through Luna, the people of Mars Colony didn't have much choice but to follow Luna's lead. For several years, food shortages resulted in forced rationing as Luna assumed Mars' resupply burden and continued railgunning foodstuffs to the colony.

Driven by the need for resources that Earth could no longer provide, daring Martian settlers set out into the asteroid belt in the early years of the 22nd Century. These colonies have prospered and grown so that their population of five million is almost equal to that of Mars itself.

THE DEATH TOLL

The Blight killed more than 5.4 billion of an estimated 10.5 billion people before being controlled in 2126. One person in two died as a direct result of famine or the plague and violence that it left in its wake. Geographically, the Blight hit Asia and Africa the hardest, though no inhabited regions escaped its impact.

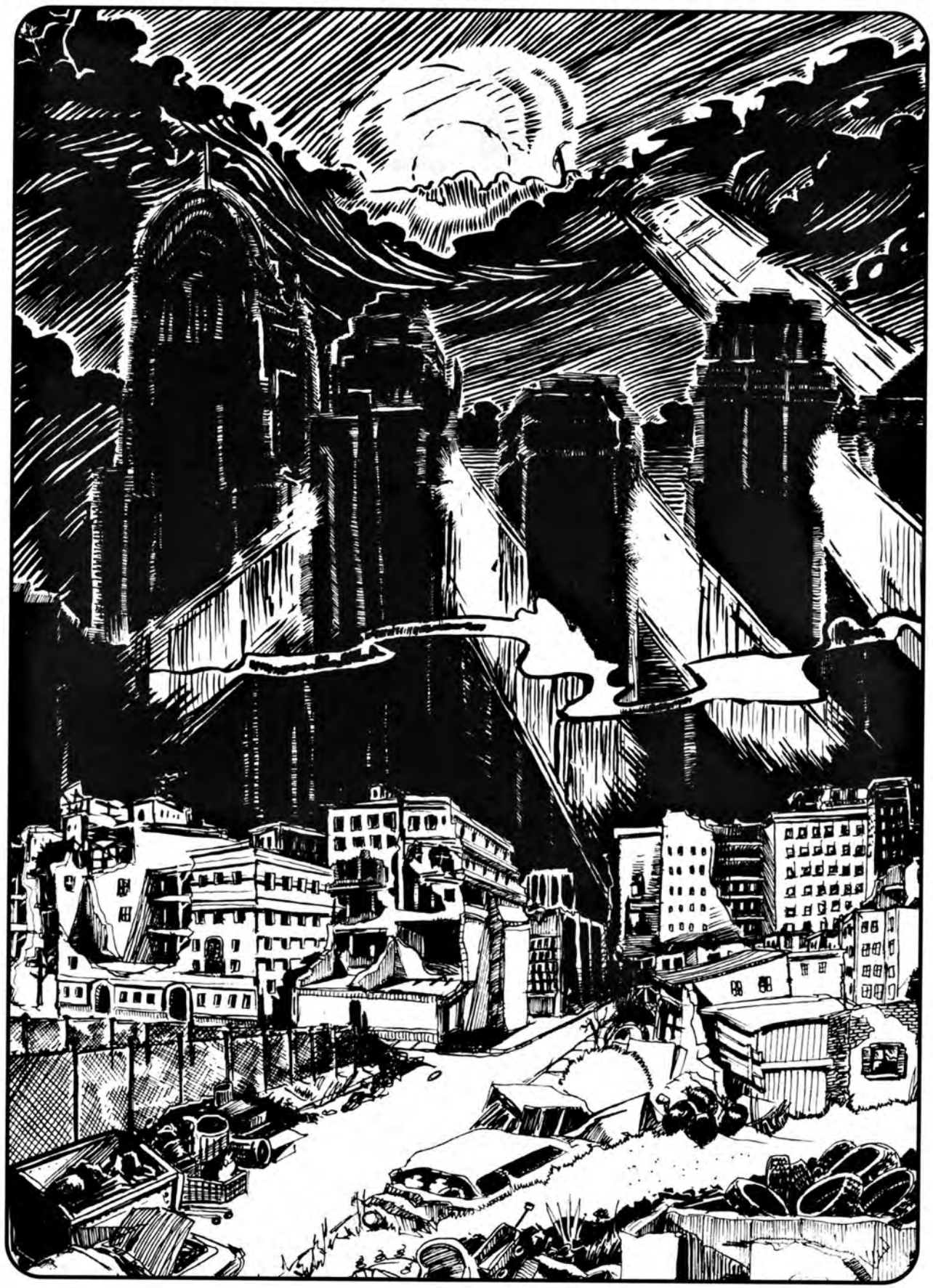
ESTIMATED DEATH TOLLS

CONTINENT (% of World Pop.)	VICTIMS (Millions)
Africa (12.1%)	639.85
Asia (60.7%)	3489.06
Europe (13.1%)	679.62
N. America (8.1%)	285.97
S. America (5.8%)	309.13
Oceania (.5%)	25.08

THE GLOBAL ECOLOGY ORGANIZATION

In the face of the devastation already wrought by the early stages of the Blight, no one questioned the urgency with which humanity needed to respond to the looming threat. British Prime Minister Marilyn Brown's speech in 2093 with which she brought UN Emergency Resolution 24072093.4c to a vote painted a grim picture of humanity's eventual extinction unless the "peoples of the Earth united to defeat the virus." In the face of such danger, nearly every member nation of the UN voted in favor of ER4c and placed their full scientific resources at the disposal of the UN and the newly created Global Ecology Organization.

By 2100, famine was widespread throughout much of the Earth. In a desperate act intended to focus efforts to combat the Blight, the UN Security Council voted to subordinate all UN resources and agencies to the UNGEO. The seven-year transition from UNGEO to



SHOOTING THE HOLE

The wormhole may make travel to a distant solar system possible, but it does not make the journey itself quick, comfortable, or fail-safe. Travel to and from Poseidon as a human passenger is expensive, difficult, and dependent on advanced medical technology. Whether aboard a government or Incorporate transport, passengers go through an extensive ordeal to make the trip.

Simply booking passage is not an easy process. The expense is prohibitive for all but the most wealthy, or the most desperate, in which case the trip is almost always one way. Most passengers travel as dependents of either the Incorporate or the GEO and are either bound for specific colonial efforts or Incorporate projects. Therefore, passengers are usually part of the manifest of specific flights, and their travel arrangements are managed by their parent organizations.

Still, if a desperate person can find the resources to book passage, they can try to make travel arrangements in several ways. Unused space on government or Incorporate flights can often be purchased, and though this is the most dependable option, it is also the most expensive.

Significantly less expensive, but decidedly more dubious, are the various private, part time, and fly-by-night runs on which passage is available—cargo haulers on light trips, independent crews with junk ships, and other unreliable sorts. With space travel, as with most other things, customers get what they pay for. On the Incorporate and government vessels, the ships, equipment, medical techs, and flight crews are usually well maintained and well trained. On the independents, they are not.

The independent crews are made up of those unfit and therefore unable to crew on better ships, and the service they provide can be dangerous. The ships and crews are bad enough, but the so-called medtechs that operate the cold sleep capsules, and the hypothermic equipment itself, are usually the most immediate danger. Obsolete, worn out,

GEO, from administrative overseer and enforcer of UN-sanctioned orders to the governing body of a united Earth, spurred a flurry of dissent among several of the old-world powers.

Many of these nations maintained ties to the GEO's scientific teams and coordinated efforts, while others ignored the Blight or worked wholly on their own. The resultant seven years of duplicated efforts and competition for scientific and economic resources gave the Blight time to mutate from a rice-specific disease into a variety of strains that attacked most members of the grain family. These reservoir-transmitted strains subsequently gave rise to aerosol forms that spread worldwide within two years.

GEO PROTECTORATES AND INDEPENDENTS

In an attempt to accommodate the dissenting nations, as well as other nations that were not UN members at the time of the UN's abdication, the GEO created two secondary classes of membership, Protectorates and Independents. Each shares characteristics with full members, though neither receives the same level of GEO support and protection. Protectorate membership grants the member states full access to GEO resources, such as satellite infrastructure and defense by GEO military forces. Protectorate representatives may attend GEO General Assembly meetings and present the positions of their government, but may not vote.

Initial GEO Protectorates included Eritrea, Kiribati, Macedonia, Monaco, Nauru, Tonga, Tuvalu, Vatican City, and the former Yugoslavia. In addition, the GEO recognized Ireland and Taiwan as independent states almost immediately by granting them Protectorate status, and thus prevented any potential internal dissent while focusing on more important matters. Of the original Protectorates, only the Pacific Island nations of Kiribati, Nauru, Tonga, and Tuvalu retain that status. The rest have accepted full membership in the GEO.

Several nations—generally the pre-Blight great powers, such as the US, France, the United Kingdom, the UIR, China, and India—joined the GEO grudgingly, and only when it became obvious that without one focused effort to defeat the Blight, humanity might not survive it. In order to secure the research and resources of these holdouts, the GEO negotiated with each individually, and granted each limited sovereign rights over and above those of the General Assembly membership. These Independents could vote, and in some cases were granted special advisory offices within the High Commissions.

The United States was one of the first and most aggressive opponents of the newly created world government, and the fledgling GEO was forced to move its headquarters from New York to Geneva, Switzerland, the

site of the old League of Nations. Switzerland became the first nation granted Independent status within the GEO Charter. In return, however, Switzerland was required to relinquish all territorial claims to much of Geneva and the surrounding area. Because it is a fully sovereign territory within an Independent state, the legal status of the GEO enclave in Geneva is closer to that of Vatican City in Rome, rather than a traditional federal district, such as Washington, DC.

In 2199, China, India, Switzerland, the United Islamic Republic, the United States of America and several smaller nations still stand in various states of semi-independence from the GEO. The US, the UIR, and China all prescribed withdrawal measures within their treaties with the GEO. For these nations, the GEO became an overseer, an addition to the governing bodies already in existence.

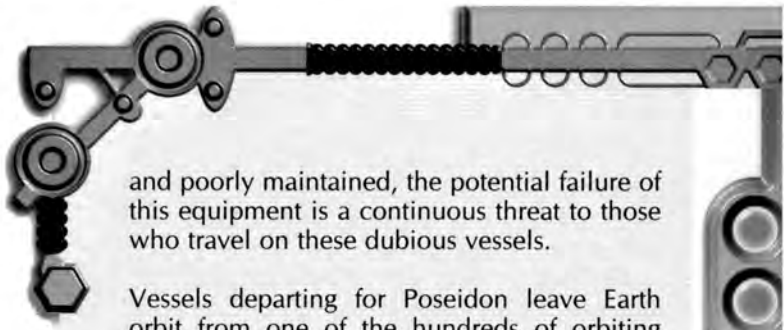
The GEO remains a vast and powerful political and economic force throughout Earth and the Colonies. Challenged by the reinstated UN, the Indepedent nations, and the Incorporate states, it is still the largest and mightiest empire in human history.

THE INCORPORATE STATES

By 2094, the Blight had spread to South America, and the government of Colombia was on the verge of collapse. Widespread social chaos and a crumbling economy had resulted in the complete inability of the Colombians to continue governing their country. After extended consultations with the Colombian government, Biogene Corporation, a leader in biotechnology and genetic engineering, petitioned the United Nations to recognize the sovereignty of a Biogene city-state in El Dorado, Colombia. Representatives from Biogene claimed that its "economic resources and administrative infrastructure far surpassed that of the traditional government," and that these resources could be used to return political stability to the region and improve the quality of life of its citizens.

After a heated debate in the General Assembly, the UN passed a resolution granting "formal sovereignty to any 'incorporated city-state' capable of satisfying the obligations of government in regions where traditional national governments have failed to do so." Throughout the Blight Years, some of the most powerful multinational corporations—generally, those strong enough to survive the economic chaos of the time—established city-states within the borders of collapsing nations.

This recognition of Incorporate city-states came after the outbreak of the Blight but before the formation of the GEO. In 2100, the Incorporate states were able to use this decision to claim Independent status within the GEO hierarchy. The political sovereignty they had been granted by the UN only six years previously, their rep-



and poorly maintained, the potential failure of this equipment is a continuous threat to those who travel on these dubious vessels.

Vessels departing for Poseidon leave Earth orbit from one of the hundreds of orbiting docks or facilities, but for passengers the journey usually begins planetside with several days of procedural orientation. At this time passengers also undergo final physical exams to assure they are fit enough to survive the cold sleep process.

With the availability of fusion drives, space travel is no longer limited by power. Instead, ship capacity and range are now limited by the extent of the shipboard life support—the oxygen, water, and food reserves. Therefore, to stretch the reserves of ships headed beyond the orbit of Mars, passengers spend their entire journey in hypothermic, drug-induced coma, thereby greatly reducing their need for consumable resources and living space. Induced Hypothermic Metabolic Suppression, or IHMS, is now a routine procedure and has been part of long-distance space travel for years.

After orientation and final medical checks, passengers are shuttled into orbit in waves and loaded as they arrive. Each passenger requires several hours of individual attention during the loading process, and on the larger passenger ships, loading can therefore take several weeks, with the first passengers loaded spending a month in cold sleep even before the ship leaves orbit.

"Cooling," as the loading procedure is called, is rather simple but depends heavily on complex drug therapy and sophisticated metabolic monitors. The process of loading passengers is tedious and even the most conscientious technicians eventually treat the passengers more like cargo than people. As a result, the process is rather impersonal and passengers are left to their own emotional resources to deal with the often-frightening experience.

The process begins with a thorough sterilization, the first phases of which are completed before the passengers leave Earth. The final chemical wash is caustic and often bleaches the passengers' skin. The external wash is cou-

pled with heavy antibiotic therapy to suppress the internal parasites and symbiotic fauna. As part of the process passengers usually are completely depilated as well. Passengers are also required to fast during the last 48 hours prior to cooling to clear their systems, as catheterization will be the only means of removing waste while in cold sleep.

The IHMS process depends on computer monitored drug therapy that is continually administered intravenously throughout the trip. After the sterilization procedures the bald, hungry, and wary passengers are dressed in loose fitting gowns and loaded one by one into their cold sleep canisters. Usually called coolers, or coffins by the more heartless techs, the canisters are just under three meters long and are self-contained technological wonders.

Though designs vary, these devices typically have a padded internal compartment just over two meters long and about a meter wide. The clamshell lid has several view ports and monitor screens, and the entire compartment is lined with cooling lines and electronic sensors. The pods have individual onboard computers with sophisticated diagnostic and decision-making programming. Interlinked with the IV and refrigeration systems the computer controls all aspects of canister function. Most canisters also have battery backup systems to maintain functions if main power fails.

During the loading process technicians hook passengers up to a complex set of drug and nutrient IVs and catheterize them. Sedatives put the passengers under and the cooling process reduces their body temperatures to just above freezing. This reduces metabolism while the drug therapy prevents metabolic failure and maintains nervous function. Cooling time varies, but within two or three hours the passengers are "cold" and in a state of hypothermic coma that will last the duration of the trip.

In an effort to prevent the degree of muscle atrophy that would normally result from six months of total inactivity, computer controlled electro-stimulus pads are glued to the skin over all the major muscle groups. These low-intensity electrodes induce muscle twitch at intervals throughout the journey. Though the passengers are not conscious, they are not completely unaware of their surroundings. Some have reported dreaming during the trip, and others have reported hearing voices and sounds around them.

resentatives contended, remained binding through the UN's reorganization. Legal and political maneuvering aside, the GEO needed the economic and technological resources of the Incorporate states, and likely granted them Independent status on that basis alone.

For the most part, the Incorporate states enjoy much the same privileges and obligations as traditional nation-states. They can tax their citizens, maintain armed forces, and make diplomatic agreements with other states. In principle, they are required by the terms of their membership charters with the GEO to meet certain standards of human rights, observe international law, and abstain from waging aggressive war against other GEO member-states.

In practice, the Incorporate states are a political entity entirely without precedent in the pre-Blight world. For one thing, the Incorporate institution is typically both the central political and economic power within the state. For example, most citizens of an Incorporate state are directly employed in their government's business concerns. For this reason, there are rarely any formal taxes in these states—the government simply manipulates the income of its citizen-employees to provide itself with revenues for "public projects."

Likewise, the populations of the Incorporate states are more in line with those of major, pre-Blight cities, rather than traditional nations. Most Incorporate states have a citizenry of several million, at most. In many respects, the Incorporate powers are true city-states, with a limited population and land area. One of the most complex legal issues of the late 22nd Century, however, is the status of real estate and natural resources throughout Earth and the Colonies that the founding corporations acquired during the Blight. For example, Atlas Materials claims that its extensive mines in central Africa became the sovereign territory of the Atlas city-state in Marrakech when the governments of that region collapsed. The Incorporate state contends that it continued to satisfy "the obligations of government" in this region throughout the Blight Years, therefore meeting the criteria of the UN statute granting Incorporate sovereignty over a region.

On the other hand, the Incorporate states have generally escaped the traditional limitations of corporations. For example, while most of the corporations that evolved into Incorporate states are still on the books as such in their charter countries, their stock is almost entirely in private hands. The worldwide economic collapse that followed in the wake of the Blight resulted in stock prices plummeting to historic lows. While this market crash ruined many multinational corporations, those that survived were able to buy up their stock for pennies on the dollar. As a result, the commercial enterprises that rest at the heart of the Incorporate states are typically owned by an elite cadre of powerful fami

lies—usually the descendants of those executives who directed the corporations through the Blight Years. Likewise, the net worths of many Incorporate states have grown to such staggering proportions because antitrust legislation was simply impractical in an era of widespread economic collapse, and the Incorporate's Independent status with the GEO now makes the passage of such legislation problematic.

While all of the Incorporate states maintain some degree of market specialization, they are in fact more diversified than any multinational corporations in Earth history. In addition to an Incorporate state's traditional commercial focus, they are all involved in such crucial industries as banking, insurance, health care, construction, and utilities, if only within their own political borders. For example, in El Dorado, Biogene enjoys a virtual monopoly over these central services. It has also been remarkably successful in marketing its financial and health care services globally. And, of course, Biogene remains a global leader in the biotechnology industry. Along with a lack of antitrust controls, this diversification has enabled the Incorporate states to grow to many times the size of the largest multinational corporations of the past.

The result of the Incorporate states' unique historical and legal evolution is that they represent unpredictable wildcards in the already chaotic global arena of post-Blight Earth. Some analysts, many of them within the GEO, have compared the governmental structure of the Incorporate states to that of the fascist nations of 20th Century Earth, with a seamless centralization of political, economic, and military power. While the Incorporate states are nowhere near as large as the Independent nation-states of Earth, and are individually dwarfed by the power and resources of the GEO, military technology in 2199 tends to level the playing field of the global arena, and the Incorporate states have emerged as a powerful force in world affairs.

The largest and strongest of the Incorporate states include Anasi Systems, in Beirut, Lebanon; Atlas Materials, in Marrakech, Morocco; Biogene, in El Dorado, Colombia; Dundalk Shipbuilding, in Belfast, Ireland; GenDiver, on Guadalupe Island, Mexico; Hanover Industries, in Hanover, Germany; Hydrospan in Perth, Australia; Lavender Organics, in Adelaide, Australia; MacLeod Enforcement, in Mombasa, Kenya; and the Nippon Industrial State, in the Kuril Islands. Many of the Incorporate powers have also established colonial city-states on Poseidon, known as "company towns" among colonists.

sengers arrive weak and with reduced stamina, they are at least functional upon arrival.

Characters just out of cold sleep should have their effective Fitness, Endurance, Strength, and Reflexes reduced by one level for every three months spent in the cooler. These lost points are regained at a rate of one per attribute, per week, with normal activity. If a character deliberately works out daily to improve his condition, the levels are gained at a rate of three per week.

The stim pads, after six months, cause significant irritation and result in a post-flight condition called the spots. The skin under the pads is typically red and swollen and, after removal of the pads, itches continuously. The result is a polka-dotted appearance and a constant scratching that, when coupled with the short hair and bleached skin, serves to unquestionably mark newcomers. The spots stop itching after a week and fade completely by the end of a month. Eventually the skin regains its coloring too, but how fast depends on the character's exposure to Poseidon's intense sun.

Upon arrival, passengers are slowly warmed and brought out of their induced comas by stimulating drugs. When they finally wake, mental and metabolic processes are retarded and recover very slowly. Muscles are weak and the skin is irritated and itches terribly. They have difficulty swallowing and digesting and so are held to a liquid diet during recovery. This weak and dependent state makes off-loading passengers even slower than loading them and requires that they spend several days in orbital or planetside recovery facilities.

The duration of a trip from Earth to Poseidon depends on the acceleration capabilities of the ship. Smaller vessels can usually get through the wormhole and into orbit around Poseidon in about six months, the larger ships taking almost eight. Therefore, with the loading and unloading delays passengers can spend up to a year completing the journey.

Though now a routine procedure, cold sleep is not without its dangers. Passengers are subject to a range of post-sleep syndromes that make each trip a calculated risk. If a character undergoes cold sleep as part of his adventures, the

player is required to make a post-sleep syndrome roll. To do so, the player should roll a single D10. If he rolls a 10, he must roll on the following condition table and apply the results to his character. If the character traveled on a non-Incorporate or GEO flight, a roll of 9 or 10 requires a roll on the condition table.

POST-IHMS CONDITION

1 Incorrect drug dosage has reduced one randomly selected sense by one level.

2 Insufficient maintenance of metabolic activity in the brain has reduced one randomly selected mental attribute by one level.

3 Insufficient maintenance of somatic metabolism has reduced one randomly selected physical attribute by one level.

4 Circulation failure in one randomly selected limb has left the limb atrophied and useless.

5 Incorrect drug dosage has reduced all senses by one level.

6 Insufficient maintenance of metabolic activity in the brain has reduced all mental attrib utes by one level.

7 Insufficient maintenance of somatic metabolism has reduced all physical attributes by one level.

8 Poor circulation in the brain has caused a stroke-like condition and the character is unable to speak coherently.

9 Poor circulation in the brain has caused a stroke-like condition and the character is a complete amnesiac. He retains his original skills and training but has no memory of his personal history.

10 Roll again. If the result is less than 10 the character must reduce all his attributes by one level. If the result is 10 the character has suffered massive metabolic failure and either remains in a permanent coma or is dead. Jaded cold sleep technicians often refer to these unfortunate passengers as "Popsicles."

THE NATIVES AND THE ABANDONMENT

During the 10 years following Planetfall, the Poseidon colony prospered despite the inevitable hardships. Colonists occasionally lost their lives in accidents, attacks by predators, or to infections and diseases that could not be diagnosed or treated in time. In 2092, more than 200 died when Goodall, a small settlement about 1,000 kilometers from Haven, was destroyed in a mammoth cyclonic storm. Through all of these challenges and setbacks, the colonists persevered, united by their common goal. Haven continued to thrive and grow, as did other major settlements, such as Second Try, Atlantis, and Kingston. As the 10th anniversary of the Athena Project neared, the colonists' spirits soared as they awaited the planned resupply ships from Earth and the second phase of the colonization effort.

The incredible expense of the initial phase of the Athena Project had ruled out a solid timetable for the arrival of the first resupply ship. The colonization plan called for a message probe to be launched by the UNSA in 2096 that would transmit a detailed schedule for the first stages of the resupply effort to the colony. The second phase of the Athena Project would be a continuing effort intended to establish a permanent human presence on the alien world. Perhaps the most crucial element of this ongoing effort would be the delivery of the heavy machinery and technology that would allow the development of a permanent industrial base on the planet. While the Athena Project colonists had extensive technological resources, they did not have the industrial infrastructure to replace much of their equipment or develop new technologies. As a result, the colony would only be truly self-sufficient once the second phase of the Athena Project was underway.

Unknown to the colonists on Poseidon, by 2096, the Earth had been suffering in the deadly grip of the Blight for more than six years. The virus continued to mutate into increasingly virulent strains, and mass starvation was becoming rampant. Already, more than two billion human beings had perished as a direct result of the catastrophic outbreak. The 2093 executive order by the UN's Secretary General had created the Global Ecology Organization, and by 2096, the UNGEO was well on its way to becoming the de facto world government of Earth.

The UNSA's budget, of course, had been devastated, as more and more of the world's resources were redirected in controlling the Blight. There would be no resupply ships, no second phase of the Athena Project. After persistent campaigning by the UNSA mission team, the General Assembly approved funding for a single message probe that could be sent through the wormhole to the Serpentis System. The probe would transmit news of the disaster ravaging the Earth and inform the

colonists that the Athena Project had been indefinitely suspended.

The probe was launched on March 8, 2097. However, catastrophic failure of the guidance systems prior to entering the wormhole caused the probe to bypass it entirely. The probe continued on its errant course and left the Solar System without delivering its message.

For the colonists on Poseidon, 2096 was a year of elation and despair. Through all of the challenges and hardships they had confronted and endured, the colony's 10th anniversary and the arrival of the resupply effort had drawn them onward. They looked back with collective pride and satisfaction at their experiences and accomplishments, and looked forward to passing them on to the rest of humanity. Their anxiety deepened and morale plunged as the weeks and months wore on and still the resupply ships did not arrive.

By the end of the year, the colonists were forced to admit that something had gone wrong, that the Athena Project's timetable, as loose as it was, had somehow been derailed. Some held out hope that there had been only minor delays and that the ships would arrive in orbit any day. Most, however, realized that the failure of the UN to even send word of the delay was a far darker omen. What could have happened so terrible that Earth was unable to launch a simple message probe? Speculations of nuclear war, catastrophic comet impacts, and plague began to circulate in the human settlements on Poseidon. The group suicide of an entire Haven family marked the darkest hour of this difficult time.

At first, there was very little pressure to make drastic changes. Though suddenly isolated from Earth in a way it had never been before, the colony was thriving and seemed capable of sustaining itself for years to come. The prevailing sentiment was that the colonists should dig in, continue their efforts, and wait for the ships to arrive. Slowly, as the shock of their abandonment subsided, spirits began to rise once again and, for the most part, life in the colony returned to normal.

However, as more years passed with no sign of the resupply effort, the colonists became convinced that the colony was on its own. Most put their fear and anxieties behind them and faced this realization with renewed determination. The second-generation colonists were also maturing at this time. These teenagers, the first true natives of Poseidon, had grown up immersed in the day-to-day struggles of the colonization effort. For them, the Athena Project was a central institution of almost mythic power and significance, one that vastly overshadowed the importance of Earth, a world they had never known. Poseidon was their home, and the lack of contact with Earth was almost irrelevant. Their goal, inherited from their parents and communities, was the continued survival and prosperity of the Athena Colony, and their isolation from Earth seemed just another challenge to face.

This eventual acceptance of their isolation, however, did initiate broad changes in the colony's plans, priorities, and efforts. The dominating importance of Haven and the other primary colonial settlements faded, as many groups volunteered to establish settlements in other regions of the planet. The colonists had experienced firsthand how destructive and hostile Poseidon could be, and spreading out would improve the colony's chances for long-term survival. Most importantly, though, the colonists began to prepare for the inevitable deterioration of their technological resources.

The technological infrastructure of the Athena Project had been formidable, and had allowed the colony to survive and prosper during the crucial early years. However, the mission plan was designed for a 10-year colonization effort, and the colonists' equipment had been part of that design. As a result, while the colonists had fusion reactors, orbital landers, surface vehicles, and computers, they did not have the manufacturing resources to build new equipment. There were ample stockpiles of spare parts, of course, and even machine tools for the fabrication of simple mechanical components. But the advanced infrastructure and technology needed to manufacture complex components, from reactor coils and industrial lasers to optical circuits and fuel cells, simply did not exist. The colonists realized their supply of spare parts would eventually be exhausted, and that all their equipment would finally wear out or be lost to accidents.

Of course, the colonists' limited population further compounded this crisis. Their existing technology was such that they may well have been able to establish and sustain a late 19th Century technological and industrial base—printing presses, steam-powered and internal combustion engines, limited manufacturing, electrical power, and primitive telecommunications. However, while their existing technology might have been sufficient for such an endeavor, their numbers clearly were not. Most critically, the exploitation of the natural resources necessary to fuel and sustain this industrialization would have been extremely labor-intensive, and labor was a resource in very short supply. After much deliberation, the colonists accepted that they would be forced to survive at a technological level not seen on Earth for centuries. It was decided that, as a whole, they should opt for a level of technology that would be sustainable by small communities over an indefinite period of time.

Fortunately, the colonists had ample time to prepare, and their technology could actually help them learn to do without. Ultimately, they simply had to retrain themselves. They had been trained to exploit their technology as effectively as possible, and now they had to learn

THE COOLER

Rolf went into hypo more than a week before the *Jebel Mousa* was to leave orbit. His cooler was little more than a box, two-and-a-half meters tall and a meter wide. That was enough for Rolf to stretch out a little. Poor Hanne would rattle around in hers, which was easily half again as tall as she was. She gave Rolf a quick kiss as they clambered awkwardly into their canisters, a single tear in the corner of one pale blue eye.

The IV they'd stuck him with must have already started taking effect. Instead of feeling bored or nervous or afraid or sad, Rolf was simply happy to lie there grinning at the ceiling. After a while, a medic in a bright orange jumpsuit came around and shone a light in Rolf's eyes. The tech muttered to himself. He pulled a round, white stim monitor out of a recess in the side of Rolf's capsule and smeared it with paste from a tube at his belt. Then he stuck it to Rolf's temple. More went on Rolf's torso, arms, and legs, and several on the back of his head. The medic stepped back and closed the lid.

The light inside went out, and for a moment, Rolf panicked. The cooler registered his fear in his elevated heart rate and breathing patterns. It sent waves of electrical current through the stims and into Rolf's body. So weak he didn't feel them, they nevertheless helped calm him down. So calm, indeed, that he was soon asleep. So calm that Rolf slept...for more than six months.

When the light came on, Rolf made the mistake of opening his eyes. More than half convinced that the world was spinning around him, Rolf clamped his eyes shut. Now it only felt like the world was spinning in the dark. A voice spoke.

"Please, do not open your eyes. Remain calm. Breathe deeply. Disorientation and nausea are normal."

"Da hab' ich ja Schwein," thought Rolf. Moments passed, and then he became aware of an itch. It began as a tingling in his skin under each of the two dozen or so stim pads, and it quickly intensified. He couldn't

to develop and use new, simpler resources. Their knowledge and abilities had served them well throughout the colonization effort, and it would continue to serve them for the indefinite future. They had extensive computer databases that could show them how to farm without robotic harvesters, how to build dwellings and boats without construction machinery or assembly lines, and how to treat the sick and injured without diagnostic computers or laser scalpels.

These years marked the beginning of what some newcomers have called the natives' "slide into primitivism." The reality, of course, was far more complex and was a continuing process as the years passed. In the early years, this technological transformation of the colony was approached in much the same way as previous efforts. The leadership at the Colonial HQ in Haven organized reeducation and vocational training programs, planned and coordinated new settlement efforts throughout the planet, and allocated existing technological resources, both to individual colonization groups and communities and to centralized facilities in Haven and other major settlements. In this respect, the Athena Project survived the Abandonment, as the natives came to call their isolation from Earth. Its objective, however, was transformed from a short-term effort to prepare the way for a permanent human colony, to the long-term survival and prosperity of its people.

As the years passed, however, the Athena Project's greatest accomplishment was the facilitation of its own obsolescence. As the human population of Poseidon continued to climb, as new communities were established in remote regions, and as the colonists adapted to a new way of life, the efficiency of and necessity for centralized planning and coordination steadily declined. As more communities became self-sufficient, contact with other settlements became a choice, rather than an imperative. Many communities maintained strong relations with each other, based on geographical, historical, economic, and personal ties. A few withdrew into relative isolation. As each new generation came into its maturity, the Athena Project lost more of its significance. The new lives they had built for themselves, rather than a struggle to colonize Poseidon in the name of a distant world called Earth, became the anchor of the colonists' worldview and identity.

It was also during these years that the cetacean colonists truly came into their own. In the early years of the colony, humans had been the undisputed masters of the little island of sophisticated technology in Poseidon's wilderness sea. After the Abandonment, the human colonists found themselves facing a new world that seemed primitive, alien, and frightening. In this world, the cetaceans were the new masters.

The cetacean colonists, of course, had learned to use their share of technological resources, but these tools had never become a central part of their sense of themselves or their world. They continued living without any physical or psychological dependence on technology. More importantly, however, their newfound ability to think like, and communicate with, humans gave them the opportunity to help their fellow colonists discover a similar technology-free way of life. Indeed, the Athena Project's ingrained tradition of deference to expertise resulted in cetaceans assuming leadership roles in many new communities and settlements.

It was this social transformation that characterized the years immediately following the Abandonment, and it was the crash of the *Calypso*, the colony's last functional shuttle, that marked the end of this transitional period. With the loss of the *Calypso*, the colonists no longer had the capability to reach orbit, and as such, the colony lost its ability to maintain its satellite network. Most crucially, this resulted in the steady degradation of the colony's communications resources, and subsequently, the Athena Project's identity as a coherent colony.

In the 50 years that passed between the loss of the *Calypso* and the arrival of the *UNSS Adm. Robert Perry* in orbit around Poseidon, the Athena Project colonists continued to develop their relationship with their new world. The colonization of Poseidon's countless islands continued in an ever-expanding circle centered on the Haven Cluster. Despite hardships and tragedies, the new "natives" of Poseidon prospered, and the human population of this alien world continued to climb beyond all expectations. As expected, the natives' high-tech resources continued to dwindle, and their ability to do without them continued to improve. By 2165, the former colonists of the Athena Project and their descendants had adapted to a technological level and way of life reminiscent of the traditional peoples of Earth's Pacific Islands.

remember ever having had to work so hard just to get his hand to move. His fingers brushed one of the pads on his chest and suddenly the itch sprang to life. It ran on millions of tiny feet to where his fingers had touched, clawing all the way. He pulled the round pad off his chest and tried to toss it away. It failed to even reach the panel only centimeters above him, before falling to the mat on which he lay.

The itch was burning the back of his neck now. He wanted very badly to vomit, but his stomach was very empty. After a few moments, a man opened Rolf's cooler. His hands were warm as he helped Rolf to sit up. His touch was reassuring, something Rolf's poor mind could cling to. Rolf looked into the man's eyes with a hopeful expression on his face, and through drool smeared lips, rasped haltingly, "Are we there yet?"

RECONTACT

In July of 2165, a young girl living in a large community on Epoch Island became the first native to locate the *UNSS Adm. Robert Perry* in orbit around Poseidon. The girl sighted the *Perry* from a simple observatory her village had maintained on the slopes of the island's dormant volcano. Almost 70 years late, the promised resupply mission from Earth had apparently arrived.

In the first years after Recontact, very little changed for the vast majority of the native population. Many welcomed the technological and pharmaceutical resources brought by the GEO representatives, and few newcomers strayed from the major settlements. For the most part, the newcomer presence on Poseidon was so small and unobtrusive as to almost escape notice. A small GEO enclave was established in Haven and staffed with a handful of scientists and researchers.

In 2172, the *UNSS Ballard* arrived in Poseidon orbit with more than 500 scientists and technicians. This more than doubled the size of the GEO base in Haven, as GEO researchers began to establish scientific stations and permanent research facilities throughout the Pacifica Archipelago. Representatives of several

Incorporate states also arrived on the *Ballard* and began exploring possibilities for the economic exploitation of Poseidon's resources. Contact between natives and newcomers became more frequent, but Poseidon still seemed to have little enough to offer any but the scientific community.

THE LONG JOHN RUSH

All that changed in 2185 when an Atlas mineral survey discovered the new class of minerals classified as xenosilicates, popularly known as Long John. When the minerals' applications in biotechnology were discovered in 2187, the oceans of Poseidon became the focus of a "gold rush" unrivaled in human history.

By the end of 2188, the GEO had awarded contracts for three new fusion torchships capable of traversing the vast distances between Earth and Poseidon. The Incorporate states began funneling billions of corporate scrip into the R&D and restructuring projects that would allow them to launch massive Long John harvesting efforts on Poseidon. Over the next several years, tens of thousands of Incorporate scientists, technicians, executives, and deep-ocean miners flooded to the colony world. Incorporate company towns sprang up across the archipelago as Biogene, GenDiver, Hanover Industries, Lavender Organics, the Nippon Industrial State, Hydrospan, Atlas, and others expanded their colonial holdings and operations.

The exploding Incorporate population of Poseidon was also accompanied by increased conflict, as competition for valuable Long John fields led to bush wars and incidents of industrial espionage. When an Atlas Materials deep-sea facility was destroyed in an apparent GenDiver attack, an open Incorporate war erupted and the Incorporate states began funneling thousands of security personnel to the waterworld. This outbreak of violence in turn prompted the GEO to expand its own presence on Poseidon in an effort to keep the peace. In 2194, the first GEO Marshals, Magistrates, and Shock Troopers arrived on the colony world, and the GEO permanent orbital facility, *Prosperity Station*, came online in 2195.

The first truly violent confrontation between natives and newcomers occurred in 2189, ironically, in the very same community that had been the first to sight the *Perry*. After a deep-sea survey identified a rich Long John node near Epoch Island, Biogene representatives approached the island's native inhabitants with an offer to purchase the rights to these deposits, as well as permission to build an offshore harvesting and refining facility. The offer was unequivocally refused.

Less than two weeks later, the village's docks and most of their small fishing fleet were destroyed in an explosion. Three natives were killed in the blast, and a dozen more were seriously injured. Several days later, the Incorporate representatives returned to the village and repeated their offer. A native fisherman named Kuahei, the father of a child who was killed in the explosion, shot and killed one of the representatives with a speargun. In the ensuing clash, the entire Biogene delegation was killed, along with Kuahei and four other natives. The community whose young astronomer had been the first to welcome Recontact also became the first native people classified as "hostile" by the GEO and Incorporate states.

Since this incident, the tensions between the natives and the newcomers have continued to increase. The most serious conflicts have occurred between aggressive native groups and those Incorporate states who refuse to recognize the legitimacy of the natives' claims to Poseidon. Much of the problem lies in the fact that the politics of colonization were never formalized after the initial Athena Project mission, as the attention and resources of Earth were diverted to the developing crisis caused by the Fischer Blight. The original UN mandate gave the administrators of the Athena Project the authority to grant property rights to the colonists, but after the Abandonment, such legal issues understandably lost their significance. As far as the Incorporate are concerned, no legitimate political authority was originally present on Poseidon, and the natives' claims are entirely without legal foundation.

The problem is compounded in that the GEO defends a claim of governance over the colony since the launch of the Athena Project in 2086. The GEO is primarily concerned with maintaining the peace and the integrity of the biospheres over which it governs. However, the resources of Poseidon promise too great a hope for the future of Earth for the GEO to ignore them. In its efforts to arbitrate, patrol, and protect, the GEO has made both friends and enemies among Poseidon's various native groups. Caught in the midst of growing tensions and brush-war violence, all interests recognize that the stern presence of the GEO may be all that keeps Poseidon from erupting into a true war zone.

Officially, the GEO is firmly committed to preserving native rights in the face of Incorporate expansion. In practice, the GEO has fallen back on its historical foundation of political authority by using environmental policy to restrict Incorporate activity on the planet. As one example, the GEO has since denied Biogene's request to build its refining and harvesting facility offshore of Epoch Island because it would endanger the spawning waters of several indigenous fish species. While most natives recognize and appreciate the GEO's motives, they publicly protest the message this sends: the rights of fish have more weight with the GEO than those of the natives themselves.

As this crisis continues, the natives of Poseidon are becoming increasingly divided. There are those natives who seek to protect themselves by working within the legal framework provided by the GEO. This attitude is most common among Poseidon's larger native communities. They are often the ones receiving political, financial, and legal assistance from non-violent, Earth-based environmental and political action groups.

Other native groups refuse to recognize the authority of the GEO. Many of these groups are becoming openly hostile to the GEO, the Incorporate, and the national governments that have established a presence on the waterworld. Though still in the minority, these groups are a potentially formidable threat and are beginning to receive backing from extremist groups on both Earth and Poseidon. Native attacks on GEO and Incorporate personnel and facilities are becoming increasingly common, and there has even been sporadic violence between hostile natives and independent newcomer settlements in the colony world's outlying regions.

ON THE HORIZON

In 2199, Poseidon has become a locus for the momentous social, political, and technological changes reverberating throughout Earth and the Colonies. The GEO, the Incorporate, the natives, and the newcomer pioneers all face a tenuous present and uncertain future.

With tensions and conflict beginning to spread throughout the Pacifica Archipelago, the GEO has taken steps to increase its military presence on Poseidon. The number of active Armed Forces personnel on the colony has doubled over the last three months. These new deployments have resulted in growing political opposition and public protest, both on Earth and Poseidon. Incorporate and Independent representatives in the General Assembly argue that this increased militarization of the colony world can only lead to escalating violence.

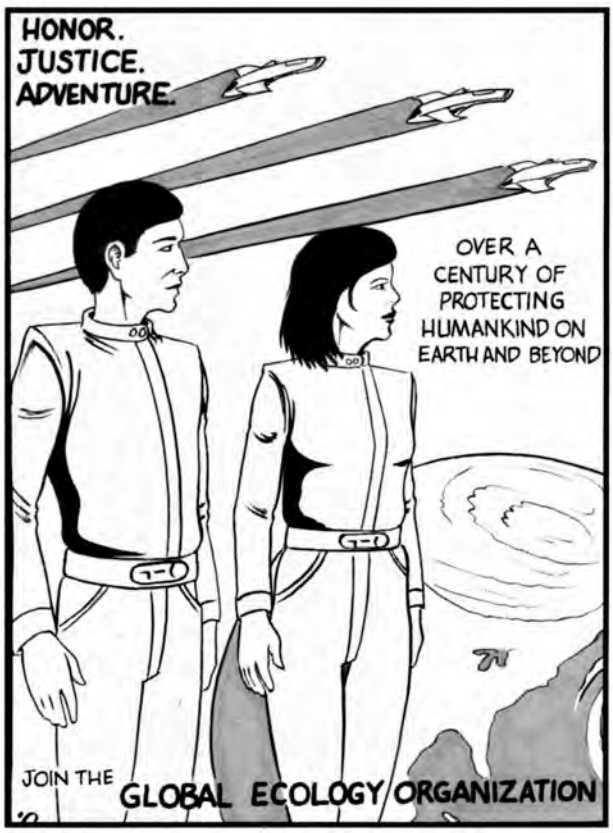
Travis Denton, the US representative in the General Assembly, has stated, "This military buildup on Poseidon is further evidence that the GEO, once a benevolent and heroic institution, has degenerated into a despotic empire. What the leadership of this empire cannot command by political or moral right, it will take by force."

Already strapped for the resources necessary to administrate the vast territories it governs across two star systems, the GEO is caught in a highly unstable political and economic position. Continuing to exist through sheer historical inertia, its heroic struggle to preserve human civilization has been transformed into a desperate one of simple survival.

The Incorporate states face a similar struggle. Often portrayed in the media as driven only by profit and greed, they are in fact waging a subtle political war with the GEO, the Independent nations, the reinstated UN, and even public opinion for their continued existence as sovereign states. This crisis is especially accute for Hanover Industries, whose city-state will become a GEO territory in the next two years. In the coming years, the Incorporate could be consigned to the pages of history or evolve into a new form of social and political organization that replaces the obsolete institutions and irrelevant political borders of traditional nations.

Poseidon's natives are perhaps in the most tenuous situation of all. Most simply wish to be left alone, to continue the lives they have built for themselves over the last century. They see the newcomers as a threat to their way of life and to their adopted world—for most of them, the only world they have ever known. They are outnumbered by more than 20 to one, and their technological resources pale in comparison to those commanded by their adversaries. Many respond by retreating further into Poseidon's wilderness, while others conspire in the shadows of the newcomers' own settlements.

In a hundred years, human civilization has moved from the brink of extinction to the dawn of a new age. Humanity has colonized a new frontier and discovered the key to its own immortality. And on the waterworld, humans are beginning to unlock an enigmatic alien legacy, one that could lift civilization to new heights, or destroy it utterly.



CHAPTER 08

ON THE FRONTIER

A WORLD IN CONFLICT

Poseidon is a world in transition, a frontier colony beginning to boil with internal dissent, instability, and violent confrontation. For all of the political centralization that occurred on Earth during the Blight Years, human civilization remains fractious and divided. In many ways, Poseidon has become a distant battleground for the competing ideologies and power blocs of Earth. The GEO, the newly reinstated UN, the Incorporate states, and Independent national governments are the political legacy of the Blight, and they have brought their history of conflict and tension to the new world. At the same time, factions unique to the colony are emerging, as natives, criminal organizations, insurgent groups, and even the elusive aborigines vie for control over Poseidon's future.

This pattern of tension and often-violent confrontation is becoming more complex on an almost daily basis. Incorporate interests ruthlessly pursuing the economic exploitation of the planet inevitably find themselves in conflict with the native population. The natives feel that their world and way of life is in jeopardy, and in turn, are beginning to organize, receiving increasing support from radical environmental and anti-Incorporate groups from Earth or based in Poseidon's major settlements.

The GEO is most often at odds with the Incorporate states and struggles to protect native rights and the waterworld's ecological integrity from Incorporate excess. Ironically, the GEO finds itself often siding with the Incorporate against the native resistance groups, in an increasingly futile attempt to maintain the peace. Many newcomers who favor the colony's independence from the GEO find a common ground with the natives, but clash with them in territorial disputes over Poseidon's limited landmasses. Perversely, while the native cetaceans have demonstrated a remarkable willingness to cooperate and live peacefully with the newcomers, the cetacean newcomers—most of them veterans of the extended military conflicts that characterized the Blight Years—are swelling the ranks of the most militant native tribes. The aborigines, too, are suspected of increasingly common acts of violence and sabotage, and they do not discriminate between newcomers.

The colony's rampant social instability is apparent to even the most unschooled observer. Most colonists, native and newcomer alike, believe that the only thing preventing overt conflict is the complete lack of alliances among the colony's many factions. Everyone agrees that there is a storm on the horizon, but no one is sure what direction it is heading or how fast it is coming. The colony's instability is mirrored by events on Earth and throughout the Solar System, where the UN has been reinstated and many powerful voices are speaking out against the immense power of the GEO. Many suspect the fragile order the GEO has managed to maintain throughout the Blight and its aftermath is about to collapse.

Regardless of how these tensions ultimately play themselves out, there is a sense among the colonists that something important is about to happen. On the CommCore newsgroups and in the watering holes of Haven, everyone has a theory or a prediction. Some think the UN has begun a secret military buildup with the cooperation of several Independent states, and that there will be civil war on Earth. Others think that natives and insurgents will lead a colonial rebellion against the GEO on Poseidon. Still others are convinced that there will be increasingly violent confrontations between the Incorporate, as the already scarce deposits of Long John become more difficult to find. Some colonists profess darker visions of enraged aborigines and an ancient legacy as yet unknown.

Though few colonists agree and fewer still truly understand what is happening around them, throughout the waterworld there is one thing everyone knows.

There is a storm on the horizon, and it is coming...

THE NATIVES

CULTURE AND PSYCHOLOGY

As is always the case when discussing the characteristics of a group of people, it is often tempting to generalize and stereotype to the point of attributing identical characteristics to all of the individual and unique societies and cultures within a population. One should always bear in mind that the native peoples of Poseidon are diverse and heterogeneous, and such generalizations are made at the risk of inaccuracy. The reader is encouraged to study the profiles of individual native communities for an illustration of their tremendous diversity. Nevertheless, their unique history and nearly 80 years of isolation and self-sufficiency have given the natives of Poseidon their fair share of cultural and psychological idiosyncrasies. Their perceptions of themselves, Poseidon, and Earth all point to a markedly different worldview from that shared by most of the new wave of Earth-born colonists.

THE NATIVE VIEW

Native communities exhibit a very strong emphasis on cooperation. The mundane tasks of day-to-day life are approached cooperatively, children are raised and educated cooperatively, property is usually based on an informal system of communal ownership, and individuals demonstrate a remarkable willingness to both ask for and lend assistance whenever it is needed. Obviously, this characteristic has its roots in the earliest history of the Athena Project, and if anything, has only become stronger and more deeply entrenched in their traditions.

By contrast, in their relations with outsiders, native communities are often characterized by a strong sense of collective self-reliance. Native communities are usually fiercely independent: they are extremely reluctant to ask for outside assistance and deeply resentful of any unwanted interference. These communities are also quick to take offense when confronted with condescending attitudes and presumed superiority, as many GEO and Incorporate functionaries have discovered since Recontact.

Another product of the natives' historical experience is their emphasis on integrity, honesty, and personal honor. A native's word carries a great deal of obligation and commitment. On the other hand, honor and trust are typically viewed as privileges that must be earned, and unfortunately, many natives relate to the newcomers with a great deal of distrust and suspicion. These characteristics may be traceable to the deeply ingrained professional attitudes and values of the scientific and technical elites that founded the original colony.

The culture and society of the native Poseidoners is also marked by their unique notions of personal privacy. Again, these cultural traits are typically traced to the experience of Poseidon's first colonists. In the early years of the colony, the colonists' survival was very much in question. With their population hovering around 5,000 and completely isolated from any contact with Earth, the colonists were compelled to adopt a strong ethic of intimate cooperation. They were forced to live and work closely simply to survive the savage and alien world they had adopted.

As a result, the natives tend to be relatively open both emotionally and physically. Native Poseidoners will often weep, laugh, rage, or exhibit other emotional displays publicly, and have difficulty understanding or sympathizing with the discomfort this causes newly arrived colonists. There is almost no concept of the traditional family unit in many native communities, and many of the roles usually ascribed to that institution in Earth cultures are instead shared by the community as a whole. Childcare is predominately a communal activity, and interpersonal relationships within the community are often considered a collective responsibility. For example, difficulties between a mated couple will often be shared with the community as a whole, and offers of assistance or mediation are generally welcomed by the individuals involved.

This lack of emphasis on personal privacy is also evident in the natives' physical openness. The natives are not at all embarrassed about their bodies, and nudity is rather common during the hottest times of the year in the low latitude regions of Poseidon. The fact that all but the most loosely fitting apparel will often interfere with the functioning of a native's gills also contributes to this tendency.

RELATIONS BETWEEN DIVERS AND SQUID

While a few communities are composed only of divers or squid, the vast majority of native communities include members of both subspecies. In general, relations between divers and squid are amicable, though there tends to be a strong division of labor along subspecies lines. The gilled osmoforms are typically given responsibility for extended underwater tasks, such as most aquaculture and underwater construction, while divers are responsible for deep-water work and surface tasks, such as hunting and fishing.

While a formal institution of marriage is uncommon in most native communities, extended interpersonal relationships are, of course, quite common. Most such pairings are between members of the same subspecies, but there are no general taboos against the pairing of divers and squid. The GenDiver engineers who created the aquaforms foresaw such possibilities. In male offspring, since the determination of an aquaform's subspecies is entirely dependent upon the mother's modified chromosomes, genetic incompatiblily is not an issue. In female children, since both parents contribute X chromosomes, specific artificial sequences deactivate the genetic contribution of one member of the modified X pair. Which X chromosome is deactivated is completly random and is initiated by the lower levels of testosterone in the developing female embryo.

THE NATIVES AND POSEIDON

The natives' view of their adopted homeworld has been strongly influenced by scientific tradition, and a stubborn pragmatism is a defining feature of the native worldview. Many Earth-born colonists forget that the "natives" of Poseidon are the descendants of a scientific and technical elite. Most natives approach life as a challenging task to be completed through careful planning, hard work, and determination.

The natives' relationship with the planet is characterized by a healthy sense of competition, but also a deep respect and reverence. In recent generations the native culture has, as a result, also been characterized by a strong spiritualism. For many natives, Poseidon has a kind of quasi-sentience, a view reminiscent of the Gaia hypotheses of Earth's late 20th Century. The oceans, for obvious reasons, are central to this worldview. Natives tend to a cyclical view of life, which, like the tides, comes in paired highs and lows. References to water and the oceans abound in their dialect, and the sea and its symbol, the circle, are common images in native art.

This facet of the natives' culture and psychology is often the most difficult for newcomers to grasp, and is also the most common source of misunderstanding between the two populations on Poseidon. For all their relatively "primitive" technology, traditional lifestyles, and often deep spiritualism, the natives of Poseidon are not a primitive people. Their grandparents, some still living, were among the most respected and accomplished scientists and engineers of pre-Blight Earth, and their pragmatic, scientific worldview still provides the foundation for the complex cultures that have evolved over the last eight decades.

THE NATIVES AND EARTH

Most of the original colonists' descendants, it seems, wish nothing more from Earth than to be left alone. They are neither openly hostile nor favorably disposed to the Earth or its representatives. Their only acknowledged link to Earth is a steadfast recognition of the lessons of history, and their consequent responsibilities to their adopted world.

In addition to this silent majority, there are many natives who have become embittered by the experiences of Recontact. These natives may harbor an intense dislike of the Earth-born colonists, but either have too much to lose or feel they are effectively powerless to actively oppose Earth's exploitation. Many of these may be willing to harbor fugitives from GEO or Incorporate justice, or even secretly provide aid to anti-Earth insurgents.

There are also an increasing number of natives who actively and openly oppose the newcomer presence on Poseidon. These natives demonstrate little concern for GEO or Incorporate authority, and many have become involved in increasingly frequent acts of violence and terrorism.

These violently anti-Earth natives often organize into small, unified groups around a shared goal, conviction, or leader. In other cases, whole native communities may be characterized by violent, anti-Earth sentiments. The native tribes of the Sierra Nueva Cluster are an infamous example, and tribal elders apparently began preparing their people for an inevitable war with the "Despoilers" long before Recontact. It is unknown how such radical traditions could evolve within a society founded by scientists and technicians in such a relatively brief period of time. Some historians have suggested that the Sierra Nueva may have been used as an exile colony for the violently insane in the early years of the colonization effort. A common rumor circulating on Poseidon is that the natives of the Sierra Nueva and similar peoples have been manipulated by Poseidons' aborigines. There is little solid evidence for either of these claims.

Finally, there is also a significant number of natives who have embraced and welcomed Recontact. These natives are very much in the minority, representing only a small portion of the native population. Most suffer a kind of second-class citizenship and are often indentured to the Incorporate.

These natives invariably live in the colonial cities, as opposed to the traditional native settlements and communities, enjoying lives of technological ease limited only by their typically meager financial resources. These limitations are often considerable, and an overwhelming sense of desperation is a common characteristic of those natives who struggle to integrate themselves into newcomer society. The lifestyle they idealize is extremely expensive, particularly for a culture that has survived for nearly 80 years on subsistence agriculture. Their powerful desire to meet the perceived standards of their adopted society leads many of these natives into a life of petty crime. The native ghettos in Poseidon's major cities are often unsafe, as thievery, prostitution, and the illegal drug trade are all on the rise. Unfortunately, these natives often suffer the prejudice of both the newcomers and other natives, who perceive them as sell-outs and traitors to both their own heritage and to Poseidon.

TECHNOLOGY

Among the native communities of Poseidon there is little that could be classified as a technological standard. The natives have learned to adapt what they have to the task at hand. They are remarkably efficient in their use of tools and resources, and always try to find new uses for any equipment that has worn out or been replaced. The high-tech legacy of the Athena Project is still very much in evidence in many native communities, as the colonists quickly developed a strong tradition of recycling and adapting their technological resources for new applications. Salvaged industrial plastic and other materials, much of it having once been part of the *Cousteau*'s modular components, were used in the construction of native dwellings and other structures. Radar systems were stripped from nonfunctional aircraft and used in makeshift weather stations. Fuel cells and turbines were stripped from vehicles and machinery to power handcrafted boats. Scrap metal was reforged to produce simple tools and implements. Fuel tanks can be found in many villages serving as water cisterns. Fiber optic cable, one of the technological foundations of the Athena Project, is often used as a component in fishing nets.

Poseidon is also rich in the simple resources required by a traditional culture, and the natives use a variety of indigenous woods, clays, seaweeds, and grasses in the construction of everyday necessities, from tools to dwellings. For example, the sands of Poseidon's beaches have an extremely high silica content, mostly due to its high concentration among the biosphere's corals and

seaweeds. As a result, the sand makes remarkably good glass, and this is a common material for many household items, including bowls, cups, pipes, and even chopsticks. Glass-blowing has enjoyed a resurgence on Poseidon and has sparked an interest among the more wealthy newcomers in owning native-produced glassware. This has given many native communities a valuable trade commodity with which to acquire high-tech and manufactured products.

The clothing common in most native communities is stylistically similar to that of the Pacific Islanders of Earth history. Both men and women favor wraps of various styles around their waists, and most women also wear a wrap across their chest. This style of dress has been adopted for several reasons. First, it is comfortable and practical in Poseidon's hot and humid climate. Second, it is relatively simple for native tailors to fashion. Finally, it allows a free range of action on both land and water, and can be easily removed for greater speed and mobility when swimming.

The cloth itself is often purchased in larger towns and settlements. There is, however, a local fabric, and like many of the natives' products, it is an algae-based resource. Water hemp is a long, thin seaweed that grows in the sunny shallows near Poseidon's landmasses. This plant is characterized by its long resilient fibers which maintain their suppleness even when removed from the water. The fibers can be spun to produce a thin, strong thread which is in turn woven into a light, airy fabric. Alternatively, water hemp fiber can be beaten and felted, after a fashion, to produce heavier cloth.

Water hemp cord is also braided together to make resilient ropes that maintain their integrity even after repeated immersion into Poseidon's seas. This cord is also used in the construction of the fishing nets that are so important to the prosperity of native villages. Finally, water hemp, as well as many indigenous grasses, is also used in the crafting of items such as baskets and roof thatch.

Almost all natives rely heavily on the use of boats. While they are, of course, extremely strong swimmers, distance and cargo capacity are still issues. Boats have become integrated into almost every aspect of native life: work, trade, recreation, ceremony, shelter, and of course, transportation. Native watercraft can be characterized as those modern boats acquired in Poseidon's major settlements, those constructed by the natives themselves, and those that are hybrids of the two.

The modern, mass-produced craft purchased in large settlements like Haven and Second Try are usually the least common and most difficult to distinguish from other, similar boats. Most of the native communities on Poseidon possess at least one such craft, often an inflatable dinghy with a small electric motor. Some settlements also possess one or more hard-hulled, prefabricated craft, though vessels of this kind are far more common close to the major settlements. It should be noted that these boats are not always purchased, as among those native peoples who have reacted to Recontact with violence, boats are considered among the most valuable spoils of war. More extreme native groups have even been known to steal boats from the harbors of Poseidon's major settlements.

The natives are also adept at constructing their own boats from indigenous materials. Such craft are powered by sails, oars, or multiple paddles. Sailboats of all sizes and descriptions are most common, and even the small oar-powered fishing boats typically have auxiliary or emergency sails on board. These craft include outrigger canoes and sailboats of varying sizes, as well as catamarans and trimarans. Hulls are often made of animal skins, which are treated with plant tars and stretched over a frame of timber spars and gunwales. The skins are maintained through regular applications of various animal oils, which help to prevent dehydration and cracking and seal the wooden frame against moisture.

Salvaged and modified boats are also common, and include anything that, with a little work, can be turned into a serviceable craft. Such salvaged craft are hodgepodges of cobbled-together items from a variety of sources. For example, the fuel pods of orbital shuttles are often used as floats for large houseboats, and it is not uncommon to see the undercarriages of defunct hovercraft serving as hulls for larger craft. Salvaged boats are also likely to have rebuilt and reconditioned engines or patchwork sails.

NATIVE SETTLEMENTS

Though no two native villages are exactly alike, most do share some common characteristics. Most settlements have been consciously designed to integrate ecological harmony and practical efficiency. Of course, to an outsider, a native settlement may appear little more than a random collection of wooden dwellings, scavenged steel supports, piece-glass windows, and plastic sheet greenhouses. Salvaged or purchased technology is almost always present, even if it is little more than a radio, a solar panel, or plastic pier. A number of settlements have communications systems, including computers, with which they stay in contact with distant settlements. Some very prosperous settlements may even have a hydroponics lab or small fuel cell generator.

The sites of native villages in the Storm Belt are most often selected for the protection they provide. Villages built in the cones of dormant volcanoes or the recesses of canyonlands are common in the stormiest latitudes. There are usually many fissures and tunnels through this terrain leading to the village, and these are often barricaded with wooden gates and fences to help protect the village from the planet's more curious and aggressive predators.

The dwellings themselves are often large, multistoried structures, open to the breezes to keep them cool during the daytime. Their construction is simple and efficient, and somewhat representative of many Asian architectural traditions. A frame of indigenous timber or cane is filled in with either thatched seaweeds or mott and daub to seal the structure against the elements. Roofs are either thatched or made of wooden planks or salvaged materials, such as industrial plastic sheeting and corrugated metal.

Dwellings are often arranged in a circle, usually around a central community area and fire pit. Outside of this circle are the secondary structures, such as smokehouses, rabbit hutches, and pig pens. The tunnels passing through the cone often lead down well-worn paths to the settlement's docks, which may have one or more outbuildings for storing nets and tackle or processing fish. These paths also typically lead to the settlement's beaches and algae pens.

Another much less common type of settlement in the Storm Belt is built within large cavern systems. Such villages can be found both in terrestrial caverns as well as in rare, air-filled, underwater caves, accessible through long, twisting submerged tunnels. Families typically share larger rooms or caverns, though with the traditional family unit's general lack of importance in many communities, this is by no means always the case. A central cavern serves as the communal gathering place where much of the village's collective activity takes place.

In the submerged caverns, mollusks and crustaceans may be farmed in smaller side caverns, and there may be additional rooms where meats and seaweeds are dried and stored. These communities are also very likely to include cetaceans, and one or more large underground lagoons are typically reserved for their use.

Settlements outside the Storm Belt are much more freeform. These are more representative of what many outsiders think of as "typical" native villages; timber and thatch huts, hodgepodges of expensive high-tech and salvaged equipment, lots of boats, and a relatively large population living in pastoral splendor on white sand beaches.

Dwellings typically rest on risers, though their height will depend on the structure's distance from the shore and the community's proximity to the Storm Belt. The dwellings are most often arranged in a semi-circle fronted by the shoreline. Several docks usually jut into the water with the fish pens and kelp fields a short distance away. Secondary structures often form a loose ring around the primary dwellings. Where electricity is unavailable or unwanted, handcrafted wood or cane flambeaus will be anchored in the sand at various intervals, providing light for the community after sunset.

The most unusual settlement type, found primarily in regions outside the Storm Belt, are floating towns, where boats, rafts, and barges are lashed together into an ever-changing, nomadic community. These settlements are typically nestled safely within a cluster of small islands or reefs. Some of these dynamic settlements have existed for decades, and can approach the size of terrestrial towns. Such older settlements have, for all practical purposes, lost their nomadic nature, and as whole units, have not moved in years. However, even the older floating villages remain dynamic, as organic material rafts decay quickly on Poseidon and require constant repair and replacement.

AQUACULTURE AND AGRICULTURE

Most native communities are firmly rooted in a tradition of subsistence agriculture. Most settlements practice some form of animal husbandry in addition to the cultivation of various seaweeds and algae. Indigenous, semi-domesticated fish are a common sight and are usually penned near the kelp fields with nets and, less commonly, electric fences. Many natives selectively breed these fish for various traits, such as size and meat production.

Rabbits are also common in many villages, simply because of their high ratio of meat production to mass. A settlement's hutches are almost always communal property, though individuals with a special talent for caring for the animals will sometimes be given greater responsibility for them.

Like rabbits, marine iguanas are also raised in (aquatic) hutches, and the genetic modifications they received on Earth have made them extremely viable food sources. Iguanas require very little space and are fairly omnivorous. With minor genetic adjustments, their fecundity was enhanced and now they are a primary source of animal protein in the native diet. In fact, the iguana was perfectly suited for the environment of Poseidon. The temperatures are ideal, and the iguana is naturally a strong swimmer. The iguana has forced some less aggressive native scavengers and herbivores out of their niches and has in turn been largely ignored by most predators. As a result, the iguana population exploded in the early years of the colony, and in 2199, it is a rare sight indeed to find even the smallest outcropping of reef or rock without a dozen or more of the reptiles basking in the sun or grazing on seaweed.

Pot-bellied pigs are also very common on Poseidon. Also omnivorous, the pigs are satisfied eating just about anything. The meat produced, while a bit greasy, is quite flavorful. A favored feature of most native celebrations, festivals, and ceremonies, its hardy nature and large litters make the species an ideal food source.

Fishing, however, is the nutritional mainstay of most of Poseidon's natives. Every conceivable form is practiced, and techniques vary based on the waters and the species being fished. Netting is the most common practice. Purse seining and gill netting are common in deeper water, and cast nets are used to catch the smaller fish species and other swimming creatures that school in the shallows. Handlines and deep-ocean longlines are used to catch larger fish, while traps, pots, and weirs are used to capture an endless variety of fish, crustacean, and shellfish species.

Spearfishing is also pervasive, as the natives are supremely adapted to this activity. Spearfishing allows the natives to take some of the large game fish that might otherwise destroy a net or trap. Native spearfishers usually hunt near the reefs and shores, as open-ocean predators are are simply too dangerous to risk encountering.

Some native groups also hunt the marine mammaloids and non-fish species of Poseidon's oceans. The caneopoise, or sunburst, is the most commonly hunted animal, and it provides a wide range of resources. While many zoologists fear that the caneopoise will eventually be hunted into extinction, the newcomer poachers who hunt the animal for its valuable hide are the real threat to its existence.

LIFESTYLE

In many ways, the daily life of the Poseidon natives resembles that of historical, pastoral societies. The natives plan their lives around the storm seasons. During the calms, agriculture, hunting, and fishing proceed in earnest, and daily life is active and full. When the storm season approaches, the natives move out of their hunting and fishing camps into more secure settlements. There they weather the storms, subsisting on preserved food while making and mending equipment, tools, and clothing for the coming season of renewal.

The average native's day begins at dawn, the adults rising from their beds with the sun. Those adults assigned to the fishing fleet load their boats and depart. Others remain behind to tend the algae plots, the crop fields, and the livestock. The children rise early as well and often assist with the morning chores. The rest of their day, however, is devoted to learning and play.

Education is highly valued, as would be expected in a culture descended from scientists and other highly educated individuals. Quite often, formal learning is combined with light chores and practical tasks, and children begin to learn about their environment at a young age through their day to day interactions with it. They learn by watching their elders and asking questions, as well as through specific instruction. While practical learning is emphasized, the scientific foundations of their activities, such as hydroponics, animal husbandry, biology, ecology, and chemistry, are equally important and part of their daily lessons.

Since Recontact, many of the larger and more prosperous native communities have begun importing computers and other technology in an effort to improve their educational resources. Some communities have even begun sending promising children to the GEO-sponsored schools in the major settlements, while others have begun hiring Earth-born teachers for local schools.

Most of Poseidon's major settlements are in the tropics, braving the Storm Belt in favor of more hospitable temperatures. Such communities often enjoy a traditional siesta, reminiscent of those of Latin American cultures on Earth. A native's lunch is usually light, consisting of spiced seaweed and smoked fish. In some settlements, the boat crews return at midday, while in others, they remain on the ocean until late afternoon. These fishermen often break for midday dives in the cooler water.

Evening is a time for community. The natives take turns preparing a communal dinner, usually the largest meal of the day. The staple seaweeds and fish may be supplemented by pork, iguana, and rabbit. Prosperous settlements may also enjoy a variety of hydroponically grown fruits and vegetables. There are also many indigenous fruits, vegetables, and herbs gathered by native communities, but cultivation is usually restricted by limited land area.

After dinner, native communities enjoy a time of social interaction, as leisure time accompanies the light chores that remain at the end of the day. Nets are repaired, sails and clothing are sewn, and the natives, like people everywhere, gossip and trade stories. Often boat crews return to the sea at sunset to reset nets, drop crustacean traps, and make a few spearfishing dives.

RITUAL AND CEREMONY

The fact that Poseidon's natives are descended from scientists and technicians has done little to inhibit the development of cultural traditions, rituals, and ceremonies. Many anthropologists suggest that this fact is not at all surprising, as these traditions would have helped to support the sense of communal identity and cooperation that was so important to the survival of the original colonists.

Births are an extremely important occasion for any native village, as they represent both a validation of past struggles and a renewed hope for the future of the community. Births are celebrated with several nights of feasting and revelry, culminating in the immersion of the newborn into the sea. This is a symbolic baptism as well as a practical test of an infant's diving reflex. This first immersion is called the Welcoming Ceremony among most native groups.

Likewise, death is treated with a great deal of ceremony, as the body is returned to the ocean that welcomed it at birth. Cremation is universal among native cultures and floating pyres launched to sea are most common. There is a great deal of feasting and toasting at a native's wake, during which the friends and family with which they shared their lives will reminisce and share stories of the departed. There is very little mourning, and ironically, the entire event closely resembles a birthing celebration.

The largest, and by far the most revelrous native celebration, is the week-long festival called Planetfall. This event is a joyous time in which everyone is encouraged to forget the hardships of life and enjoy the hope, community, and bounty of the planet. The festival honors the anniversary of the original colonists' arrival on Poseidon and culminates with Founder's Day, a frantic and emotional celebration of the first landing. Whole villages come together for a raucous, non-stop party, reminiscent of Earth's many carnival-style holidays.

Coincidentally, almost one-third of annual native births occur during a time that has come to be called the Baby Wave, roughly nine months after the previous year's Planetfall celebration.

While the natives of Poseidon continue to be a predominantly pragmatic people, many other rituals and ceremonies have been identified within individual native communities. Traditions involving the coming of the storm season, the hunt, mating, the aborigines, and other phenomena have been reported among the more isolated native communities. Further surveys are needed to verify these reports, but the often extreme hostility of these native groups makes any such efforts problematic at best. Recent statistics indicate that field anthropology is becoming one of the most dangerous occupations on Poseidon.

THE GEO ON POSEIDON

The Global Ecology Organization has maintained a continuous presence on Poseidon since the *Adm. Robert Perry* arrived in orbit in 2165. This presence has expanded from a few scientific teams clustered in the Pacifica Archipelago to thousands of GEO personnel and dependents stationed throughout the waterworld.

The relationship between the GEO and Poseidon is complex and fraught with conflict. Even the history of the relationship is disputed. The GEO claims 119 years of support and governance of the colony, dating from the UN's *Argos 12* mission in 2080. Native activists argue that the GEO's claim on the colony ended with the Abandonment in 2096. Political opinions aside, no one disagrees that the GEO plays an increasingly important role in the daily affairs of every colonist on Poseidon.

John Bishop, the Colonial Administrator, heads the Office of Colonial Affairs and is the highest ranking GEO official on Poseidon. Each of the GEO High Commissions is represented by a Deputy Commissioner who is responsible for his Commission's assets and activities on Poseidon. The Deputy Commissioners are, in principle, subordinated to the Colonial Administrator, but in practice, they enjoy a great deal of autonomy with which to pursue their responsibilities.

Currently, the Deputy Commissioners hold regular meetings at the Government Center in Haven to coordinate their efforts. Given the colony's relatively loose administrative structure, however, the level of this cooperation is completely dependent on the personalities of the Deputy Commissioners and the leadership of John Bishop.

HUMAN RESOURCES

The HCHR maintains an extensive presence on the colony world. This Commission has primary responsibility for providing the colony's many settlements with educational resources, disaster relief, and development assistance.

Education continues to be one of the GEO's top priorities on Poseidon. Currently, organized primary and secondary schools exist in the vast majority of newcomer settlements, though most of them are quite small. Most of these schools have been built and maintained with direct support from Human Resources. The Commission oversees the schools' curricula, provides funding, and supplies teaching materials, computer equipment, CommCore access, and many other valuable resources. In addition, Human Resources coordinates several programs that bring well-trained and enthusiastic teachers to these settlements.

Poseidon is an often-savage world, and disaster relief is one of the most valuable services provided by Human Resources. In addition to coordinating the development of local fire and flood protection in settlements throughout the colony, the Commission maintains several Emergency Response Teams. These highly trained teams respond to natural disasters and accidents and perform a variety of search-and-rescue functions. The Teams' actions are coordinated by Anastacia Flores, the Emergency Response Manager on *Prosperity Station*.

The ERTs are well publicized and enjoy a great deal of support from the colonists, newcomer and native alike. Natives account for more than 15% of all ERT personnel, and an additional 10% are Earth-born cetaceans. The ERT service is one of the few GEO programs that enjoys widespread support from native colonists.

An ERT Training Camp was established in 2188, but it has since been supplanted by the Poseidon Training Academy. The Academy is tasked with training suitable candidates for all nonmilitary positions within the GEO hierarchy, including the ERTs. Human Resources' goal is to eventually recruit 75% of the GEO's colonial staffing requirements from the local population.

Human Resources is also charged with providing development assistance to the colony's settlements. The Commission provides financial and technical assistance for a wide range of public projects, including power grids, desalinization plants, and hospitals.

NATURAL RESOURCES

The HCNR's primary role on Poseidon is to regulate the booming economic exploitation of the planet and investigate violations of GEO environmental statutes on the colony world. The HCNR is allowed by law to send Environmental Inspectors to all industrial sites on the planet. This includes Incorporate facilities and operations, though the details of Incorporate treaties with the GEO may stipulate further conditions on these inspections. There have been occasions when inspection teams required the assistance of Marshals and even GEO Peacekeepers to gain access to Incorporate facilities.

The HCNR also maintains a network of global surveillance satellites in Poseidon orbit, similar to the Commission's EarthWatch network. These satellites have been remarkably effective in identifying environmental violations and have also provided valuable scientific data on Poseidon's ecology.

Environmental Inspectors also visit colonial settlements on an infrequent basis. The inspection teams look for many of the same things they do at an industrial site, including sanitation and environmental overload. Even where problems exist, these inspections do not often result in legal action. The data is usually turned over to Human Resources so a solution can be implemented.

SCIENCE AND TECHNOLOGY

The HCST's presence on Poseidon is one of the most extensive of any GEO Commission. There is a growing horde of scientists on the planet, as botanists, zoologists, geologists, meteorologists, oceanographers, and researchers from countless other fields scatter across and below the planet's surface. Science and Technology is responsible for coordinating and funding many of these research efforts. The Commission founded the Haven Institute of Science and Technology in 2188, and the WSA's *Darnel Observatory*, an orbital facility named for a GEO astronomer, became operational in 2195.

The HCST has also established an underwater research facility called GEO Prime near the Zion Islands. The laboratories at GEO Prime focus on the research of Poseidon's marine life, including the aborigines, the planet's tectonic activity, and the nature and origin of xenosilicates. More than 25% of the GEO personnel stationed at GEO Prime are dolphin scientists and orca technicians.

COMMUNICATIONS

It has been the monumental task of the HCC to develop the telecommunications infrastructure of the frontier colony. The Commission has established a network of communications satellites in orbit and has also installed a local CommCore network. Though it remains significantly less sophisticated than the one on Earth, the network's growth is pacing that of the colony as a whole, and most every newcomer on Poseidon carries at least a bodycomp with full CommCore access.

Communications on the planet can nevertheless be somewhat unreliable, for reasons partially outside the HCC's control. The planet's furious surface storms can sever communications with outlying settlements for weeks at a time. Even where storms do not occur, Poseidon's often-dense cloud cover and attendant electrical activity frequently render satellite communications unreliable.

INTERNAL SECURITY

Though the HCIS maintains offices on *Prosperity Station*, not even the Colonial Administrator knows the extent of the quietly growing IS presence on Poseidon. Incorporate activities on the planet have been a major concern for the Executive Council, and Astumo Nakano, the current High Commissioner, has brought his legendary "Black Crusade" against the Incorporate to the waterworld.

STATE AND INTERNAL AFFAIRS

The SIA is confronted with one of the most difficult tasks confronting any GEO Commission on Poseidon. It is SIA's responsibility to maintain peaceful relations between the GEO and the colony world's many competing factions, including the Incorporate, the natives, and the independent colonists. SIA maintains consular offices in many Incorporate company towns, including Cliffside, Santa Elena, and Al-Mamlakah. Additional consulates exist in Poseidon's major colonial settlements as well, such as Haven, Second Try, and Kingston.

SIA Envoy Teams are charged with identifying and contacting previously unknown native communities. When such a settlement is discovered, the Envoy Team evaluates its needs and negotiates with its leadership for GEO services and protection. The Envoy Teams are also trained to provide basic medial care, from the inoculation of children to the instruction of settlers in basic first aid and emergency procedures. After first contact has been established, these duties are typically turned over to Human Resources.

The Office of Colonial Affairs is an SIA agency, though John Bishop, the Colonial Administrator, actually outranks the SIA Deputy Commissioner on Poseidon. The OCA is responsible for the general administration of the colony and for coordinating the efforts of the Deputy Commissioners. While the OCA is headquartered in Haven's Government Center, each of Poseidon's major settlements maintains an OCA office.

The OCA is charged with the management of all immigration to Poseidon. The backgrounds of prospective immigrants are screened electronically, but this process is notoriously easy to circumvent. The OCA also supervises the briefing and medical procedures that each immigrant must undergo, and maintains the passenger receiving facilities on *Prosperity Station*.

All new colonization efforts must be approved by the OCA. Such efforts must be carefully planned according to established guidelines, which include zoning restrictions and population ceilings. Any expansion beyond these initial settlement plans must receive OCA approval. In practice, of course, there is almost no official supervision of many settlements on Poseidon. The OCA's limited personnel and resources are simply insufficient to keep pace with the colony's explosive growth.

ARMED FORCES

There is a heavily reinforced brigade stationed on Poseidon under the command of Luther Gideon, a Marine Corps Lieutenant General. The brigade includes five companies of Peacekeeper Special Forces (the Blue Berets), a company of Marine Corps Heavy Cavalry (Shock Troops), and six regiments of Peacekeepers. The total strength of this infantry force is approximately 10,000. Support from the GEO Aerospace and Naval Commands includes VTOL strike-fighters, patrol jumpcraft, missile hydrofoils, and fighter subs.

The primary downside military base is near Kingston, New Jamaica, but many of the Peacekeepers are dispersed in company-size garrisons around the planet. Spread out and isolated, the Peacekeepers are in a situation similar to that of the US Cavalry in the 19th Century American West. This analogy, of course, has escaped the attention of neither the popular media nor the soldiers themselves.

JUSTICE

The GEO has assigned three Magistrates to the Poseidon colony. Each of them commands eight Marshals and the GEO Patrol personnel and resources within their jurisdiction. The Justice Commission is planning to expand the GEO's law enforcement presence on the waterworld as resources become available. Currently, even with the assistance of specialized Peacekeeper units on loan from Armed Forces, the GEO has insufficient personnel to effectively maintain the peace in many isolated areas.

The municipal facilities of Poseidon's major settlements include permanently maintained offices for Magistrates, Marshals, and their support staffs, as well as detention facilities. Most of these settlements also have at least one Patrol precinct. All but the most isolated settlements have designated offices that can be used by the Magistrates. On a rotating schedule, a Magistrate, accompanied by one or more Marshals, will hold court in the settlement. The Magistrate hears any civil cases that have been filed since his last visit and also conducts any necessary criminal trials. These facilities usually include a small jail, though the most violent or dangerous prisoners are held locally only until a Marshal can be dispatched to transfer them to *Prosperity Station*.

The UN established the Marshal Service during the early years of the Blight. More than 100 years later, it has become a powerful federal police organization with a major presence throughout Earth and the Colonies.

Each Marshal stationed on Poseidon answers to a Magistrate and commands one or more Deputy Marshals. In addition, they have command authority over local Patrol personnel. For the most part, local law enforcement is the responsibility of the Patrol precincts in Poseidon's major settlements. Marshals and Deputy Marshals are typically involved in large-scale investigations, from terrorism to organized crime. Marshals are also frequently in charge of investigating alleged violations of GEO statute by member states, including the Incorporate.

The Marshal Service maintains offices in most of Poseidon's major settlements, including *Prosperity Station* in orbit. Marshals have the authority to act with a great deal of independence, though they are always answerable to their Magistrate. When not engaged in a major investigation, Marshals spend much of their time circulating between the offices in their district, overseeing local law enforcement efforts and pursuing investigations at their discretion.

Just as on Earth, local law enforcement in Poseidon's major cities and settlements is the responsibility of the GEO Patrol. The Patrol's organization is similar to that of police agencies throughout the modern era, except that each precinct ultimately answers to a GEO Magistrate. Patrol Officers have a wide range of typical law enforcement responsibilities within their jurisdictions, from traffic violations to homicides.

In practice, the Patrol is so understaffed and poorly funded that many crimes on the frontier colony are not even investigated. For example, there are less than 1,000 Patrol Officers on duty in Haven, a city of more than 500,000 people. All too often, there is a sort of "triage" in effect in the Patrol precincts. Officers focus on violent crimes, such as assaults, rapes, and homicides, and ignore the countless other criminal activities, from small-time drug trafficking to property crimes, that plague Poseidon's major settlements.

In an effort to address the critical shortage of law enforcement personnel on Poseidon, as well as to generate goodwill among the native population, the Justice Commission created the Native Patrol in 2193. The goal of the Native Patrol is to establish a legitimate law enforcement presence among those native settlements and areas that have resisted both Incorporate and GEO intervention. Members of the Native Patrol are trained in standard law enforcement procedures and are authorized to draw upon GEO Patrol and Marshal Service resources when necessary.

Native Patrol officers have developed their own traditions and are fiercely loyal to their own people. Initially intended as an official GEO presence within the native population, the Native Patrol is in practice a native presence within the GEO hierarchy. The first loyalty of a Native Patrol officer is almost always to his community, and cooperation with GEO authorities is typically viewed as a necessary means to a desired end. In most areas, the relationship between the Native Patrol and the GEO is cordial and cooperative, if not exactly friendly. In others, there is almost no contact between local Native Patrol officers and the GEO chain of command.

Law Enforcement on Poseidon

The most crucial problem confronting the Justice Commission on Poseidon is not the shortages of personnel and resources, which are real enough, but the issue of what laws apply to the colony world. Shortly after Recontact, the General Assembly approved a bill that applied all GEO laws to Poseidon, but this action has been caught up in a fair amount of controversy and ambiguity. As has already been noted, many native activists deny the GEO's claim of a continuous presence on Poseidon since the launch of the Athena Project. These voices of dissent have been joined by those of the Incorporate and Independent governments, each of whom have a stake in loosening the GEO's grip on the colony world.

Politics aside, colonists on Poseidon face many issues and situations that are simply not addressed by any of the laws that were drawn up on Earth. One of the most dramatic is the legal status of the apparently sentient aborigines. Another is the natives' right to property for which they have made no legal claim, but have occupied, in some cases, for more than 100 years. These problems, and others like them, are compounded by the fact that, while the executive branch of the GEO has a strong presence on Poseidon, the colonists as yet have no voice in the General Assembly.

While not the only problem confronting law enforcement on Poseidon, the lack of sufficient personnel and resources is certainly a major obstacle for the Justice Commission. As noted above, the Marshal Service typically focuses on major investigations, while even the Patrol Officers in major settlements are forced to ignore a wide range of criminal activity. In isolated or outlying settlements, a village constabulary, the Native Patrol, or a wandering Marshal may be the only law. Likewise, GEO law enforcement officials are rarely seen in the company towns, where the only law is that enforced by Incorporate security.

The result is pretty typical of any frontier society from the pages of history, though not quite so romantic. In many cases, colonists are responsible for their own protection. Private citizens often carry sidearms and other weapons, as the law gives them a great deal of room to protect themselves and their property. On Poseidon, self-defense is both a very strong legal defense and an important right for every colonist.

On the other hand, the right of self-defense is just that: it should never be mistaken for a license to kill. If a burglar is shot and killed by a law-abiding homeowner, the Patrol is more likely to thank the citizen than to bring him in for questioning. Indeed, due to the Patrol's priorities, petty criminals face the wrath of their victims far more often than that of the Justice Commission. But a colonist who seeks out and kills someone he believes has wronged him will be prosecuted to the full extent of the law. The average colonist has a great deal of freedom on Poseidon, but there are seldom running gunfights in the streets of Haven.

TRADE AND INDUSTRY

The HCTI has a growing presence on Poseidon, resulting from the xenosilicate boom and the colony's accelerating industrial development. It is the HCTI's task to manage the economic exploitation of Poseidon in accord with GEO statute. The Commission works with private corporations, Incorporate states, other Commissions, and individual settlements to implement long-term development strategies, and funds countless programs designed to bring the colony to economic self-sufficiency as quickly as possible. In the meantime, the HCTI also coordinates with the OCA to schedule and administer regular resupply efforts from Earth.

The HCTI is typically the Commission with the least popular support among the colonial population, despite the crucial role it serves. Its poor public image is likely the result of its relationship with the Incorporate states. The Commission's position is a difficult one: on the one hand, it has a responsibility to promote the economic welfare of both the colony and Earth. As has been the case throughout the last century, that welfare is largely dependent on the Incorporate powers. On the other hand, Trade and Industry is as much a GEO High Commission as Natural Resources or Justice. It is firmly committed to the standards of environmental responsibility and human rights on which the GEO was founded. Many colonists, native and newcomer alike, fail to realize that the HCTI is often most responsible for curbing the excesses of the Incorporate states on Poseidon.

THE INCORPORATE STATES ON POSEIDON

Since the discovery of xenosilicates in 2185, the Incorporate states of Earth have driven the exploitative rush on the colony world. In 2199, the Incorporate are a permanent fixture of life on Poseidon, and their activities continue to have a profound effect on the political, economic, and social makeup of the frontier planet.

ANASI SYSTEMS

Colonial Holdings: None

Though its longevity therapies, biomods, and healthcare facilities have lifted Anasi to the forefront of the biotechnology field on Earth, it has not yet established a colonial presence on Poseidon. Anasi contracts with several Incorporate states for the xenosilicate ore it requires for its products, services, and research programs. However, there are persistent rumors that Anasi intends to acquire one or more private Earth-based corporations with experience in deep-sea mining operations. The entry of yet another major player into the Long John industry has several GEO Commissions concerned about escalating conflict between rival Incorporate states. The fact that Anasi is the only Incorporate state to have used a nuclear weapon in a conflict makes the situation even more tense and unpredictable.

Anasi is also conducting a careful survey of Poseidon in hopes of finding a satisfactory location for a new "luxury arcology" similar to the Xanadu complex on Earth. The Incorporate state intends to construct this arcology on the seafloor, hoping to capitalize on the romantic and exotic image the waterworld has enjoyed on Earth. Anasi is thought to be negotiating with both Atlas and Hydrospan for the construction of this submerged arcology. The Incorporate state's plans are meeting resistance both from the GEO and several native activist groups.

ATLAS MATERIALS

Colonial Holdings: Al-Mamlakah (pop. 27,500)

Habib al-Muhammadi is Atlas' Chief of Operations on Poseidon. Al-Muhammadi and his deputy, Saide ibn-Fahad, are the driving force behind an Incorporate state that is poised to reap billions from mankind's exploration of the stars.

Although Atlas Materials is one of the wealthiest Incorporate states, it has a relatively small downside presence on Poseidon, since the planet does not yet have the infrastructure to support a large manufacturing operation. As a result, Atlas continues to reap immense profits from the fleet of transports that ship manufactured goods and materials to and from Earth.

However, the Atlas leadership realizes that colonial enterprises will only pay the huge costs of interstellar shipping so long as there is no alternative. Consequently, Atlas' presence on Poseidon is growing daily. Its major emphasis is on increasing the available construction, manufacturing, and repair facilities on the colony world. Its major downside port is the town of al-Mamlakah.

Al-Mamlakah is the only city on Poseidon that has the necessary facilities to build and repair large orbital shuttles and the massive fusion reactors required to power them. The majority of the shipbuilding and manufacture of vehicles such as jumpcraft and hovercraft that occurs on the waterworld also takes place in Atlas' industrial center. There are also limited construction and repair facilities for specialized spacecraft and heavy machinery, though the planet's orbital stations continue to provide most of these services.

Al-Mamlakah's most prominent feature is its Mosque. The building's central spire is built around the control tower of the Atlas spacecraft, *Jebel Chelia*. Rising more than 250 meters above the surrounding industry, the tower provides a platform from which the muezzin can be heard for more than 20 kilometers across the ocean. While the vast majority of Atlas citizens on Earth are Muslim, the Incorporate state's operations on Poseidon accept independently contracted employees of any faith and ethnic background.

BIOGENE

Colonial Holdings: Cliffside (pop. 49,450)

Ever hungry for any opportunity to turn a profit or expand its operations, Biogene was among the first generation of Incorporate states on Poseidon and continues to play a major role in waterworld politics. Even though its major concerns fall within the field of genetics, Biogene has at least a limited interest in most commercial operations on Poseidon. The genetics giant has more than 30% of its net worth invested on the colony world and is one of the leading exporters of xenosilicates to Earth.

Biogene is represented on Poseidon by its Executive Vice President for External Affairs, Carl d'Augustino. Born in Medillin, Colombia, D'Augustino is a graduate of the Harvard Business School. He is reputed to be a formidable opponent both at the negotiating table and below it. Having secured a position at the top of the Biogene hierarchy through marriage to one of the Ballard daughters, d'Augustino has acquired a reputation as a masterful power broker who can engineer lucrative deals both with rival Incorporate states and the GEO.

D'Augustino is backed by a Board of Governors that includes some of the shrewdest economists and political strategists in the system. Members of the board include a retired Major in the GEO Peacekeeping Force and a former high-level bureaucrat in the HCTI. As a result of this diversity, Biogene's leadership on Poseidon has always been aggressive and visionary.

Biogene's colonial holdings and operations are widespread. They include the massive spires of the Ballard Building in downtown Haven, the research stations and laboratories scattered across Poseidon's surface, several undersea mining facilities located near xenosilicate deposits, and the company town of Cliffside. Cliffside is an ocean town, a collection of sturdy platforms atop concrete pilings anchored in the bedrock 100 meters below. It gets its name from the nearness of the continental slope, which begins less than a kilometer from the center of town. In addition to its crucial role as a supply and distribution center for Biogene's operations throughout the region, it is a popular stop for tourists and a common downside vacation spot for Biogene citizens and employees.

Biogene has the largest Incorporate security force on Poseidon. Biogene Security officers enjoy state-of-the-art training and equipment, and many of them are genetically enhanced. Biogene Security serves a number of roles on the colony world, from law enforcement in Cliffside to the military defense of Incorporate facilities, personnel, and operations. Biogene Security is supported by a number of VTOL aircraft, patrol jumpcraft, surface vessels, and fighter subs.

LONG JOHN

Over the past two decades scientific thought and progress have both undergone drastic change as a direct result of the discovery of xenosilicates on the planet Poseidon. Entirely new scientific disciplines have developed, and entirely new controversies have arisen over everything from genetics and biochemistry to the origin of life and divine creation. No single discovery in recent times has so impacted every field of science or had such far-reaching social ramifications as the realization of the potential in these minerals.

The commercial value of xenosilicates is the reason the Poseidon frontier was opened, and the reason the Incorporate can afford the horrendous expense of exploiting a planet in another star system. Xenosilicate mining drives the economy of Poseidon and stands as a determining factor in Earth's recovering economy.

To date, the minerals have been found exclusively in the exposed lithosphere of the planet Poseidon. Xenosilicates are an enigma and represent an entirely new class of minerals. The purest ore is translucent, and in dim light it almost glows. Such pure nodules are rare and uniformly small. More commonly, the ore is found in larger nodular deposits intermixed with other mineral compounds and organics, giving the ore a milkier and grainier appearance. The specific gravity of purified xenosilicate is 6.8 with a hardness comparable to diamond. Its specific heat appears variable by grade with some types of ore being almost impossible to melt.

Xenosilicates are found in large but isolated deposits, as nuggets or nodules of various sizes. Individual nodules usually mass less than .5 kg but there are unsubstantiated records of nodules in excess of 50 kg. Most nodules are spherical in shape with multiple radiating spurs or spines that can be over a meter in length. In some cases these spurs interconnect nodules implying that they somehow serve as catalysts for the deposition of new nodules.

Prospecting for xenosilicates is more art than science and most attempts to facilitate the process with technology have met with little success. Like historical prospecting, experience, hard work, and luck are the only practical tools.

Predicting the location of xenosilicate deposits is not only complicated by the apparent lack of any deposition pattern, but also by the fact that more than 94% of all deposit discoveries have been made on the ocean floor, below a depth of 1,000m.

It was discovered early on that xenosilicates have a characteristic effect on electromagnetic fields, warping them in an identifiable way. Unfortunately, even with sensitive instruments, this effect is undetectable beyond only a few hundred meters. Prospecting for xenosilicates is therefore a problematic task, requiring slow and careful proximity scans of the ocean floor. Further complicating the effort is the apparent lack of geological consistency between the locations in which deposits are discovered. There seem to be few consistent geological cues indicating the presence of a deposit.

Mining xenosilicates is a hazardous, technically demanding process. Commercial exploitation of the minerals has forced advancement of underwater engineering and the birth of entirely new technologies. Because of the complications of depth, pressure, and violent surface storms, most mining efforts involve submerged factories, labs, habitats, and refineries. Trains of tug subs and armies of hard-suited miners work under thousands of meters of water in absolute cold and darkness, under unforgiving, lethal pressure.

The smallest deposits are usually excavated using large cargo subs specially outfitted for extended use as support facilities. Some deposits are worked using portable, submersible stations, temporarily lowered and supported from the surface. The largest deposits require more permanent facilities.

These facilities are large, with dozens or hundreds of crewmembers, multiple sub bays, and even refining operations. In addition to mining the ore, many facilities are also used to mine other ocean-floor minerals to further offset expenses and justify operation.

DUNDALK SHIPBUILDING
Colonial Holdings: Colonial Station
(pop. 15,500)

Dundalk's only holding beyond the Solar System is *Colonial Station* in Poseidon orbit. This massive facility is one of the largest orbital stations in the system, and is the center of not only Dundalk's industrial efforts on Poseidon, but its political presence as well. *Colonial Station* is primarily used as a supply, maintenance, and repair facility for the Dundalk spacecraft fleet, but it also boasts expanding construction operations that provide orbital shuttles, satellites, and modular deep-sea habitats to the booming colonial market.

Sean Kirkpatrick is the Vice President of Colonial Operations on Poseidon. The nephew of Dundalk President Annette Kilkenney, Kirkpatrick shares his aunt's vision and charisma. On Poseidon, Dundalk has maintained its reputation for fair play and responsible management, and continues to enjoy solid relations with both the GEO and its Incorporate rivals. *Colonial Station* is currently the center of a joint research venture by Dundalk and Hydrospan intended to develop new breakthroughs in the engineering of submerged habitats, and Dundalk is also benefiting from cooperative efforts with Atlas Materials. As Atlas continues to focus its colonial efforts on expanding its downside infrastructure and manufacturing facilities, it has allowed Dundalk to acquire many of its space-based resources. These include several small orbital stations, shuttles, and even a few transport craft that make the run between Earth and Poseidon. As a result, Dundalk stands to become the undisputed Incorporate leader in space-based operations and technology.

GENDIVER
Colonial Holdings: Santa Elena
(pop. 20,150)

GenDiver has been one of the most aggressive Incorporate states in expanding its operations on the colony world. GenDiver has established numerous mining operations and refining facilities across the planet, and its somewhat adversarial approach has resulted in numerous confrontations with the GEO, the natives, and its Incorporate rivals.

Since the reinstatement of the UN, GenDiver has officially refused to recognize the GEO as a legitimate governing body. It has withdrawn its representatives from the General Assembly and has repeatedly denied HCNR Environmental Inspectors access to its facilities on Poseidon. Ironically, however, its confrontations with the GEO have been more overt on Earth than on the colony world. The GEO's control of the wormhole—and therefore all access to the Serpentis System—makes the Incorporate state somewhat hesitant to test the GEO's limits on Poseidon.

Nevertheless, Steven Crawford, the Director of Operations on Poseidon, has touched off a cold war between GenDiver and GEO personnel. The SIA consulate in Santa Elena is subject to heavy electronic surveillance by GenDiver Security, as Crawford realizes that most of the personnel there are in fact attached to Internal Security. GenDiver uses this and other intelligence assets to monitor the activities of the GEO and ensure that its own operations continue uninterrupted.

GenDiver has also been prone to conflict with its Incorporate rivals, particularly Atlas Materials. The hostilities between the two Incorporate states have a long history, beginning in the first years after the discovery of Long John and its commercial potential. In 2192, a squadron of GenDiver fighter subs escorting an ore-carrying transport submersible inexplicably veered off course and launched multiple torpedoes at Undersea Habitat 1, Atlas' first deep-sea facility on Poseidon. More than 200 Atlas citizens died in the attack.

While GenDiver claimed that the attack was the result of "pilot error," it refused to disclose its recordings of communications between the submersibles and the administration in Santa Elena. Survivors also testified that the fighter subs circled the facility, making visual contact before they launched the attack. In any event, the incident touched off the first major Incorporate hostilities on Poseidon, and was the first such conflict to occur since the last years of the Blight.

In 2199, Poseidon still has a reputation for lawlessness, and though deserved, things are tame compared to the years before the arrival of the GEO Magistrates and their Marshals. Bloody confrontations between GenDiver and Atlas personnel were common during this time, and hundreds of Incorporate security personnel and employees lost their lives. The violence reached a peak in 2194 when five colonial civilians were killed in a gunfight between more than a dozen GenDiver and Atlas laborers on leave in Kingston, New Jamaica.

Such confrontations have become more covert, if not more infrequent. Isolated research stations are occasionally attacked, cargoes are sabotaged, research data is stolen, and GenDiver and Atlas executives are sometimes the casualties of mysterious circumstances. However, even GenDiver rarely involves itself in activities that cannot be covered up and plausibly denied.

As if to make matters worse for the troubled corporation, GenDiver has suffered more from the attentions of hostile native groups than any other Incorporate state. The natives of the Sierra Nueva Cluster seem to have taken a particularly violent interest in the company. For the most part, the natives have confined their attacks to isolated research outposts, weather stations, and other small facilities, but in recent years GenDiver shipping has come under increasingly frequent attack.

Even with the sophisticated technologies that provide access to the sea floor, the actual process of mining is relatively primitive and labor intensive. At most mines, deep sediment layers must be dredged away to expose the crust. Once the bedrock has been exposed, the deposit must be removed from veins in the crust itself. Explosives, high-pressure water cannons and heavy earth-moving equipment must then be wrestled into position and operated by hard-suited miners.

After the ore nodules are freed from the bedrock they must be hauled to a refinery, usually on the surface. Here the mineral is sorted by grade, cleaned, and processed into wafer. Wafer is the purified, semi-raw form of xenosilicate in which the ore is stored and shipped.

Each wafer is a 10-gram, fibrous and brittle rectangle with a translucent milky hue. Each stick is etched into 10, one-centimeter-square sections that in turn serve as the basic currency standard in the modern economy. On Poseidon, a gram square of standard purity is worth about 1,000 scrip; on Earth its value is five times that. Though paper and plastic money dominate as currency on Poseidon, these units of exchange are supported by the market value of xenosilicates, and it is not uncommon to see actual wafer trading hands, much like gold nuggets once did on Earth.

Xenosilicates' inherent value was discovered accidentally by an Incorporate mineral survey in the early days of colonization. A technician at an Atlas subsidiary cleaning mineral samples in an enzyme bath noted the extreme reactivity of a xenosilicate nodule. The enzymes in the bath were denatured and then restructured by contact with the nodule. Simple curiosity led to more sophisticated chemical tests, and eventually to the discovery of the minerals' exceptionally bioreactive nature and biochemical potential.

Certain grades of ore, when carefully processed in a pharmaceutical laboratory, become powerful synthetic catalysts for cellular metabolism. In simple terms, enzymes manufactured within the cell control cellular metabolism. The DNA of the cell in turn con-

trols the manufacture of enzymes. It was discovered that xenosilicates can act as biochemical templates for the manipulation of organic molecules. Certain cleavage faces can serve as chemical frameworks and substrates that act to repair, restructure, or stabilize DNA and therefore the genetic code. Such acute biochemical control allows genetic engineers to literally rewrite a cell's genetic blueprint, redesigning the very structure, function, and metabolism of living organisms.

The applications of xenosilicates have forever changed not only the fields of medicine and genetic engineering, but the face of humanity as well. In-vitro alteration, viral transformation, and genetic surgery have each added form as well as function to the human body. Genetic disorders can be corrected, cancers eliminated, and diseases cured. Strength can be enhanced, speed increased, and body parts replaced or modified. Anything is possible, anything at all, if the price can be paid. And if the price is high enough, even death can be bought off.

The common names for xenosilicates, longevity ore or Long John, originated because of the ore's most remarkable and unexpected effect. Genetic engineers had long known that aging in animals was caused by a slow deterioration of their genetic code, ending in the failure of certain aspects of cellular metabolism. In early experiments it was found that patients undergoing Long John therapy suffered no such metabolic decay. Certain configurations of the mineral apparently serve to stabilize cellular metabolism, in effect arresting the aging process. It eventually became apparent that Long John was indeed a miracle drug—a drug that stopped aging and held the promise of immortality.

The discovery of the biochemical applications of Long John was one of those watershed events in history that forever alters humanity's collective perspective. No longer constrained by death or physical limitations, the future holds new potential. However, few can afford this potential. While individual Long John treatments to combat disease or modify genetic code are within the means of some, only the very rich can afford the continuous therapy.

GenDiver Security frequently sends personnel into the Sierra Nueva to investigate these attacks. On several occasions, these security teams have been involved in violent confrontations with natives who likely had no part in attacks on GenDiver personnel or resources. The latest of these incidents, the Stone Bridge Massacre in June of 2198, resulted in the death of seven natives, and was well publicized in the media of both Poseidon and Earth. The massacre has resulted in loud protest from the Haven Council and native rights groups throughout the colony. Deacon Kingsley, the prominent native activist and councilman, has referred to the GenDiver Security teams as "death squads." The incident has also prompted the GEO to expand the Native Patrol presence in the Sierra Nueva and expand the Peacekeeper garrison on Crusoe. Most observers are unsure whether these actions will help to pacify the region or only serve to escalate the violence.

Santa Elena is GenDiver's only major territorial holding on Poseidon. It is a mid-size town on the southeast coast of Isla Verde focusing on aquaculture, biological research, and Long John refining. Security around the town is very tight, and visiting journalists have described it as an "armed camp." Visas are required to enter the company town, and applicants are subject to intensive screening and background checks by GenDiver Security.

HANOVER INDUSTRIES

Colonial Holdings: Lebensraum (pop. 25,650)

Hanover Industries has perhaps a bigger stake in the colonization of Poseidon than any other Incorporate state. Because control of the Hanover city-state will revert to Germany in 2201, Hanover Industries depends upon Poseidon for its economic and political independence. As a result, its activities and operations on the colony world are both numerous and widespread.

Lebensraum, the Hanover company town, is located on Sable Bay, on the coast of Mandalay Island about 1,500 kilometers from Haven. Founded only six years ago, Lebensraum is quickly becoming one of the largest settlements on Poseidon. Along with Atlas Materials, Hanover is leading the effort to industrialize the colony world, and Lebensraum is becoming a thriving manufacturing center. The German conglomerate has also made a concerted effort to position itself in consumer services, a sector of the frontier economy that has traditionally been dominated by small, privately owned concerns. As a result, Hanover Colonial Bank is one of the largest financial institutions in Haven, Hanover-owned supermarkets and discount stores are being opened in several of Poseidon's major settlements, and the Hazards casino in Kingston is a Hanover property. Hanover Autoworks is constructing a manufacturing plant that will turn out everything from jumpcraft to

hydrofoils, and plans to open dealerships in Haven, Kingston, and Second Try when the plant is completed. The vehicle division is also constructing a number of full-service fuel stations across the colony.

The President of Hanover Colonial is Werner Keinz. Keinz is the ranking executive on Poseidon, and his office is responsible for coordinating the activities of each Hanover division on the colony world. The local operations of each of these divisions are managed by an Executive Vice President, and each of them is answerable to Werner Keinz. Keinz has been extremely careful to cultivate good relations with the Office of Colonial Affairs and the other government agencies on Poseidon, as tensions between Hanover and the GEO remain high on Earth. Keinz hopes that if Hanover keeps its nose clean on the colony world, there will be less political resistance to the transition that is coming in 2201.

HYDROSPAN
Colonial Holdings: New Fremantle (pop. 18,910)

Hydrospan has been extremely active in the reopening of the Poseidon frontier. One of the first Incorporate states to establish a presence on the waterworld, Hydrospan's earliest efforts were devoted primarily to environmental research and a few GEO contracts for downside construction jobs. Hydrospan's Poseidon-based aquaculture research in the 2170s even paid dividends by alleviating food shortages in several regions of Earth that were hardest hit by the Blight. Hydrospan also made early contacts with several native communities, and took a leading role in providing those who wanted it with technological assistance and resources. In 2176, Hydrospan established temporary clinics around the colony that provided any native cetacean who came in with a free translator implant. The results of the effort were mixed, but it was indicative of Hydrospan's attempts to facilitate the reintegration of native colonists and newcomers.

With the discovery of Long John and the ensuing colonial rush, Hydrospan began to expand its operations on Poseidon. New Fremantle was established in Poseidon's Antilles in 2189 and shares much the same architectural patterns as the Fremantle EcoDomes on the Australian coast. The town sprawls from the coastline, across and below the water, and like its counterpart on Earth, it is home to one of the largest cetacean populations on the planet.

In 2199, Hydrospan's colonial operations continue to be dominated by scientific research and the construction of marine habitats. However, it has recently begun construction on manufacturing facilities that would provide watercraft, submersibles, underwater equipment, and cetacean accessories to the growing colonial market. Hydrospan Poseidon is directed by Steward, a dolphin executive who has served with the Incorporate state his

py required for longevity. Long John is expensive; xenosilicates are rare and difficult to mine, they must be shipped to Earth, and the Incorporate control their distribution. To keep the genetic code stable and the aging process arrested, a patient must undergo several longevity treatments each year. On Earth, each treatment can cost as much as 50,000 scrip. On Earth, a world of economic desperation and dwindling resources, few can afford continual youth.

Longevity therapy is substantially cheaper on Poseidon, as Long John is decidedly more accessible. The skill and equipment to process the raw ore into its pharmaceutical form is rare on Poseidon, however, and so the therapy is still not cheap, costing about 5,000 scrip per treatment.

Longevity treatments do not make one younger, they simply prevent further aging. If the treatments are stopped, the effects slowly fade and aging begins again within a few months. Poseidon has only been reopened for exploitation for about 30 years, and the unique properties of Long John were first realized only within the last 15 years. Longevity therapy was many years in development and so has been broadly available itself for only the past decade. Therefore, the social effects of an ageless upper-class have yet to be felt, though most analysts fear a new era of social strife as the rich and powerful remain healthy, living on and on, while the poor continue to age as always before.

Economically and technologically, xenosilicates have had profound effects by changing the very basis of biotechnology and unleashing the power of DNA. Philosophically, the discovery of Long John has had more subtle, but no less significant, effects. Controversy is rampant about the origins of xenosilicates, and varies from conventional scientific theory to the patently absurd. There are those who claim Long John is a naturally occurring substance, forming in the lithosphere by some natural geological process. There are others who think Long John's compatibility with terrestrial biochemistry is far too unlikely to be coincidence. These people have claimed everything from

hyper-advanced alien intelligence to the hand of God as origins for the minerals.

Current evidence regarding the origin of Long John is circumstantial at best, and all relevant theories are therefore suspect in the absence of a scientific consensus. Nonetheless, the question remains one of the most hotly pursued in modern research. The race to artificially synthesize xenosilicates continues, for the ability to manufacture Long John would obviously be a major economic coup. It would also herald a new era of social change as the benefits of longevity therapy became available to the masses.

The major obstacle to these efforts is that the biochemical applications of xenosilicates require a perfect lattice, completely free of flaws. While xenosilicate lattices have been synthesized in the lab, there are always numerous errors in these structures, and they are therefore of little use as templates for precise molecular manipulation. Chemists believe that perfect xenosilicate lattices can only be created at enormous temperatures and pressures and, unfortunately, only over long periods of time. Attempts to accelerate the process have yet to meet with any success.

entire life. The dolphin's choice of a title is indicative of the way he perceives his relationship to Hydrospan and to Poseidon. He treats both as a household that has been delivered into his care, and is equally concerned with the prosperity of each. As is the case on Earth, Hydrospan enjoys good relations with the GEO, and along with Atlas Materials, is awarded more GEO contracts on Poseidon than any other Incorporate state. Hydrospan's citizenry is also expanding rapidly, as both native and newcomer cetaceans are coming to New Fremantle to live and work in increasing numbers.

LAVENDER ORGANICS

Colonial Holdings: Dyfedd (pop. 6,235), Caernafon (pop. 15,500)

Lavender's President, Charles Crandal, was quick to recognize the potential profits of supplying the exploding consumer market for biomods and organic computer technology on Poseidon. The result of this vision was Dyfedd, Lavender's first colonial company town. Named after a region of Wales, Dyfedd was the first modern free-floating settlement on Poseidon. A modest first effort, the town nevertheless marks a milestone in the settling of the waterworld. Dyfedd consists of a collection of interlocking, bioplastic barges that provide enough buoyancy and stability to support the town, but enough flexibility to withstand the formidable Poseidon weather. Each barge has integrated station-keeping MHD drives, and a flotilla of powerful tugs can be used to maneuver and relocate the entire settlement as weather forecasts and research objectives dictate.

Dyfedd is usually located to the southeast of Westcape Island, just beyond the southern edge of Poseidon's hurricane belt. Supported by efficient fusion- and solar-power facilities, high-capacity desalination facilities, and extensive hydroponics gardens, the floating city is essentially self-sufficient. The southernmost settlement in the Pacifica Archipelago, Dyfedd is usually found more than 2,000 kilometers from its nearest neighbor.

While the company town remains a valuable center for corporate research and development, it is becoming an increasingly important onsite lab for scientists studying Poseidon's oceans. The Haven Institute of Science and Technology has established a state-of-the-art oceanographic research facility on Dyfedd, and at any one time, over a hundred scientists from all over Poseidon and Earth can be found working out of the floating city.

Because of its unique design and pleasant summer climate, Dyfedd is also becoming a popular vacation destination for Poseidon's pampered rich. Several posh hotels have been built in recent years, necessitating the addition of two new rafts to Dyfedd's superstructure. With this lucrative and eclectic diversification of the Dyfedd facility, Lavender Organics maintains its reputation as an eccentric but successful company.

Lavender's other major holding on Poseidon is Caernafon, a company town located on the northeast coast of the Highlands in the Channel Islands. Caernafon is Lavender's primary administrative and commercial center on Poseidon. To date, Lavender's activities have focused on understanding Poseidon's complex ecology and on serving the growing colonial market for biomods and pharmaceuticals. Lavender field researchers have systematically studied the native cures developed from Poseidon's indigenous plant and animal life, in hopes of finding new drugs and other organic chemicals for the markets of both Earth and Poseidon.

Lavender has also committed significant resources to the study of the aborigines and the exploration of the deep-sea trench off the western coast of the Highlands. The leadership of Lavender Organics believes that the ruins found on the Dunedin Seamount offer evidence that the aborigines once had a technological civilization and are hoping to discover revealing relics and artifacts from that era. On several occasions, Lavender research stations and submersibles have suffered what are believed to have been aborigine attacks, and the leadership accepts this as further evidence that their efforts may eventually be rewarded.

MACLEOD ENFORCEMENT

Colonial Holdings: None

While it has not yet established a company town on the colony world, MacLeod's presence on Poseidon is growing rapidly. The vast majority of its business on the planet involves providing private security personnel, high-tech security equipment, and non-military weapons to the independent settlements of Poseidon. Dangerous wildlife, hostile natives, and violent criminals ensure there is a steady market for these services.

It is also widely known that MacLeod has contracted with several native groups to provide intensive military training to their young men and women. In most cases, these contracts are not explicitly illegal, unless MacLeod provides such training to native groups that the GEO has classified as hostile. Of course, hostile natives are precisely the ones most in need of military training, so MacLeod's activities have spurred a number of investigations within the Justice Commission.

Of course, MacLeod also balances these services by supplying several Incorporate states with additional materiel and personnel. The security concern stands to benefit tremendously from increasing tensions between the various factions on Poseidon, and it has certainly done nothing to ease them. Unless MacLeod decides to build arms manufacturing facilities on Poseidon, it is unlikely that it will establish a company town on the colony world.

NIPPON INDUSTRIAL STATE
Colonial Holdings: Simushir (pop. 26,450)

Like Hanover, the NIS has established diversified operations on Poseidon. The NIS is expanding its manufacturing facilities, and will soon be able to offer everything from marine habitats to heavy mining equipment on the colonial market. The NIS is also the largest exporter of xenosilicate ore to the Pacific Rim.

Simushir, the NIS company town, is located on the island of Ina, approximately 1,000 kilometers from Cliffside. Because both Biogene and the NIS are heavily involved in mining the New Hawaii chain for xenosilicate deposits, there has been sporadic conflict between the two Incorporate states. Simushir is a sprawling industrial complex, and its processing facilities, machine parks, and manufacturing plants are expanding all along the coast of its island paradise.

Most of the NIS personnel stationed at Simushir are indentured laborers, and many of them failed independent prospectors and miners. The NIS provides these employees with cheap, semi-permanent housing that is not designed to withstand fast fungus and Poseidon's harsh weather. Reliable electricity, efficient plumbing, fresh water, health care, and fire protection are also often in short supply in these satellite slums that are expanding around the central industrial center. The living conditions are so bad that they have inspired a proverb among the independent miners and prospectors on Poseidon. A miner who is down on his luck or known for poor judgment is said to be "on the road to Simushir."

THE NEWCOMERS

While Recontact with the Poseidon colony is marked by the arrival of the *Adm. Robert Perry* in orbit around the planet in 2165, it was 20 years before the colonial rush truly began. Prior to the discovery of Long John, the enormous expense of maintaining a viable extra-system colony seemed to ensure that Poseidon would remain home only to the natives and a few dedicated scientists.

Between 2165 and 2185, the population of Poseidon, native and newcomer alike, grew by just more than 15,000. The vast majority of these newcomers were clustered in Haven and the other major settlements of the Pacifica Archipelago, though there were a few scientists in isolated research stations, and a handful of GEO Human Resources personnel working in outlying native villages.

With the discovery of Long John and the newfound commercial potential of Poseidon, it has become increasingly feasible for private citizens and small organizations to emigrate from Earth. In the aftermath of the Blight, there are millions of human beings on Earth desperate for a chance to start a new life on a new world. In many areas, poverty, disease, malnutrition, economic opportunities, and living conditions are only marginally better than they were during the darkest years of the 22nd Century.

Whether fleeing Ebola epidemics in central Africa or epidemic unemployment in the world's cities, humanity looks to Poseidon for hope. The dream is realized, of course, by only a few. After more than a decade of explosive growth, the Poseidon colony still represents less than .04% of the human population. The Office of Colonial Affairs estimates that it approved only one in every 1,000 applications for immigration to Poseidon between 2186 and 2196.

Most of the first newcomer settlements were organized and subsidized by the GEO. Through the coordinated activities of several Commissions, colonization plans were drawn up and applicants were selected from the millions being sent to dedicated CommCore datasites. The Office of Colonial Affairs was responsible for organizing all aspects of these settlement efforts, from the equipment they would need to the range of skills the colonists would require. An OCA administrator was often assigned to oversee the activities of a new settlement for several months, and the colonists were bound by contract to follow GEO directives.

While the GEO is rarely directly involved in the organization and sponsorship of new colonization efforts in 2199, new settlements are still regulated by the OCA. Independent groups are free to develop their own settlement plans, but these plans must meet the OCA Colonial Settlement Guidelines, available on CommCore. These guidelines cover a broad range of issues, including settlement size and location, minimum financial resources, construction standards, environmental impact assessments, and disaster response plans.

The OCA guidelines are fairly restrictive, but there are several factors that limit the GEO's ability to enforce them. Most importantly, the OCA simply lacks the resources to maintain even infrequent supervision of the hundreds of settlements on Poseidon. In most, the discovery of an OCA violation is often an accident or the result of a GEO investigation into a disaster. Further, there is often little the GEO can do to prevent changes in the plans of a colony or of individual colonists once they are on Poseidon.

In recent years, the OCA has focused on the regulation of immigration to Poseidon. Applicants must not have a criminal record, must be in good health, and must be able to show a relatively stable work history in a useful field. Applicants with experience in a profession that is in short supply on the planet, such as teachers, medical professionals, and technicians, are much more likely to be approved.

Unfortunately, for all the GEO's efforts, a large number of private and Incorporate services will transport anyone who can pay to the new world. False records, bogus Incorporate citizenships, and outright smuggling bring thousands of undocumented immigrants to Poseidon every year. Unsuccessful applicants, criminals fleeing the authorities, and ecoterrorists all find these alternatives expensive but effective.

Many of those who opt for immigration to Poseidon do so because they think the planet offers the promise of an easier life. In fact, however, the average colonist on the waterworld will face greater hardships than all but the most disadvantaged and miserable of Earth. The adversity begins with the chemical baths and viral therapies of preflight and continues thoughout the colonist's life. Along the way, the colonist must contend with ferocious storms, lethal parasites, dangerous predators, and frontier violence.

The life of a colonist is also one of few luxuries. While the millions on Earth take for granted their daily dependence on reliable technology, the colonists of Poseidon depend on scarce, overworked, and unreliable equipment for their very survival. Farm machinery, fishing boats, communications equipment, medical supplies, survival gear, and hunting rifles are often all that stand between the colonists and a savage planet. The colonists of Poseidon, those who survive, are almost uniformly stalwart, resourceful, independent, and lucky.

Most of all, a colonist must be willing to work. On Poseidon, there are kelp farmers, fishermen, prospectors, technicians, teachers, builders, and countless others, and hard work is a feature of all their lives. Newcomers who come to Poseidon seeking the carefree lifestyle of holovid natives wind up dead or huddled in the slums of Haven and Second Try. Because colonists rely on the hard work of others as well as their own, few newcomer settlements will tolerate slackers.

A census sponsored by Human Resources placed the number of newcomer settlements in 2199 at approximately 300. They range in size from a single family running an isolated trading post to large towns with populations of 50,000 or more. The Poseidon colonists are diverse, with different motivations, dreams, customs, and lifestyles. Regardless of their reasons for coming, they all share one thing in common: they now call Poseidon home.

PIONEERS

The pioneers of Poseidon are tough, hardworking people who came to the colony world in search of freedom, prosperity, and a simpler life. Pioneers immigrate to Poseidon to escape Earth's crowded cities, government administration, and the corporate rat-race. These are the colonists who build new settlements with their bare hands, colonists who spend their days in kelp fields and on fishing trawlers, working to provide for themselves and their families. There are pioneer settlements built on GEO and Incorporate grants, family wealth, religious devotion, and the will of charismatic leaders. All are built on the blood, sweat, and dreams of men and women searching for a new life on a new world.

While the realities of colonial life are very different from the myths perpetuated in Earth's entertainment industry, the truth is, every pioneer is something of a romantic. There is something epic, something noble, in humanity's struggle to carve a civilization from an alien wilderness, and only the most dour and reserved pioneers are immune to its lure. Most pioneers come to Poseidon to build a new life for themselves, but find that they are also building a new future for humanity.

The daily life of a pioneer is an ironic interplay of the routine and the unexpected. Each morning, pioneers rise early and share breakfast with their families. For the next couple of hours, the children will often help their parents with the morning chores before going to their settlement's small schoolhouse or returning to their homes to access CommCore. The parents will go to the docks, the kelp fields, the algae pens, the workshop, the general store, the clinic, or the town hall to begin the day's work. Most of the day will transpire like all the others before it, but inevitably, there will be some crisis to disrupt the routine. A young man working on a construction team will be injured, a marine predator will threaten the fishing crews, a storm front will move in, a property dispute will arise between neighbors, or a stranger will come to town.

Pioneers depend on each other for survival, and the pioneer communities of Poseidon are tightly knit. If a pioneer needs help on his trawler, bringing in a kelp harvest, or building a house, most of the community will be ready and willing to lend a hand. Like small towns everywhere, just about everybody in a pioneer settlement knows everybody else, and few secrets are kept for very long. Because many settlements are also vulnerable to the human predators who roam the frontier, the close ties among the members of a newcomer community often translate to a general distrust of strangers. While pioneers will often appear polite and even friendly when dealing with outsiders, this appearance often masks fear and suspicion.

The GEO and Incorporate remain the major players in the colonial arena, and the natives receive the majority of the media attention on Earth, but pioneers are the backbone of the Poseidon colony. They are building islands of civilization in a sea of wilderness, and they will be forging their own destinies on the colony world long after the last kilogram of Long John has been scraped from the planet's crust. The pioneers are a quiet faction in

COLONIAL CALENDAR

The tourist had paid a small fortune for the trip, a short, overnight cruise with his wife aboard an old fashioned sailing yacht. He wasn't happy about the money, he wasn't sure about the sailing, and he even had doubts about his wife. But at least he'd managed to find a good charter service.

"Okay, I've got you booked for eighty-four-ninety-nine, returning eighty-five dot ninety-nine," the captain said. Is that correct?"

"Uh, well...huh?"

"Good, and we'll be sailing from Haven Marina, Dock 4, Pier 32, at 26:30, right?"

"Yes, no...uh, what?"

Earth and Poseidon have very different rotational and orbital periods. As a result, the way time is measured in days and years is different for each. While some amount of confusion is inevitable, the people of Earth and Poseidon have developed some conventions that facilitate understanding and communication.

Earth's day lasts approximately 24 hours, and its year lasts about 365 days. Each year is further divided into 12 months, and this convention is still common in the Earth-Luna system. On Poseidon, however, each day lasts just over 30 hours and each year is 330 days. Because Earth's days are six hours shorter than Poseidon's, one year on the colony world lasts just over 413 Earth, or Standard, days.

The original Athena Project colonists decided they would track daily time using a modified military scale of 30 hours. Each year would be measured by the 330 thirty-hour day orbit of Poseidon around Serpentis. The colonists also decided it was impractical to continue counting these days from 2086, the date of their arrival. Instead, they began counting days and years "since planetfall" (SP). This means 001.1is the colonial date of Planetfall, and 163.70 the date for the day of Recontact. Likewise, the current year is 99 SP by colonial reckoning.

the politics of the waterworld, but they are also independent, dedicated, and passionate. Scattered across the planet in isolated settlements, they are united by a common dream, and eventually, their voices will be heard.

PROSPECTORS

Poseidon offers the irresistible promise of untold wealth, and the Incorporate have not been the only ones to catch "Long John fever." The discovery of Long John sparked a colonial rush, and independent prospectors and miners flood to the colony with hopes of striking it rich. Many of these fortune-seekers have few financial resources and most have even less experience in deep-sea mining. Thousands of prospectors have fallen victim to old and poorly maintained equipment, marine predators, hostile natives, and their own bad judgment. Many more have been forced to abandon their dreams and pursue other, safer careers on the frontier.

Nevertheless, there are those who continue to chase the big prize, from solitary prospectors in obsolete submersibles to independent collectives of hard-suited miners scouring the ocean floor for deposits the Incorporate have missed. Ironically, the very idiosyncrasies of xenosilicates that make it difficult to mine also make it possible for independents to compete with the industrial giants. An independent prospector with a decent magnetometer and reliable hard suit has almost as good a chance of finding a deposit as an Incorporate survey team. Moreover, the prospector doesn't have to harvest much of the ore to ensure his financial future. A single gram of unrefined Long John commands about 300 to 400cs on the colonial market. Lucky prospectors retire to a life of luxury after discovering their first strike.

When not piloting their submersibles along the sea floor or wrestling with a sediment dredge, independent prospectors spend their free time in the dozens of small mining towns dotting the frontier. These towns are usually little more than a collection of run-down saloons, brothels, pharium dens, and repair shops huddled along a rocky beach or floating in the tiny cove of some unnamed island. Most prospectors are stereotypically irritable and quick-tempered, and barroom brawls and even shootings are a staple of daily life in Poseidon's mining towns.

The life of an independent prospector on Poseidon is a hard and often lonely one, and only the most skilled and fortunate will ever enjoy fame and fortune. It is a life that many find unenviable. For most prospectors, though, the solitude, challenge, and risk are stronger motivations than the promise of riches. When the bills are overdue and wealth seems an elusive dream, pride and determination drive the prospector onward in the relentless pursuit of the prize.

OPPORTUNISTS

The Poseidon colony's booming economy and underdeveloped private markets have attracted thousands of independent entrepreneurs looking to corner a piece of the waterworld's prosperity for themselves. Most of these opportunists flock to the colony's cities and major settlements. Arriving on Poseidon with only a little credit and a lot of hopes, they open general stores, repair shops, fish markets, wilderness outfitters, fuel stations, charter services, and countless other enterprises.

While there truly is a world of opportunity on Poseidon, the colonial economy has its share of problems. Retailers have difficulty keeping goods in stock, simply because there are still so few manufacturing operations on the planet. Several Incorporate states and a few private corporations are beginning to rectify this, but most manufactured goods are still in short supply. As a result, most of the manufactured goods on Poseidon are preowned. There is a steady trade in second-hand clothing, vehicles, electronics, and just about every other durable good. This scarcity ensures that the entrepreneur's profit margins on this merchandise remain fairly high.

Of course, there is a darker side to opportunism. Some of the colonists with dreams of prosperity are either unwilling to risk their capital on legitimate business ventures or do not have the capital to risk. Others balk at the life of hard work and patience that the entrepreneur must embrace. These colonists hope to get their piece of the action by operating on the margins of the law, or by leaving it behind entirely. Con artists, black marketeers, and even organized crime have become major forces in the economies of the large settlements.

Quite often, the challenges facing legitimate businesses are magnified by the activities of these underworld entrepreneurs. In the cities, most small businesses are vulnerable to protection rackets, and the GEO Patrol has had little success in breaking up these schemes. Similarly, the scarcity of manufactured goods has forced many retailers to look to the black market for products ranging from vehicle parts to unregulated pharmaceuticals. Construction and transportation businesses, two of the most prosperous industries on Poseidon, are favorite targets of organized crime, and are subject to arson and hijackings if they don't cooperate.

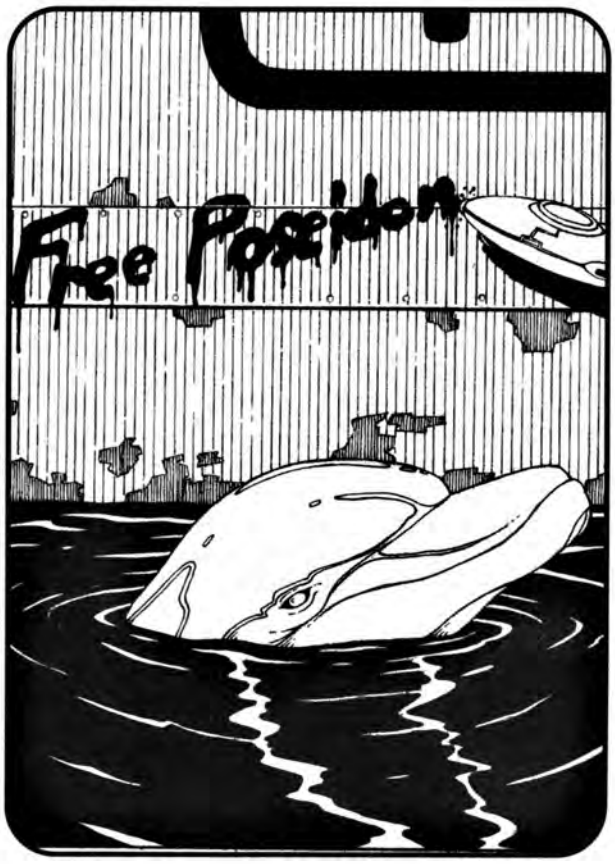
From independent shopkeepers and mob enforcers to native sell-outs peddling "genuine aborigine artifacts" on the waterfront, Poseidon is where the action is. Sparked by boomtown commerce, the private sectors and criminal underworlds of the colonial settlements are growing at a frantic pace. The strongest, wisest and luckiest of Poseidon's opportunists are swept up in this tide of prosperity. Many more are left penniless, their dreams shattered, huddling in the slums of Brighton or running small-time hustles in the mining towns.

CETACEANS

HISTORY

In 2042, capitalizing on the tremendous breakthroughs in cetacean communication achieved by Dr. Marcos Gottfried, the Woods Hole Oceanographic Institute, in cooperation with Johns Hopkins University, successfully uplifted the first dolphin subjects to full sentience. At a time when genetic engineering and neuro-viral therapy were in their infancies, this accomplishment stunned the scientific community and captured the attention of the world.

The first decades of the 21st Century had been a difficult time for cetaceans. The last known humpback whale washed ashore in Hawaii, hailing the extinction of the great whale species. Most of the rare, open-ocean dolphin and porpoise species had not been encountered for decades, and even the common and bottlenose dolphins were rapidly declining in number. The killer whales, once common in cold waters worldwide, had also begun to vanish. Eventually, those few pods uplifted at Woods Hole, and at a small number of similar facilities around the world, were all that remained.



Relations between sentient cetaceans and humans were tense, almost from the very beginning. Possessed of an intimate, spiritual relationship with the natural environment, cetaceans looked upon the ecological destruction wrought by humans with horror and incomprehension. The fact that humans were essentially responsible for the extinction of all but a few cetacean species did not exactly endear human society to them either. The first generation of genlifted cetaceans retained the memories of their primal existence, remembering when they had shared the oceans with the great whales. Most perceived humans as genocidal and brutal savages.

The cetaceans were victims of extreme social prejudice and legal discrimination as well. The unalienable "human rights" of which society was so proud did not seem to apply to the newly sentient animals, who therefore had no real place in the human social order. Legally, they were often able to claim stronger protections by virtue of endangered species legislation than by the limited civil liberties granted them as new world citizens.

Ironically enough, genlifted cetaceans found their initial acceptance in the world's military forces. Indeed, the navies of several major nations had been experimenting with dolphins in various military applications for decades, and it had been defense funds that supported the Woods Hole efforts. Cetacean soldiers served in search and rescue teams, reconnaissance units, and as special operatives. Unfortunately, even these opportunities were marred by deep-seated discrimination. In many armies, cetaceans were eligible for only the lowest enlisted ranks and were never promoted. In practice, they were often viewed as materiel rather than soldiers.

When the Athena Project was launched, the UN selected 500 cetaceans to participate in the colonization effort. It is estimated that well over 85% of the world's cetacean population volunteered for the Project. The opportunity to begin a new life on a pristine ocean world seemed a chance at spiritual redemption. Poseidon became a promised land that would finally free them from a world scarred by pollution and prejudice.

The Athena Project marked a profound division within the culture of the uplifted cetaceans. The dolphin and orca colonists, while facing extreme hardship and challenge, did indeed find their promised land. On Poseidon, they found a life and a world they could share with humans, and they were offered the chance to participate in a common social endeavor in which they played a crucial role.

The cetaceans who remained on Earth, however, were destined for a very different future. Like all the other peoples of Earth, the Blight left indelible marks on their minds and souls. While their counterparts on Poseidon were exploring new freedoms and possibilities and forging new relationships in human society, the cetaceans of Earth were trapped in a nightmare of war, disease, starvation, and wholesale environmental destruction.

LIFE ON POSEIDON

This divergent experience has resulted in two distinct cultures characterizing the native and the newcomer cetaceans on Poseidon. While the natives are more deeply spiritual (and, some newcomers would say, incomprehensible), they nevertheless find it easier and more rewarding to interact with humans. They have forged intimate relationships with the humans who share their communities, and rarely have any preconceived prejudices against newcomers. They are, for the most part, willing to trust humans, giving them the benefit of the doubt. Even native cetaceans many humans would characterize as extremists—such as Bataku, the orca leader of the Sierra Nueva insurgents—have formed and maintained close relationships with humans.

The Earth-born cetaceans, on the other hand, harbor a fundamental distrust of human nature. Most believe that humans are inherently greedy and destructive of the natural world, and that the Blight was simply the latest manifestation of this pathos. While most came to Poseidon as soldiers in the GEO and Incorporate armed forces, they hope that the colony world will eventually offer them the chance to completely isolate themselves from their fellow newcomers.

In several cetacean units around the planet, a kind of racial militarism is taking root. For many of these cetaceans, distrust has been transformed into racial hatred, and some believe that Earth-born cetaceans should join with the native pods to permanently rid Poseidon of the human newcomers. The recent and increasing defections of cetacean soldiers to several hostile native groups is only one symptom of this growing sentiment. The Justice Commission has launched an ongoing investigation into alleged anti-human fraternities in the GEO Armed Forces. An orca Marine belonging to a group called the Deep Ocean Cadre was recently court-martialed and extradited to Earth for imprisonment after he assaulted and maimed a human superior. The DOC has been accused of crimes ranging from vandalism and insubordination to desertion, sabotage, and murder.

Whatever their destiny holds, cetacean hopes rest with Poseidon and its future. For most, Earth was part prison and part graveyard, a slow death of human design. The GEO Armed Forces have enjoyed tremendous gains in cetacean recruitment on Earth, simply because most cetaceans see military service on Poseidon as their chance of escape. The cetaceans arguably have the greatest stake in Poseidon's future. For them Poseidon is their last hope for redemption, salvation, and grace.

DOLPHINS

ANATOMY AND PHYSIOLOGY

Modern, genetically uplifted, or genlifted, dolphins are primarily of bottlenose stock (*Tursiops truncatus*), and they are commonly referred to as *Tursiops sapiens* in the media. The dolphins themselves seem to find this title immensely amusing.

The morphology of most genlifted dolphins resembles that of the coastal ecotype of the species. They average three to four meters in length and weigh between 250 and 450 kilograms. In most cases, adult males are somewhat larger than females. Dolphins have a sleek, streamlined form, and their coloration is typically a soft gray to grayish green or brown dorsally, fading to white or pink ventrally. When their ancestors left the land and entered the seas some 40 to 50 million years ago, they began an evolutionary process that has culminated in a modern form that is well suited to life in an aquatic environment.

A dolphin's pectoral flippers have all of the skeletal characteristics of land mammals, including individual but flattened finger bones. Dolphins use their pectoral flippers to steer when swimming and are also capable of a surprising range of subtle gestures that help them to communicate with humans when technological assistance is unavailable.

The horizontal lobes of a dolphin's tail are called flukes, and are composed of tough, fibrous tissue completely without bone or muscle. Muscles along the dolphin's back are used to move the flukes up and down, propelling them through the water. The dolphin's centrally located dorsal fin is made of tissue similar to that of the flukes, and acts as a keel to stabilize the dolphin as it swims.

Dolphins have an enlarged, rounded melon that acts as a kind of "acoustic lens" for focusing and transmitting echolocation signals. Dolphins have a well-defined snout, or rostrum, marked by a lateral crease, and their lower jaw is structured to aid in receiving the dolphin's "echoed" signals. Genlifted dolphins typically have between 80 and 100 conical and interlocking teeth. Their eyes are on the sides of their heads, near the corners of their mouths. Their ears, which have no external flaps, are small openings just behind their eyes. A dolphin breathes through a single blowhole on the dorsal surface of the head.

A dolphin's physiology is well adapted to the aquatic environment, and they served as the first models for the aquatic modifications of humans. They can swim almost effortlessly for considerable distances at speeds between eight and 10 kilometers per hour, and can manage short bursts up to 40 kilometers per hour. Though most dives do not exceed 50 meters, dolphins are capable of diving to depths in excess of 500 meters without technological assistance, and they can remain submerged for up to 30 minutes, when necessary. A dolphin's blubber and highly adapted circulatory system allow them to maintain a comfortable body temperature even when diving in cold waters.

Modern dolphins eat as much as 15 kilograms a day, preferring various species of fish, which are swallowed whole. A dolphin's lifespan can exceed 50 years with access to adequate medical care, and as with humans, lifespan is indefinite with regular longevity therapy.

PSYCHOLOGY

Though there are countless stereotypical portrayals of dolphin psychology in the media, in truth, these creatures' psychological and personality traits vary as widely as humans. However, as a species, dolphins demonstrate a number of distinct psychological characteristics, just as humans do.

Dolphins tend to a somewhat poetic and philosophically complex view of the world. This worldview has been at times described as holistic, animistic, and pantheistic. Though any interspecies communication of such fundamental notions as make up a worldview is extremely difficult, it would seem that dolphins do not experience their environment in terms of the subject-object dichotomy that characterizes all human sensory experience.

Specifically, dolphins seem to identify themselves as one aspect of an individualized world, rather than one thing (self) separate from other things (objects, others). This characteristic manifests itself in dolphin behavior in ways that are often startling and disconcerting for humans. For example, most dolphins react to damage or destruction of their workspaces, prized possessions, and natural environment in the same way a human would to an attack on himself or his family. Dolphins are often willing to sacrifice their own lives for these things without a moment's hesitation, because to them, they are sacrificing only one part of themselves to preserve the whole.

It is also thought that dolphins do not share the distinct barrier between the subconscious and conscious mind that characterizes human cognition. Researchers have even tried to relate this theory to the dolphin's unusual sleeping habits: one hemisphere of a dolphin's brain sleeps while the other remains semi-active and conscious. A sleeping dolphin will lie floating in the water with one eye open and the other closed. Periodically, the dolphin will switch, allowing the other hemisphere to rest.

Some psychologists have suggested that genetic uplift served only to "bracket off" a small corner of the dolphin mind, allowing them to function on a conscious level more similar to humans. This more structured, orderly consciousness, in turn, allows dolphins and humans to communicate

more meaningfully. Interspecies communication could as easily have been achieved, these researchers claim, by altering the human brain in such a way that the conscious-subconscious barrier was weakened or dismantled.

The dolphin's mind is uniquely suited to conceptual and analytical tasks. Most can accomplish at will the sort of mental feats that have been likened to an idiot savant's capacity for almost instantaneous calculation, or the "eureka effect" that many scientists and scholars experience in relaxed states, when the conscious-subconscious barrier is lowered and there is a kind of "free play" between both cognitive faculties. Dolphin characters will often "know" something or become committed to a specific course of action without being able to explain or justify themselves to their human companions. This is extremely aggravating to many humans, but dolphins accept it among themselves as a matter of course.

Unfortunately, new discoveries and insights into the dolphin mind often introduce more questions than they answer. For this reason, a truly adequate understanding of dolphin cognition, both before and after genetic uplift, will require a great deal more research. Regardless, it is certainly safe to say that there are radical differences between the ways dolphins and humans think and experience the world.

It is clear, however, that genlifted dolphins remain as playful, mischievous, and impulsive as their primal ancestors. They are notorious for their love of pranks, and their behavior is typically not as constrained as that of most humans. A dolphin's pranks will often be dangerous and sometimes lead to injury. For example, many dolphins seem to find it endlessly amusing to jam human navigational sonar with barrages of echolocation pulses, even when their "fun" threatens the safety of the vessel. Most dolphins who have frequent interactions with human groups, however, have learned to abide by more conventional standards of behavior.

Dolphin morality is so far completely impenetrable to human researchers. While most, if not all, dolphins clearly abide by some moral beliefs or ethical standards, it is not clear exactly what they are or how they have been chosen. A proverb common in the Church of Whalesong Theogony is translated roughly as, "The world decides the right of it and we observe." Some researchers believe this saying indicates that dolphins do not ascribe moral agency or responsibility to individuals as humans do. Dolphins who associate with humans often follow human moral codes, but it is usually clear that the cetaceans are not committed to them.

Dolphins are also famous for their sexual appetites. It is estimated that up to one-third of a primal dolphin's day was devoted to the pursuit of sex, and this inherited tendency is constrained among the genlifted only where necessary. Dolphin young typically begin pursuing sexual relations at the age of six weeks or less, long before they have reached reproductive maturity. Homosexual activity is very common, and their first couplings will typically involve their mothers and aunts. It is also well known that dolphins are fond of sexual contact with humans, though most humans do not welcome such encounters. The promiscuity and homosexuality of dolphins is usually accepted in human groups, but their propensity for incestuous and interspecies relationships is a common source of social friction.

SOCIOLOGY

Socially, dolphins exhibit sharp distinctions based on their past experiences. Those native to Poseidon are predominantly gregarious, outgoing, and fun-loving creatures who are very fond of human company. Friendships between native dolphins and humans are quite common, and native dolphins are often more favorably disposed to the newly arrived colonists than are native humans.

Earth-born dolphins typically exhibit contrasting tendencies. It is thought that their experiences during the aftermath of the Blight may have soured them on human companionship, or humans in general. Most of the Earth-born dolphins found on Poseidon are, or have been, in military service with the GEO, and it is thought that their military training, indoctrination, and experiences may have had a considerable impact on their socialization.

On Earth, primal dolphin social organization was remarkably transitory. The role of motherhood is perhaps the dominant value in dolphin society. The most stable social groups are those organized around females and their offspring. By contrast, male dolphins play almost no part in the care and raising of their offspring. Likewise, the image-names of male dolphins are often near-copies of their mothers', translating to something like "so-and-so's offspring." Female dolphins always create their own image-names that are distinct from their mothers'.

Typically, young dolphins will remain close to the female members of their immediate family for a year or more, after which it is common for them to switch social groups, almost on a daily basis. Dolphins claim that this migration is an important part of the early education and socialization of dolphin children. Once she reaches sexual maturity, a female dolphin will often rejoin her mother's pod. Males, on the other hand, typically form small fraternities of three to five dolphins. For primal dolphins, the purpose of these fraternities was largely sexual, as it was through these alliances that males would compete for the attentions of females.

The pursuit of sex remains a strong motivation for genlifted males, but these fraternities are also frequently based on professional ties. Humans have used this feature of dolphin sociology to organize everything from military units to scientific research teams. Dolphin fraternities are characterized by extremely strong and durable bonds of friendship, and they typically last throughout the lives of their members. As with many of the most intimate aspects of their lives, dolphins actually seem to incorporate the other members of these fraternities into their own identity or sense of self, and loyalty within the fraternity is extremely strong as a result. On some occasions, especially on Poseidon, human membership in these fraternities has even been observed. Usually, this occurs at the request of an established fraternity, but in some cases, solitary dolphins entering human associations have attempted to organize the group along fraternal lines.

While aspects of these social tendencies remain characteristic of dolphin society on Poseidon, the small population requires some compromise. For the most part, the familial groups of females and the fraternal groups of males serve as the core of wider social memberships, typically based on profession. Within an Incorporate research team, a GEO military unit, or a native community, these family and fraternal groups are the foundation of the dolphin's social life.

CULTURE

For obvious reasons, dolphin culture is closely tied to their social characteristics. Likewise, their sentience has indelibly marked their social organization and relationships. However, the social life of genlifted dolphins has taken on characteristics and tendencies that were impossible or meaningless in the wild. Scientists have used this distinction to draw a line between purely social and specifically cultural institutions and values.

One of the most widely publicized features of dolphin culture, on both Earth and Poseidon, is their refusal to take linguistic names for themselves. Dolphins seem to believe that human naming conventions serve to make an object of the one who is named, and they have tried to avoid it entirely. While dolphins do have so-called "image-names" for themselves, symbolic representations that can be exchanged and interpreted through dolphin communication, these image-names are notoriously difficult to translate into human language.

On the other hand, humans require some means of identifying dolphins if the two species are to have any kind of meaningful social interaction. As a result, dolphins adopt some form of professional title to identify themselves in human society. Titles like Soldier, Doctor, Scout, Teacher, Prospector, or Diver are common, as are more offbeat titles like Killer, Dreamer, or even Juju Man, in the case of at least one dolphin spiritual leader of a settlement in the Zion Islands. Whether rooted in traditional meanings or slang, dolphin titles will almost always have some connection to professional affiliation. This has caused some difficulty for dolphins engaged in criminal activity. If a law enforcement officer encounters a dolphin calling himself Gangster or Privateer, a thorough investigation is likely to ensue. Most dolphins have found ways to skirt this difficulty, however. For example, a dolphin engaged in the drug trade is likely to call himself Peddler, rather than Dealer, if only to avoid the incriminating connotations.

By far, the most widespread dolphin cultural institution is their religion. The Church of Whalesong Theogony was founded in 2063 by Preacher, a first generation genlifted dolphin in San Diego. Few human researchers have been able to make any sense of the faith, but a few of its basic tenets have been documented.

Whalesong Theogony is firmly rooted in the cetaceans' primal history. It seems to glorify various instinctual and physiological experiences, from the diving reflex to the mating ritual. Some human researchers believe this obsession with the primal is dangerous, in that it serves as an obstacle to the development of cultural institutions firmly rooted in the cetaceans' experiences since uplift.

The religion appears to involve a narration of Earth's evolutionary history, expressed through a difficult and obscure form of epic poetry. The dolphins claim that this epic begins when the first whales, the supposed authors of the narration, returned to the oceans some 60 million years ago. Though few human researchers lend any credence at all to the claim that great whales were creating epic, naturalistic poetry in the distant past, parts of the narration have been translated and are open to some intriguing interpretations.

For example, one sequence apparently refers to seals and sea lions as "young hunters." Interestingly, scientists have long believed that seals and sea lions are among the youngest of the marine mammals, having evolved from the first carnivores to reenter the oceans some 15 million years ago. Did the great whales witness this event and add new lyrics to their epic to commemorate it? Most dolphins seem to think so.

The Church is pervasive on Poseidon. Most of the major settlements offer dedicated places of worship, the largest and most famous of which is in Haven. Most churches are simple aquatic structures with little ornamentation, a place where members can assemble in relative privacy. These structures almost always have an organic architecture that is very different from the mechanistic, utilitarian style of most cetacean workspaces. There are rarely any scheduled ceremonies at these churches. Instead, members are free to congregate for worship, fellowship, food, and sex at all hours of the day. Even in settlements where there is no physical church, members will assemble at an agreed upon meeting place to share their faith.

KILLER WHALES

ANATOMY AND PHYSIOLOGY

Modern, genlifted killer whales are descended from *Orcinus orca*, the primal killer whales. The genlifting procedure for killer whales focused on development of the neocortex, which allows for higher level cognitive capabilities, and a cultivation of the orca's already advanced social and cooperative behavior.

A male killer whale will average between seven and eight meters in length and weigh between 3,500 and 5,500 kilograms. Females are somewhat smaller, averaging between five and seven meters and weighing between 1,500 and 3,500 kilograms. Killer whales share the sleek, streamlined form of dolphins, but their coloration is far more striking and distinctive. The dorsal surface and pectoral fins of an orca are black, with the exception of a gray saddle pattern behind the dorsal fin. The ventral surface and lower jaw are mostly white, while the undersides of the tail flukes are white, fringed with black. There is also a distinctive white eyespot located just above and slightly behind each eye.

A killer whale's physical form is very similar to a dolphin's. An adult male's pectoral flippers can grow up to two meters long and one meter wide. Their tail flukes will measure up to 2.7 meters from tip to tip. The adult male's dorsal fin is tall and triangular in shape, often reaching a height of nearly two meters. A female's dorsal fin is somewhat smaller and may curve slightly toward her tail.

A killer whale's rostrum, or snout, is far less pronounced and distinct than a dolphin's, and they have significantly fewer teeth, averaging around 50. However, these teeth are approximately 7.5 centimeters long and 2.5 centimeters in diameter. Like the dolphin's, they are conical and interlocking, designed for grasping and tearing rather than chewing.

Like all cetaceans, orcas are well adapted to life in the water, and they are among the fastest marine mammals. They are capable of short bursts up to 50 kilometers per hour, but more commonly swim between three and 10 kilometers per hour. While they will typically dive to depths between 30 and 60 meters, they are capable of diving as deep as 300 meters without technological assistance. A killer whale will usually remain submerged between four and five minutes when diving, though they are capable of diving as long as 20 minutes.

Orcas eat as much as 45 kilograms per day. A male's lifespan can exceed 50 years with adequate medical care, while a female can live up to 90 years. As with humans, regular longevity therapy can prolong an orca's lifespan indefinitely.

PSYCHOLOGY

Genlifted killer whales are considerably less intelligent than their dolphin cousins, and their psychological makeup is also thought to be far less complex. Plodding, methodical thinkers, killer whales are nonetheless able to respond with terrible quickness when they react instinctively. An orca's psychology is largely dependent upon the classification of their social relations and natural behavior.

SOCIOLOGY

Resident killer whales are highly social, peaceful creatures that interact very well with humans. On Earth, primal residents once gathered in pods of 50 or more based on familial relationships, feeding on a variety of fish and aquatic vegetation. Resident killer whales will often be content with a lifestyle very like that of primal orcas and usually lack the personal motivation to become concerned or involved in human affairs. Earth-born dolphins are fond of referring to these killer whales as "civilized" and often develop long-lasting friendships with them.

Resident pods are structured according to a matriarchal hierarchy. Each pod usually consists of an aged matri-

arch and her offspring, who usually spend their entire lives in their mother's group. Pods will sometimes split if they become too large, or merge if they become too small, but each pod has a distinctive primal dialect. This dialect is unique enough that even human scientists can use it to identify the social membership of individual orcas.

Transient killer whales are somewhat anti-social, aggressive, nomadic hunters. The favorite foods of their primal ancestors were other marine mammals, including whales, porpoises, dolphins, and seals. For obvious reasons, modern transients have had to curb some of these appetites. They travel in hunting pods that rarely exceed a dozen members, mostly male, and they sometimes join resident pods during the mating season. Genlifted dolphins have an instinctual fear of transient orcas and commonly refer to them as "savages." Most dolphins, of course, are reluctant to acknowledge any such fear, claiming instead that they are merely embarrassed by their cetacean cousins' primitive antics.

While primal transients did not share the same loyalty to a fixed territory as their resident brothers and sisters, their pods were nonetheless characterized by advanced social organization. It is believed that organization and cooperation were absolute necessities for the orcas to successfully hunt the larger baleen whales. With genetic uplift, transient orcas most readily adapted to life in human military organizations on the basis of these social tendencies.

CULTURE

Many of Earth's resident pods have exhibited very little cultural development since the Woods Hole-Johns Hopkins Cetacean Project. For the most part, they remain devoted to the ties of family and community, and are rarely willing to leave their home waters in pursuit of human goals. The lifestyle of most resident orcas is therefore largely indistinguishable from their primal ancestors. Feeding, playing, mating, and various other social activities dominate their waking hours.

The only real cultural development that human researchers have identified among resident orcas relates to the care and raising of the young. As with dolphins, this duty was the exclusive province of females in primal orca communities. In recent years, male orcas have begun to take a greater role in the care of their children. It has been suggested that this phenomenon is one aspect of an emerging emphasis on more formalized education among resident killer whales. Fathers spend some portion of each day with their offspring, particularly their male offspring, instructing them in subjects ranging from the history of the species to hunting techniques and mating practices. Some researchers have claimed that this development represents a cultural achievement that even dolphins have not matched, the institution of true fatherhood.

Transient orcas have adapted most easily to interaction with the human world. The social cooperation of their primal ancestors has evolved into a deep-seated "teamwork ethic" that allows them to function smoothly and efficiently in human groups. Transient orcas are most comfortable in structured, almost rigid, social groups, where cooperation is a much more powerful motivation than competition. They perform admirably in professional groups with a clear hierarchy and in which each member of the group has a carefully defined role. Because of their intellectual limitations, transient orcas have most often found the opportunity to become involved in such groups within military organizations, but this is by no means always the case. Orcas have participated in such cooperative professional groups as research teams developing underwater technologies and exploring the wilds of Poseidon.

As with dolphins, spiritual life is important to both resident and transient orcas. While many killer whales are devotees of the Whalesong, most human researchers believe the Church is dominated by dolphins. It is unclear whether this is true. It may just be that dolphins are more capable of communicating their spiritual beliefs and values to humans. Nevertheless, it certainly appears that most of the positions of leadership within the Church are filled by dolphins, and some researchers have suggested that orcas are portrayed as antagonists in some parts of the Whalesong epic. Because primal orcas hunted whales and dolphins, this is not entirely surprising. However, both orcas and dolphins have insisted that the hunting orca is just one of many powerful images in the Whalesong epic, that it is part of the history of the oceans, and that the epic does not attach the moral judgments to this image that humans do.

TECHNOLOGY

As mentioned above, cetaceans enjoy a wide variety of sophisticated technologies that have been developed to meet their specific needs. These technologies include sonic trodes, cybernetic weapons harnesses, and perhaps most importantly, CICADAs.

A few examples of how cetaceans can integrate specific skills with this technology should be helpful to game moderators and players alike.

Cetaceans would use the Computers skill to access computers, just like humans, but they would typically do so through the use of sonic trodes. With cybernetic devices such as micro-toolkits, cetaceans can also design and repair computer systems, but these tasks typically require a specially constructed environment or the use of remotes.

Cetaceans should use the Remote Operation skill to pilot CICADAs and hover drones. In addition, Electronics will sometimes be necessary to use the sensor systems often installed in these

machines for difficult or specialized tasks. Cetaceans use Remote Operation to fire weapons mounted on CICADAs, hover drones, and other remotes, and Gunnery to fire weapon systems mounted on cybernetic weapon harnesses.

LIFESTYLE

The material needs of cetaceans are entirely distinct from those of humans. Unlike humans, cetaceans do not depend on durable or consumer goods, and most prefer to live in the open water rather than enclosed dwellings. Cetaceans do, of course, require food. While most prefer to hunt just as their ancestors did, many simply do not have the luxury of this time-consuming task. On both Earth and Poseidon, there are businesses in many coastal cities and settlements that provide food for cetaceans. Likewise, any professional organization with cetacean personnel will have the resources and facilities to feed them. For the sake of convenience, most cetaceans have adopted the mealtimes of the humans with which they live and work.

In any case, beyond the necessity of food, cetaceans need and desire few material possessions. They have no use for cars, boats, fur coats, jewelry, or exercise equipment. Many necessarily require the cybernetic equipment that allows them to fully access the human world, and these devices are often their only, but prized, possessions. While most do not require dwellings, they do need a secure place where they can keep this equipment when they are not using it. Many also require a place to perform tasks not suitable to a fully aquatic environment. Again, most coastal cities and settlements offer structures that are a combination of temporary residence, storage room, and workshop. Likewise, professional organizations that employ cetaceans, from the GEO to the Incorporate, provide similar facilities for their cetacean personnel. Cetaceans typically refer to these areas as "workspace."

The physical layout of the typical workspace is distinctly amphibious and heavily automated. Usually, the workspace will be partially submerged, allowing the cetacean to remain in the water while working with equipment that is safe and dry within the structure itself. The workspace is often controlled by a central maincomp, which the cetacean can access through a sonic trode or other interface. This computer will control typical functions, such as climate, lighting, and communications. The computer will commonly be networked to a number of simple robots, microcomputers, and other automation that the cetacean can use to transfer objects from the water to the workspace, or to work with dry equipment and delicate devices.

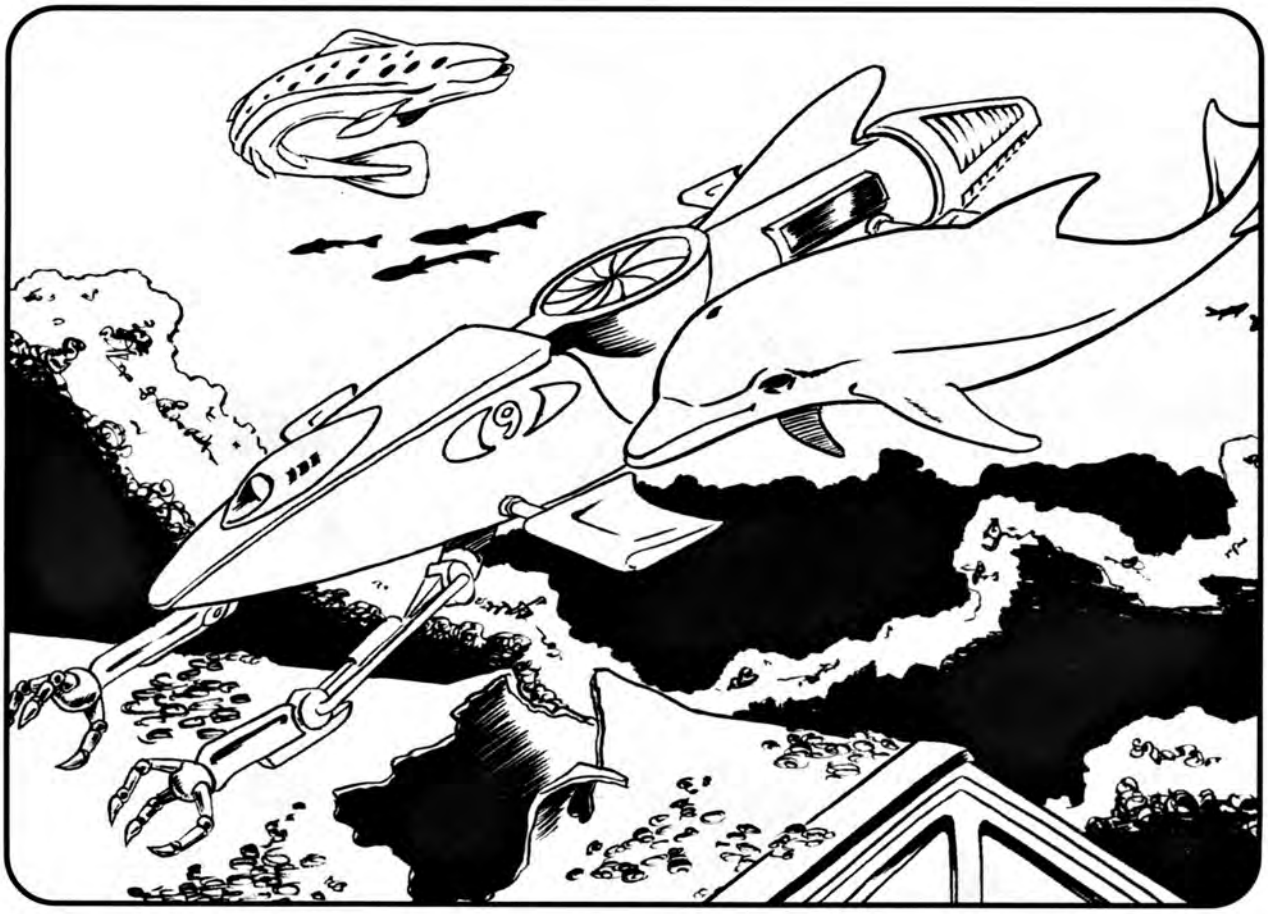
For the most part, cetacean workspaces are utilitarian. Cetaceans seem to have no desire to decorate or personalize these facilities, and they can usually be distinguished only by the function of the equipment they house. Similarly, the workspace is a place to pursue one's professional tasks, and is to be otherwise avoided in favor of the comforts of the open ocean, family, and friends.

TRANSPORTATION

Because of the radically different environment to which they are adapted, transportation has been the greatest obstacle to the smooth integration of cetaceans into human society. Obviously, it is difficult for cetaceans to travel on land, and impossible without the use of expensive, bulky equipment. For most cetaceans, the hover drone component of CICADAs has offered an acceptable compromise with this limitation. With audiovisual equipment and a variety of other features, hover drones allow cetaceans to follow their human friends and colleagues most anywhere they go. Direct links to a hover drone are only possible over relatively short distances, but satellite uplinks and signal relays allow cetaceans to send their hover drones virtually anywhere.

These drones are also the primary alternative to long-distance transportation for cetaceans. Due to their size and life support needs, it is problematic and expensive to transport cetaceans long distances. While there are commercial air and rail carriers on Earth that offer service to cetaceans, they are rare and expensive. Unfortunately, these carriers are even more uncommon on Poseidon. The GEO Armed Forces and several Incorporate states are among the few organizations with the necessary resources. While special MHD harnesses, power shells, and other technologies are available to allow cetaceans to travel more quickly, most are content to remain at home and allow their remotes to take their places on long journeys.

An open comm link between a cetacean and a human companion with a sensory recorder and implant computer also allows a cetacean to see, hear, and feel everything the human does. This practice, called "piggybacking," is only common in cases where very close cetacean-human friendships have developed, and most humans find it a disorienting and somewhat schizophrenic experience. Communication between the host human and piggybacking cetacean is so intimate that the host can even attempt tasks at the cetacean's direction for which he would ordinarily have no skill. For example, a dolphin technician piggybacking on a human with little or no computer training might be able to repair a maincomp, using the host as his eyes, ears, and hands. The target number penalty is dependent on the situation and left to the moderator's discretion, but it will rarely be less than –3.

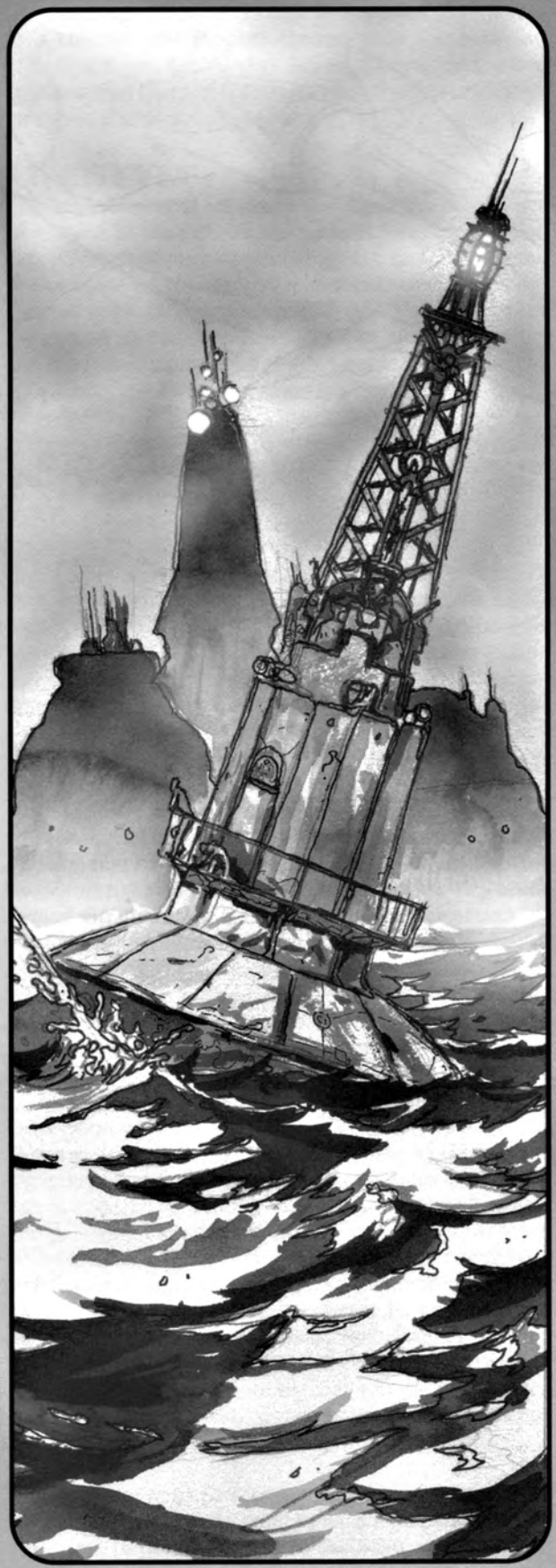


COMMUNICATION

Cetaceans were capable of basic communication with humans even before genetic uplift, but this communication was simplistic and rather one-sided. Dr. Marcos Gottfried is credited with surpassing this original and limited interaction and developing the basics of modern Interspecies Language, or Interspec.

Cetaceans are able to comprehend human language, and have actually demonstrated impressive linguistic ability, but their anatomy prevents them from easily pronouncing most human sounds. Conversely, humans are entirely unable to comprehend the subtleties of dolphin vocalizations, and have even more difficulty with pronunciation. Accordingly, Interspec is an odd language, one humans need only understand, and one cetaceans need only "speak." The language consists of a variety of simple human words, natural vocalizations, and gestures easily made by cetaceans and easily understood by humans. The language is difficult for humans to learn but is a valuable and effective form of communication.

Because the language is difficult and somewhat limited, some cetaceans have turned to modern technology for an alternative. In 2199, there are few cetacean newcomers to Poseidon who do not possess a translation computer. This streamlined device is typically mounted on a light harness or attached directly to the user's skin with organic adhesives. These translators function much like those used by humans. The integrated sonic trode allows the cetacean's vocalizations to be processed into human speech by the computer, which then outputs the human translation through integral speakers. Unfortunately, these devices are far from perfect, and their translations often range from the humorous or crude to the incomprehensible. While translators are common among newcomers, most native cetaceans still communicate exclusively through Interspec.



TIMELINE

CHAPTER 09

1957 The Space Age begins in October when the Soviet Union launches the first artificial orbiting Earth satellite: *Sputnik Zemli*. *Sputnik 2* follows in November, this time with a passenger—a dog named Laika.

1958 The National Aeronautics and Space Administration (NASA) is formed in the US.

1960 Norris and Prescott find that bottlenose dolphins use echolocation to locate objects in the water.

Soviet cosmonaut Yuri A. Gagarin makes one orbit of the Earth in *Vostok 1*, making him the first man in space. During his flight time of 108 minutes, he reaches an apogee of 327 km and a perigee of 180 km. He lands safely in Siberia.

1962 John H. Glenn, Jr., aboard *Mercury-Atlas 6*, becomes the first US astronaut to orbit the Earth, in a flight of three orbits. In a speech delivered at Rice University, President John F. Kennedy challenges NASA to place a man on the Moon within 10 years.

We choose to go to the Moon in this decade and do these other things not because they are easy, but because they are hard. Because that goal will serve to organize and measure the best of our energies and skills. Because that challenge is one that we're willing to accept, one we are unwilling to postpone, and one we intend to meet.
— President John F. Kennedy

1967 Christian Barnard carries out the first heart transplant operation, transferring the heart of a 25-year-old woman into the body of Louis Washkansky, a 55-year-old grocer. Washkansky lives for 18 days.

1969 *Apollo 11* is launched. After entering lunar orbit, astronauts Buzz Aldrin and Neil Armstrong transfer to the lunar module. Michael Collins remains in lunar orbit following the separation, piloting the command and service module. The LM descends to the surface of the Moon on July 20, landing at the edge of Mare Tranquillitatis. Armstrong, at 10:56 PM (EDT), steps onto the surface of the Moon. He is joined by Aldrin, and the astronauts spend more than two hours walking on the lunar surface. They gather 21 kg of soil samples, take photographs, and set up a solar wind experiment, a laser-beam reflector, and a seismic experiment package.

1970 The first Earth Day is celebrated in the US.

1975 *Apollo-Soyuz* becomes the first international space flight.

1976 The National Academy of Science reports that propellants from spray cans are causing damage to the ozone layer.

Scientists at MIT announce construction of a functional synthetic gene, complete with regulatory mechanisms.

The tanker *Argo Merchant* runs aground, spilling millions of gallons of oil off the coast of Massachusetts.

1977 Apple introduces the Apple II, the first pre-assembled personal computer.

1978 Charon, Pluto's only moon, is discovered by scientists Christy and Harrington.

1979 At the Three Mile Island nuclear power station near Harrisburg, Pennsylvania, a coolant accident releases radioactive gas into the atmosphere. Although radioactive fallout is minimal, the political fallout is devastating, crippling America's nuclear power industry for years to come.

The first test tube baby, Mary Louise Brown, is born in England.

1980 The US Supreme Court rules that a microbe engineered by General Electric for oil clean up can be patented.

1981 Crippen and Young become the first astronauts to use a re-useable launch system with the first launch of the space shuttle *Columbia*.

The Centers for Disease Control and Prevention publish the first reports of the AIDS epidemic based on five unexplained cases of pneumoncystis pneumonia affecting gay men in Los Angeles.

IBM introduces DOS and markets the personal computer system to the general public.

The Chinese duplicate a golden carp, the first animal to be successfully cloned.

1982 William DeVries transplants the first artificial heart, developed by Robert Jarvik. The recipient, Barney Clark, lives for more than three months after the surgery.

Eli Lilly & Co. releases the first commercial product of genetic engineering: human insulin produced by bacteria.

1984 A Union Carbide plant in Bhopal, India releases several tons of methyl isocyanate into the air, killing more than 3,300 Indians in history's worst industrial disaster. The Indian government is awarded more than 470 million dollars in punitive damages from Union Carbide.

Allen Wilson and Russell Higuchi are the first to clone genes from an extinct species.

1985 A NASA TR-1 survey aircraft operating over Argentina and Chile confirms the existence of a "hole" in the ozone layer over Antarctica.

1986 The *Challenger* shuttle is destroyed 73 seconds after launch due to a failure of an O-ring gasket on one of its boosters. Seven astronauts and Christa McAuliffe, who had been selected the preceding year as the first "teacher in space," are killed in the disaster.

The *Mir* space station, designed as a successor to the *Salyut* series, is launched on February 19. Described by the Soviets as the core of the first permanently manned space station, it features six docking ports and can be occupied by two cosmonauts.

One of four reactors at the Chernobyl nuclear power plant explodes, spreading radioactive material over the Soviet Union and Scandinavia. More than 30 people die as a direct result of the accident, and more than 16,000 square kilometers are declared off-limits because of residual radiation and fallout.

The Department of Energy (DOE) announces its Human Genome Initiative after a meeting in Santa Fe, New Mexico, to explore its feasibility. Pilot mapping and information projects are pursued at DOE national laboratories to develop critical resources and technologies for genetic analysis.

1987 The Montreal Protocol, signed by 24 countries, bans the use of CFCs.

The world population passes the five billion mark.

1988 The US shuttle program is resumed on September 29, with the flight of *Discovery* and its crew of five astronauts.

More than 10,000 United Nations Peacekeeping troops stationed in Cambodia, Angola, and the Western Sahara are awarded the year's Nobel Peace Prize for their mediation of conflicts throughout the world.

The Human Genome Organization is founded by scientists to coordinate global collaboration.

The first patent for a vertebrate is issued to the Harvard Medical School for their genetically engineered mouse.

1989 Exxon Oil's *Exxon Valdez* runs aground in Prince William Sound and spills more than 260,000 barrels of crude oil into the ocean in the worst oil spill in history. The local ecology of Prince William Sound does not recover fully for more than 20 years and judgments against Exxon total more than $5 billion.

1990 The long-delayed $1.5 billion Hubble Space Telescope is deployed by space shuttle, but because of an optical defect, initially fails to provide the degree of resolution for which it was designed.

The Human Genome Project is launched.

1991 While fighting a rearguard action during the First Persian Gulf War, Iraqi soldiers set fire to hundreds of oil wells on the Arabian Peninsula. The soot from these fires, many of which burn for months, produces toxic plumes visible even from space.

1992 The membership of the United Nations grows to 172 nations.

UN member state Norway resumes whaling in the Arctic and North Atlantic oceans.

NASA begins the Search for Extraterrestrial Intelligence program (SETI).

The first genetic linkage map of the entire human genome is published.

1993 The Greenhouse Effect is reported as a statistical certainty when a team of meteorologists conclude an extensive global climatological survey.

1994 China resumes above-ground nuclear testing at its Lop Nor testing grounds in Xianjing province, releasing hundreds of tons of radioactive soil into the atmosphere. China, whose army outnumbers any other nation in the world by more than two to one, maintains that the testing is completely legal under UN charter statements giving each member state the right to defend itself against aggression.

The genetic mapping five-year goal is achieved a year ahead of schedule.

The Genetic Privacy Act is the first legislative product of the Human Genome Project. It proposes the regulation of collection, analysis, storage, and use of DNA samples and the genetic information obtained from them.

1995 The Equal Employment Opportunities Commission guidelines extend the Americans with Disabilities Act employment protection to individuals experiencing discrimination based on genetic information related to illness, disease, or other conditions.

The Human Genome Project achieves its goal of a high-resolution map of mouse genes.

1996 The Centers for Disease Control report that more than 320,000 Americans have died of AIDS since its discovery in 1981.

Evidence of life on Mars is discovered. A NASA research team of scientists finds compelling evidence in a meteorite that strongly suggests primitive life may have existed on Mars more than 3.6 billion years ago. Inside an ancient Martian rock that fell to Earth as a meteorite are the mineral features characteristic of biological activity and possible microscopic fossils of primitive, bacteria-like organisms.

There is not any one finding that leads us to believe that this is evidence of past life on Mars. Rather, it is a combination of many things that we have found. They include Stanford's detection of an apparently unique pattern of organic molecules, carbon compounds that are the basis of life. We also found several unusual mineral phases that are known products of primitive microscopic organisms on Earth. Structures that could be microscopic fossils seem to support all of this. The relationship of all of these things in terms of location—within a few hundred thousandths of an inch of one another—is the most compelling evidence. — JSC planetary scientist Dr. David McKay

Water-ice is discovered by the *Clementine* spacecraft at the bottom of a 13-kilometer-deep crater at the Moon's south pole.

Dr. Ian Wilmut, an embryologist at the Roslin Institute in Edinburgh, Scotland, becomes the first scientist to successfully clone a mammal.

2010 The incidence of skin cancer in Tierra Del Fuego, Chile, reaches 75%. This excessive level is expected to continue and is attributed to increasing ozone depletion.

CommCore, the world's primary online data service, announces that it moved more than a terabyte of information every hour during the preceding year. The FBI's annual crime statistics indicate a 250% jump in computer crimes during the same period.

2011 Lavender Organics patents a technique for manipulation of the human genome in newly conceived fetuses. The technique allows for the manipulation of simple characteristics like hair and eye color. The procedure makes basic genetic modification available and affordable to the public for the first time. Concerns and debate about the ramifications of manipulating the genetic code of human beings is renewed worldwide.

2012 An economically viable synthetic substitute for human blood is developed. While it is anticipated to markedly decrease the tremendous demand on the world's blood banks, public distrust and the potential for medical malpractice suits keep it out of most hospitals in developed countries.

2013 An ESA probe to Europa discovers the first evidence of surviving life on another world in the form of organic polymers found on the ocean floor of the Jovian satellite.

It really is a fascinating organism. This little molecule scavenges things like magnesium and calcium from the rocks it's stuck to, then it uses the carbon and hydrogen in the rock to make more molecules. It's alive, and it's eating Europa. — Roger Smythe, Johnson Space Center

2014 Ford Motor Systems introduces the world's first production passenger ground-effect vehicle. Hovercraft become popularly known as skimmers.

2015 A researcher in Japan clones a cell taken from the flank of an albacore tuna. The cell is duplicated over a billion times into a slab of meat that is kept alive artificially for several weeks. The technique is proclaimed as the farming method of the future, but proves prohibitively expensive.

2016 The governing Sunni majority in Iraq is overthrown by Shiite and Kurdish rebels. A general election leads to the formal unification of Iran and Iraq, and the United Islamic Republic (UIR) is born. Though UN observers are denied access to the elections, the new republic is given membership in the United Nations and is recognized by most UN member states, with the exception of the United States and Israel.

2017 A team of physicists from Stanford University, Fermilab, and the Russian Academy of Sciences initiate, control, and sustain a fusion reaction. The reaction is maintained for 57 days, but requires significant power to keep running.

2018 In response to pressure from the UN Security Council, the United Islamic Republic grants autonomy to the Kurds, creating the Republic of Kurdistan.

2019 More than 2,000 people die when a toxic compound is released into the water supplies of Los Angeles, Paris, Tokyo, London, and Berlin on Earth Day. Zero Nation, an organization protesting population growth, claims responsibility. Many survivors find themselves sterile, while others are burdened with children suffering severe birth defects.

2020 Indonesia emerges as one of the four major Asian powers, joining China, Japan, and India.

2021 Feinbaum-Blanc Investment Group completes Van Diemen Spaceport in the Australian Outback. Van Diemen begins regular weekly service to orbit providing resupply for the increasing construction needs of corporate space programs.

Diagnosis of virtually any illness is possible in a few hours by examining a patient's Human Protein Index.

2022 The UIR invades Kurdistan, as well as the former Soviet republics of Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. A UN coalition led by the United States, Saudi Arabia, and Turkey deploy forces to the region in preparation for an expected attack on Afghanistan and Pakistan. The expected invasion never materializes, but the abundant resources of the former Soviet republics, together with the largest petroleum reserves in the world, elevate the UIR to the status of a legitimate superpower. Afghanistan and Pakistan become buffer states between the UIR, India, and China.

2023 Integrated Circuits creates the datacard. One datacard holds a terabyte (1,000,000 MB) of data.

Back surgery is revolutionized with the release of artificial spinal discs. Made of titanium and cobalt chrome, these new discs are more affordable, last longer, and are rarely rejected by the body. Small springs are substituted for the cartilage cushions between the discs.

2024 Hakamichi World, a consortium of American, Japanese, and European corporations, initiates a fusion reactor that produces a permanently sustainable electric current. The prototype reactor itself, although significantly smaller than the Fermilab reactor, is known as "Humongous Hak."

2025 TransWare releases the first commercial direct neural interface. Once only found in certain military applications, this item creates an explosion of new devices and software.

Earth's population reaches eight billion.

2027 Biogene Corporation signs a treaty with the government of Colombia, giving it the legal authority to prosecute any party presenting a threat to the company or its employees. Biogene, which has supplied much of Colombia's tax revenue for several years, has long been pushing for a certain degree of autonomy. The treaty, viewed with skepticism by many in the international community, and especially the UN, gives Biogene the power to appoint judges, legislate and enforce laws, and arm a paramilitary security force.

Hmm...I dunno. They say that Biogene's going to take care of us. They've got all kinds of new authority under this treaty. Arrest, prosecute, even execute. I guess that's a good thing. But what I want to know is, who're they going to use this new authority on? — Resident of El Dorado, Biogene company town

2029 Biogene puts its treaty with the Colombian government to the test. Eduardo de Jesus is arrested, tried, and convicted by a judicial system entirely appointed and administered by Biogene. De Jesus' execution takes place in the central square of El Dorado early on the morning of February 1. Less than one week later, the United Nations threatens Colombia with economic sanctions and international censure, and the government rescinds the treaty.

Feinbaum-Blanc defaults on taxes to the Australian government. This action is met with legal protests from the Australians which FB lawyers drag through various government courts for the next 28 years. During this time, the spaceport continues operations.

2031 The United Nations reaches an unprecedented level of influence in the international arena, as more and more nations come to rely on UN protection from commercial interests.

Several manufacturing companies contract to build a station in orbit that will be capable of turning out enough zero-g-grown semiconducting crystals to supply more than 50% of the world's yearly market. Construction costs are expected to top three billion dollars and be recouped in the first year.

Biogene Corporation announced today that late last month, a Biogene employee carried to term a baby girl whose genome was modified in vivo. The girl had been engineered to be more efficient than an average human. Biogene public relations officials stated that modifications include a heart that is 40% stronger than normal and visual sensitivity well into the infrared. The cost of bringing this one child to term is estimated at nearly 50 million dollars. Biogene officials declined to comment on how many times this procedure has been attempted, or whether they plan to continue with the project. The baby girl has not yet been given a name.
— Reuters News Service

2033 A torchship on approach to Van Diemen Interplanetary loses attitudinal control and crashes into the Amazon basin. Its fusion drive fails catastrophically, and 50,000 square miles of rainforest burn to the ground. The firestorms created by the blaze disrupt weather over the entire basin.

In June, the Big One hits California. The first quake registers 7.6 in San Francisco and property damage is extensive, though there are only 400 fatalities. Berkeley loses 1,039 residents an hour later, and early the next morning Santa Barbara suffers a 6.4 quake. Throughout the day, Monterey, Los Angeles, and Riverside are also hit by quakes ranging from 4.3 to 8.1 in magnitude. By the time the aftershocks have subsided, the quakes are responsible for more than 150,000 fatalities throughout the region. Geologists attribute the quakes to new growth faults, which are at low angles to the ground and very difficult to detect with seismographs. It will take many cities in California nearly 20 years to fully recover from the devastation.

2035 Biogene begins implanting all of their ranking executives with data transmitters. Each transmitter is designed to continuously record important health information and relay it to a central terminal. Biogene points to this as a revolution in the company's ability to care for its employees. The action is widely criticized in the UN and among human rights organizations as yet another attempt by a multinational corporation to transform itself into a police state.

So now the hoods at Biogene are interested in taking care of their people. That's a switch. But for some reason, they're going to start taking an interest in the health and safety of their employees. Or are they? Might it just be the location and physiology of their folks that Biogene is taking an interest in? Because those little LifeScan transmitters are set up to transmit location and metabolism of the subject at any time. Do you really want your boss to know where you are and what you're doing every minute of the day? When you eat, when you sleep, when you have sex, when you do drugs? Thanks, I'll pass.
— Shannon Sterling, Columnist

2038 Much of South America and Asia are affected by severe food shortages. Starvation becomes one of the leading causes of death in more than 40 countries. The United Nations High Commissioner for Refugees requests the authority to requisition stockpiles of food in the United States and Canada. In the US, her request is denied after several weeks of congressional debate.

The world's tenth major spaceport is built on the immense salt flats outside of Salt Lake City, Utah.

2042 The Woods Hole Oceanographic Institute, in cooperation with Johns Hopkins University, develops a procedure including viral and biochemical therapy that, when coupled with specific biofeedback training, uplifts cetaceans to apparently human-level intelligence.

2043 The humpback whale, last of the great whales, is declared extinct.

El Niño fails to form in the South Pacific for the eighth straight year. Much of Micronesia and the Caribbean becomes uninhabitable as Class Four and Five hurricanes repeatedly sweep the regions.

A researcher with Gibson Microelectronics develops a ceramic superconductor that has a resistance of zero at 257° Kelvin (–14°C). Forming only in zero-gravity, the ceramic is enormously expensive to produce in quantity.

2045 Anasi Systems, a French genetics firm, develops a counter-virus designed to neutralize HIV. The treatment, still in its experimental stages, promises to end the greatest medical threat of the 21st Century.

2046 Feinbaum-Blanc investment group acquires the previously struggling SilverStar Manufacturing.

Biogene patents a genetically engineered drug that selectively suppresses the human immune system. With the arrival of Hysporine, the success rate for most transplants reaches nearly 90%.

Gibson Microelectronics refines its superconductor to be effective at 268° Kelvin (–5°C).

2049 SilverStar Manufacturing perfects an efficient and economical method for manufacturing fusion reactors. SSM becomes a billion-dollar-a-year business and increases production of fusion drives to one every nine days. Van Diemen Interplanetary reports a tenfold increase in traffic to and from near orbit.

2050 The United Nations contracts with SSM to produce a fleet of heavy-lift fusion craft to begin construction of a self-sufficient mining and research colony on the surface of the Moon. Ibrium City is intended to house more than 10,000 permanent residents when finished. Preliminary teams begin surveying various sites on the Moon.

On Earth, fertility rates stabilize at 1.7 children per couple. Global population reaches 8.8 billion.

2051 Atlas Aerospace finishes construction of its *Icarus Station* orbital facility. Icarus boasts room for more than a thousand individuals, most of whom are engaged in specialty manufacturing, although tourism of the facility also becomes a significant part of Atlas' income.

Biogene releases a follow-up to its enormously successful Hysporine. Omega-suferon is marketed as an immuno-booster drug of unprecedented potency. Biogene claims that patients administered regular doses of Omega-suferon do not suffer from even the common cold.

2052 A site is selected for Ibrium City, and construction of an initial complex is completed.

2055 University College in London suggests that they have discovered a way to preserve human embryos indefinitely. This technique allows a couple to conceive a child while they are young and fertile, saving the healthy embryo until the parents are ready for the commitment and responsibility of raising a child.

2056 In an attempt to better its ailing reputation among the Swiss populace, SilverStar Manufacturing's parent corporation, Feinbaum-Blanc Investment Group, makes major contributions to the Swiss government.

It is this commission's opinion that both sales of FB-manufactured products and government decisions concerning FB projects will become increasingly favorable if FB makes itself an integral part of public life throughout Switzerland. The potential benefits of a population favorably disposed to Feinbaum-Blanc, coupled with a government whose decisions can be manipulated by that good favor, cannot be overestimated. — Excerpt from FB internal memorandum

Dr. Josef Ben-Gurion's team begins construction of a gravity-wave detector in Earth orbit.

When Libya's petroleum reserves are exhausted, the economy collapses and the country is torn by civil war and social unrest.

2058 Ibrium City, the first permanent settlement on the Moon, is completed.

2059 DNA-based optical data storage becomes commonplace. A cubic centimeter of commercial grade storage gel can hold more than 50 gigabytes of information.

Earth's population is now nearly nine billion.

2060 Ingratiating itself with the Swiss, Feinbaum-Blanc develops a controlling influence in the Swiss government to remove bureaucratic limitations on its interests. No public announcement is ever made, but no question remains who holds the reins of power in the Alpine nation. A grassroots political resistance movement begins among the Swiss people, but it remains largely powerless.

2062 A United Nations team uses a fusion torchship to land a prefabricated station at the foot of Olympus Mons on Mars. The team claims all of Mars and its gravity-well for the United Nations.

2065 Albert Charboneau, Swiss Prosecutor General, is investigated for taking kickbacks from a dummy corporation that fronts for FB Investments. Charboneau is never indicted.

2068 A skyhook is completed atop Mons Pavonis on Mars. The structure reaches 17,000 km to *Ares One*, an orbital facility in stationary orbit.

2070 An exploration team launched from the UN World Space Station in Earth orbit lands on Ceres in the asteroid belt. The expedition's main outpost, Delphi Station, is a permanent structure, gathering and refining most of its required resources from the asteroid itself.

2073 India's Prime Minister, Devaki Kamath, directs Indian forces to invade Kashmir, as well as several border areas occupied by China. She also closes the border to Bangladesh and annexes Sri Lanka. These actions touch off a war between India, Pakistan, and China that lasts more than three years.

2075 Atlas Materials establishes a mining base in the asteroid belt and immediately realizes an enormous profit in mineral mining.

Astronomers John Masters and Yuri Vishenko record anomalous trajectories of comets from the Oort cloud. Later in the year, they publish evidence of a massive object beyond the orbit of Pluto. Amateur speculations about the object range from UFO's to black holes.

2076 Physicist Josef Ben-Gurion proposes that Masters and Vishenko may have discovered a Lorentzian wormhole.

2077 *Prometheus II*, a fusion-powered probe designed at the Jet Propulsion Laboratory, is launched by the UNSA to investigate the anomaly.

2078 *Prometheus II* enters the wormhole. Five days later, contact is reestablished with the probe, which had exited the wormhole in the Lambda Serpentis System, 35 light-years from Earth. After collecting data on this far-away star system, *Prometheus* safely returned to the Solar System.

2079 After nearly a decade of construction, the Earth Skyhook is completed. The structure links *Clarke Station* in geostationary orbit to Port Horizon, an international city on the outskirts of Quito, Ecuador.

2080 The UN launches the *Argos 12* mission to Lambda Serpentis II. The Argos astronauts discover an Earth-like world with a complex biosphere inexplicably based on DNA.

The UNSA begins construction of a massive colony ship, the *UNSS Cousteau*. The effort, called the Athena Project, is intended to colonize Lambda Serpentis II and is expected to cost more than a trillion dollars. Economists argue that either the world will be rendered destitute by such an exodus of resources, or that spin-off technology will fuel the global economy to new heights.

A relatively unknown genetic engineering firm, GenDiver, is contracted to provide limited modification of potential colonists. Modifications include webbing between fingers and toes, significantly more efficient hemoglobin for carrying oxygen in the blood, and skin more resistant to saltwater.

2085 Work is completed on the *Cousteau*, and it is stocked with equipment and genetically engineered, cryogenically stored embryos. 5,000 colonists are selected from a pool more than 50 million applicants to participate in the colonization effort.

2086 The *UNSS Cousteau* leaves orbit. After rounding the sun, it leaves the Solar System and traverses the Masters-Vishenko wormhole. On December 12, the *Cousteau* enters orbit around Lambda Serpentis II, and the crew immediately begins detailed surveying operations.

2087 On January 3, the *Cousteau* begins a landing effort on the surface of Lambda Serpentis II. The Colonial Headquarters, a modular structure stripped from the colony ship, is established on the site of what would later become Haven.

In the economic depression following the first phase of the Athena Project, a number of multinational corporations sign the Icarus Accords aboard *Icarus Station*, pledging their mutual assistance against any perceived threats from the UN. A serious concern in the General Assembly, the agreement would have no consequences for the global balance of power for years to come.

2088 The Athena Project colonists finish construction of Haven, the first settlement on Poseidon. The first native Poseidoner, Jessica DeMarco, is born two months later.

Haven aquacultural technicians begin farming the shallows around the island for several species of native seaweed.

2090 A virus genetically engineered by Fischer Foods to attack a parasitic fungus damaging rice crops is released into the environment. The virus, an untested strain, begins to infect the rice it is intended to protect. Hundreds of thousands of people in Asia starve as rice crops fail throughout the continent. The method of release is unclear, but many claim it was a premature and uncontrolled field test by Fischer.

Earth's population stands just shy of 10.5 billion, while Luna's permanent residents number 11 million.

2091 New strains of the Fischer virus are discovered in sampled crops. The new mutations are decidedly more virulent than the original. These new versions of the virus begin to attack not only rice, but many other species of grains and grasses as well. The United Nations begins massive hunger relief efforts in southern and central Asia.

Several more villages are founded on the surface of Poseidon by small groups of colonists. Among these are the towns of Atlantis and Second Try.

Ibrium City's mass driver begins operations, sending more than 10,000 metric tons of refined metal to Earth orbit in its first year of operation.

2092 Starvation is widespread throughout most of the Earth due to the Fischer Virus, and the catastrophic famine is now commonly known as the Blight. Many genetics corporations and national governments focus the efforts of their R&D teams on preserving their interests against the virus, rather than trying to destroy it.

A small settlement on Poseidon is destroyed in a cyclonic storm many times more powerful than any terrestrial hurricane. More than 200 colonists lose their lives.

2093 Conservative United Nations estimates place the global death toll as a direct result of the Blight at one person in 10.

An executive order from the Secretary General creates the Global Ecology Organization. The UNGEO is designed to monitor and enforce compliance of the UN member states and corporations with the emergency regulations enacted in response to the Blight.

The stations on Luna and in the asteroid belt, hydroponically self-sufficient, remain free of the Fischer Virus and are unaffected by the Blight. The government of Luna establishes a full embargo on all traffic from Earth. Mars Colony survives with needed supplies being launched from the mass driver on Luna.

The construction of the Athena resupply vessels is deferred in the face of the massive resource expenditures required to combat the Blight. In the coming years, the Athena Project ceases to exist as the UN is forced to continually ration its dwindling resources.

Okay, we—that is, Luke and Luke's little brother and I—we were out north of Haven, looking for rockhoppers. You know, those little brown jumping herpetoids? Well, we were over this reef, maybe five, 10 meters. I had a netbag full of hoppers, when I see this small school of stingrays. Well, not really rays, more like a combination of an overgrown nudibranch and a furless seal. They paid no attention to Luke or me, but definitely seemed interested in Luke's little brother—swimming around him, rubbing up against him. It was weird and kind of eerie. When Luke and I moved to fend them off, they disappeared over the deep edge of the reef. We got to Luke's brother and he was okay but was in some sort of trance...like he was drunk, or something. We got him to the surface fast, but by the time we hit air, he seemed to have come out of it. The whole thing was really creepy.
—Mikael McRunion, Poseidon colonist

2094 Protesting government ineffectiveness in response to the Blight, ecoterrorists bomb the Acropolis in Athens, destroying it completely. They demand immediate action, threatening to also destroy the Taj Mahal, Stonehenge, and the Louvre.

In response to social unrest and political ineffectiveness, Biogene Corporation, with the support of the Colombian government and the signatory corporations of the Icarus Accords, petitions the UN to recognize the sovereignty of its city-state at El Dorado. Biogene claims, unlike the Colombian government, it has the resources to restore social and political order to the region, thereby lessening the suffering of its citizens and the resulting burden on the UN itself. After heated debate in the General Assembly, the UN pushes through a resolution granting "formal sovereignty to any Incorporated city-state capable of satisfying the obligations of government in regions where traditional national governments have failed to do so." With this resolution, El Dorado becomes the first of the Incorporate city-states granted formal sovereignty.

2095 The UNGEO is given the authority to enforce its emergency mandates on member national and Incorporate states that violate regulations pertaining to the Blight effort. Its enforcement arm, the UN Marshal Service, becomes a powerful world police organization.

Cousteau's main computer crashes. Left without guidance or environmental controls, the vessel is completely stripped of all usable resources, sealed, and left in orbit. The last of her three reactors is taken to the surface to join the others in providing the colonists with power.

2096 The resupply ship from Earth fails to arrive and concern in the colony runs high as predictions of doom prevail. The colony experiences its first suicide when a Haven family uses a small mining charge to destroy their boat in the Haven harbor.

Terrorists detonate explosive charges along a section of the Earth Skyhook, about 10 km above the surface of the Earth. The massive cable is almost

completely severed and remains inoperable for 40 years.

2098 The UN introduces its specially trained, genetically engineered Shock Troops in a strike against a food-processing plant in Russia. The plant, maintained by Vostonaya International, had been illegally hoarding food reserves and supplying a few corporate enclaves with disproportionate allowances.

2100 The World Health Organization announces that continued mutation of the Fischer Virus makes the containment of the Blight unlikely any time soon.

In a desperate and unanimous vote, the Security Council of the United Nations elects to subordinate all organizations and functions of the United Nations to the Global Ecology Organization, giving the GEO the necessary power to protect and salvage the planet's threatened ecology. One week later, the General Assembly approves this radical restructuring. Several nations, including the United States, Switzerland, and China refuse affiliation with the newly created world government.

2101 Claiming that the Fischer Virus was developed at a biological warfare facility in Jaipur, China launches a series of attacks into India and Pakistan. Sensing an opportunity, the United Islamic Republic invades Afghanistan. The fledgling GEO responds by leading a multinational coalition of its member states in deploying troops to Saudi Arabia and Malaysia. Naval assets are also dispatched to the Persian Gulf, the Indian Ocean, and the Sea of Japan. Conflict continues at some level in the region for more than fifteen years, as the Blight prevents all participants from committing sufficient resources to end the hostilities. The Second Indo-Chinese War ends with the UIR controlling much of Afghanistan, and India controlling Pakistan and Bangladesh.

2103 While on a sub-orbital flight from Haven to New Jamaica, the *Cousteau*'s lander, *Calypso*, reports observing a school of animals swimming just below the surface of the ocean at speeds of more than 40 knots. The school appears to cover more than 50 square kilometers. When a skimmer from New Jamaica arrives to investigate, no trace of the animals can be found.

2104 Most national governments become vestigial institutions as the GEO usurps more and more authority combating the Blight. Most popular support has shifted either to the GEO or to those Incorporate states that have managed to protect their interests and citizens from the horrors of the Blight.

Medical supplies on Poseidon run short in the wake of a major fire that destroys most of Kingston, a town more almost 3,000 kilometers from Haven.

The ray-like beings first encountered in 2093 are observed again, this time apparently herding a school of fish.

2105 With no resupply from Earth, the colonists assume they are permanently cut off and begin to redirect their efforts towards the simple goal of survival.

It's clear now that Earth has forgotten us. Ezra can talk about nothing else. 'We're alone,' he says. 'We'd better start acting like it.' I think it's just an excuse to have another baby. He wants a big family so bad. But how can I justify bringing a child into this strange world when I don't even know whether or not she'll have any kind of life? Aslen and Einer are so big, now. Fifteen and twelve. When I was twelve, I was still playing tag with the house 'bot. Einer killed five rubber shrimp yesterday, more than enough food for the four of us and the Jacobsons. This planet has made us all grow up fast. — Kieran Connor, Poseidon colonist

2106 The Fischer Blight crosses the South China Sea, reaching the East Indies.

2107 Much of central Africa is engulfed in civil war and anarchy as economies, and then governments, collapse in the wake of uncontrolled famine and disease. Thousands of hybrids leave their reservation to join the GEO

Peacekeeping Force dispatched to the region to suppress violence and offer humanitarian relief.

The 20th anniversary of Planetfall is met with mixed reactions by the colonists. The colony itself thrives, but the sense of isolation weighs heavily on its inhabitants.

The Poseidon colony sets a new record for births in a year, as the population climbs towards 7,000.

2109 Faced with catastrophic famine, political paralysis, and rising social unrest, Syria and Jordan join the United Islamic Republic.

2110 A native Poseidoner, a teenager alone on a fishing trip to a group of islands near New Jamaica, reports having a short intelligent encounter with an alien ray. His report is largely discounted.

GEO predictions that the Blight may have been contained are proven false when much of central Canada's grain crops are devastated by a new variant of the Fischer Virus. GEO troubleshooters resort to scorched-earth tactics in an attempt to stop the spread of the new strain.

2111 A biological expedition exploring submerged reefs south of Atlantis holotapes a ray carrying an unidentified metallic object. Debate rages as to the significance of the observation.

2112 A research vessel off Atlantis is destroyed shortly after capturing a ray for study in a behavioral lab on the island. There are no survivors, and the cause of the boat's destruction is never discovered.

Rationing of transportation begins on Poseidon as vehicles begin to deteriorate and reserves of spare parts are depleted.

2113 The GEO subsidizes a mass-evacuation of Israel. Isolated from its political and military allies, the Jewish state is no longer capable of offering even token resistance to foreign aggression.

Shortly after the evacuation is completed, UIR forces garrison Jerusalem, Tel Aviv, and Haifa. Much of northern and eastern Israel is absorbed into the Syrian and Jordanian provinces, and the rest is subsumed under a newly created Palestinian province.

2114 Against GEO protest, Argentina annexes the Falkland, South Georgia, and South Sandwich Islands. Both Argentina and the United Kingdom are full member states, and the GEO immediately deploys a Peacekeeping Force to restore order to the region. After a brief skirmish, Argentina surrenders all of its military personnel and materiel to the GEO. A small garrison force remains in Argentina for the next 10 years.

2115 The last colonial shuttle, *Calypso*, is destroyed while attempting to land in heavy weather off Second Try. Its crew of five and all 23 passengers are killed.

Travel to and from orbit becomes impossible. Select groups of colonists volunteer to break away from the major towns on Poseidon to start their own settlements. It is hoped that spreading out will improve the colony's chances for survival.

2116 GEO officials announce that the Blight has been effectively erradicated. Efforts turn from containment to rebuilding.

US President Kesslar issues an executive decision bringing an end to all food exports. His decision is fiercely protested around the world.

2117 When UIR forces mobilize to annex Lebanon, Damascus is destroyed by a 10-megaton nuclear missile launched from the Anasi city-state at Beirut. An official dispatch from the Anasi leadership promises an unlimited nuclear attack on the UIR if their forces are not immediately withdrawn. The government in Tehran sends the head of the Director of its Central Intelligence Service to Beirut in a box, along with a personal message from the Ayatollah apologizing for the "ill-conceived

attack on the sovereign soil of Anasi Systems."

2118 The orbit of *UNSS Cousteau* completely decays, sending the vessel plunging into Poseidon's atmosphere. Thousands of colonists watch the flaming *Cousteau* arc across the early evening sky to plunge into the deep ocean. A great deal of the wreckage, including *Cousteau*'s computer core, is never recovered.

2119 Two years after the conclusion of the Second Indo-Chinese War, China again takes up arms and annexes the Korean and Indochinese peninsulas. A mobilization of forces in Chinese Burma appears to threaten a renewed invasion of India. When both India and the GEO promise the use of tactical nuclear weapons in the theater, Chinese forces are withdrawn from the Indian border.

2120 After 30 years, the GEO announces that the Blight is no longer a threat. The death toll attributed to the Blight exceeds 50%. Earth's population is now 4.8 billion.

The population of the colony on Poseidon reaches 9,000.

2121 Remains of a ray are discovered floating in the Kingston harbor. A scientific team begins immediate examination of the body. Reports from the outlying settlements of colonists interacting with the rays, now popularly called "aborigines," are still generally discounted.

2122 Colony researchers discover a sensory organ embedded in the skin of the aborigines that appears to be a chemical sensor of great precision. Protein-rich secretions in the aborigine's skin are believed to be related.

2123 Colony geologists begin to suspect that the island on which the town of Atlantis is built is tectonically unstable.

The population of Poseidon reaches 10,000.

2124 Mt. Odysseus, the central peak of the island on which Atlantis is built, erupts. More than a million tons of rock and soil are blasted into the atmosphere in a series of explosions. Many of the 400 colonists on the island are buried under the ash and ejecta from the mountain.

2128 The eighth anniversary of the defeat of the Blight is met with the WHO announcement that the previous year marked the first time in over 25 years that the human population of Earth enjoyed positive growth.

The Poseidon colony's population reaches 12,000.

2131 *Representatives of the Nikkei Stock Exchange announced today that the exchange has reached 50% of its pre-Blight trade volume. Many economists say they are not impressed, and are predicting many more years of hardship. Economic sectors likely to take the longest time to reach a meaningful level of recovery include the transportation industry, entertainment, and manufacturing. Agribusiness and genetics research continue to be the best bets for long term investment returns.*
— ForbesNet

2133 The GEO announces its plans to institute worldwide population controls to avoid post-Blight drains on resources. The move is decried by many in poorer regions of the world as an attempt to keep agrarian peoples in subjugation.

2135 Planetwide storm distribution and an exceptionally wet rainy season that dumps an average of 3,200 cm of rain over many of the settled areas of Poseidon lead to widespread fungal infections among the colonists. Poseidon's irreplaceable supply of pharmaceuticals is severely depleted.

A coordinated effort by GEO, Incorporate, and independent personnel returns the Earth Skyhook to operational status.

The GEO develops plans to redirect much of Earth's economic redevelopment towards orbital industry.

2137 Discussion begins on Poseidon about the possible institution of a planetwide

government for the nearly 15,000 colonists. The idea is quickly discarded as unnecessary.

The GEO resumes near-Earth industrial work that requires weekly service to orbit and Luna. The spotty resupply efforts to Delphi on Ceres and Ibrium City on Luna become regularly scheduled flights from the World Space Station.

2140 Colonial farmers report that much of their aquatic crops are being eaten by fish herded by the aborigines. An attempt to communicate with the aborigines about the humans' need for the plant erupts into violence when one farmer kills both himself and three of the seemingly unconcerned aborigines.

2144 The 57th anniversary of Planetfall sees the birth of the Poseidon colony's twenty thousandth human inhabitant.

2146 A helium flash in the last operational fusion reactor on Poseidon destroys the reactor and much of the surrounding Haven countryside. The town is plunged into darkness as its primary source of electricity burns to the ground. Nearly 150 colonists are lost in the accident and the fire-fighting effort.

2149 A GEO team, operating under the auspices of the World Space Agency, uses a solar sail to travel from Lunar orbit to orbit around Mars. The mission is hailed as an almost energy-free method of space travel, but the time required for a round trip is prohibitive for all but the lowest priority flights.

2150 A family farm south of Second Try claims to have "domesticated" a species of large, vegetarian fish. While the fish are not, in the truest sense of the word, domesticated, they have become dependent on the farmers for much of their sustenance, and are the product of a selective breeding program that has produced a strain of fish both larger and slower than the root stock.

The last of the colony's original drug supply is exhausted during the treatment of a number of colonists who were lost while on a fishing trip. Adrift for 43 days, the 27 survivors all suffer from exposure, as well as various fungal and parasitic infections.

The human population of Poseidon climbs to 25,000.

2155 The WSA begins work on a plan to send a recontact mission to the Lambda Serpentis colony. The plan, generally considered a long shot and projected to cost several billion dollars, is not met with a great deal of enthusiasm.

The population of Poseidon reaches 30,000.

2156 Against GEO policy, the United Nations is reinstated. A two-thirds vote of the original member nations, however, is needed to disband the GEO.

2157 The GEO announces that the last of the Fischer Virus has been exterminated. Small samples originally intended for deep freezing in vaults around the world are mysteriously destroyed in a series of freak accidents.

2159 Ernest Carslake, an independent industrial tycoon, dies of inoperable brain damage suffered during a massive stroke. Carslake's will leaves his entire fortune of $13.5 billion to the WSA's recontact project. Widely regarded as a wealthy eccentric, Carslake's last years were spent trying to drum up popular support for the continued conquest of space.

The population of Poseidon reaches 40,000.

2162 Dundalk Shipbuilding is awarded a contract for a mid-size vessel capable of traversing the wormhole. The WSA refuses to comment on the ship's intended mission, but speculation runs rampant.

2164 The Dundalk vessel is completed. The GEO announces that the *UNSS Adm. Robert Perry* will be crewed and provisioned for a three-year recontact mission to the Athena Project colony in the Serpentis System.

2165 *Perry* arrives in orbit around Poseidon. The survey of the planet and its roughly 40,000 inhabitants takes just under two weeks from orbit. *Perry*'s presence is detected by at least 40 colonists who have never given up watching the night skies for some signal from Earth.

2169 *Perry*'s lander begins shuttling down both crew and small amounts of cargo to the planet's surface. The recontact with Earth is met with decidedly mixed emotions, particularly when the crew informs the Poseidoners of the Blight and its aftermath.

The United States begins withdrawing its formal political support for the GEO. Acknowledging the GEO's success in dealing with the Fischer Blight, the President expresses the country's gratitude, while insisting that "America must once again become a free and sovereign nation."

Several public and corporate organizations begin to push for the regular resupply ships and scientific expeditions originally called for under the Athena Project.

2170 Several Incorporate states, including Atlas Materials and Dundalk, are given contracts for large, high-efficiency supply ships to make regular runs to Poseidon.

The population of Poseidon reaches 51,000.

2172 The *UNSS Ballard* arrives in the Lambda Serpentis System, bearing more than 500 scientists and technicians in cold-sleep, and more than a half-million metric tons of supplies. The supplies are well received by the colonists; the scientists, less so.

2174 The *Ballard* arrives for a second time at Poseidon, this time bearing prefabricated components for an orbiting station. The facility is designed to expedite ground-to-orbit transport.

A floating scientific station less than 50 kilometers from Kingston is attacked by a herd of carnivorous marine mammals. Although New Jamaica is well within radio range of the station, no distress call is made, and the radio logs show nothing out of the ordinary. All aboard the station are lost.

2176 The first GEO administrators arrive on *Ballard*'s sister ship, *UNSS Nerid*. *Nerid* also brings the first independent commercial interests to Poseidon. First to set foot on the planet are research teams from Lavender Organics, GenDiver, and Atlas Materials.

The population of the colony, including the colonists newly arrived from Earth, reaches 60,000.

2181 Atlas Materials finishes construction of a research lab 152 meters below the surface of the ocean to facilitate the exploration of the seabed. More than 250 people live in the facility, which is given the indifferent name of Undersea Habitat 1.

2185 An Atlas mineral survey discovers deposits of a previously unclassified form of silicate in the crustal plates of the ocean floor. It is discovered that these "xenosilicates" can be used to specifically manipulate biochemistry more accurately and efficiently than has ever before been possible. The potential benefits are enormous, and Atlas attempts to keep its discovery secret. Unfortunately, information about the minerals is sold by a disgruntled lab tech to an Earth-based media conglomerate for more than 100,000cs.

2187 An independent biochemistry lab on Earth uses a xenosilicate "template" to manufacture precisely tailored, programmable retroviruses. The introduction of these "smart viruses" in living cells appears to prevent cancer, fortify metabolism, and stop degradation of genetic expression, essentially arresting the aging process. A massive exploitative rush for the minerals, popularly referred to as Longevity Ore or Long John, begins. Poseidon's newest resource promises to bring untold wealth to anyone who can harvest a share.

2188 GEO contracts for three more interstellar transport ships are awarded, and Incorporate states and large, independent corporations spend billions of dollars researching Long John harvesting technologies. Most of the more than 70,000 native Poseidoners vehemently oppose the massive influx of Incorporate interest and personnel from Earth, but are essentially powerless to stop it.

2190 More than 20,000 people, mostly miners and engineers employed by the Incorporate, arrive from Earth.

The first floating town, Dyfedd, is built by Lavender Organics.

2192 Commercial flights from Earth bring a total of 30,000 people to Poseidon this year.

Atlas Materials' underwater facility is destroyed in what appears to be an attack by rival GenDiver. A minor Incorporate war breaks out, and both companies begin importing security personnel.

A resolution is introduced to the GEO General Assembly which would repeal the UN treaty granting sovereignty to the Incorporate states. The bill is defeated, as many members have become outspoken advocates for returning power to the reinstated UN. This faction calls for the passage of a single resolution which would abolish both the Incorporate states and the GEO.

This institution has no more place in the post-Blight order than the Incorporate city-states. Both emerged from the chaos and desperation of that time, and both should now pass into the pages of history. I do not believe that this government has the legal or moral position to question the legitimacy of any political institution until it is ready to question its own.
— Travis Denton, US representative to the GEO General Assembly

2194 In response to the continued conflict between GenDiver and Atlas, the GEO appoints a garrison of 12 GEO Marshals, a company of Shock Troops, and a cadre of Magistrates to police the colony.

Kingston announces its refusal to recognize the authority of the GEO and declares itself an independent state. The announcement is met with a great deal of concern, and the GEO eventually decides to negotiate a political settlement with colonial representatives.

2195 *Prosperity Station* is built in polar orbit around Poseidon. The station serves as the home for GEO personnel on the planet, as well as a major staging point for cargo and colonists flowing both to and from the waterworld.

2197 The price of a single longevity treatment reaches 50,000cs on Earth.

2199 Incorporate competition and exploitation on Poseidon continues to increase as the planet's population explodes towards two million.

Acting on pictures taken by a weather satellite, a survey team sponsored by National Geographic explores the Dunedin Seamounts. The team finds what appear to be ancient, artificial formations atop the submerged mountains.

A group of young natives in the Sierra Nueva Cluster assaults a GenDiver transport, leaving it in flames and its crew dead. This incident—and GenDiver's retaliation—marks the start of the Sierra Nueva War.

Colonial Administrator John Bishop is left in critical condition after a terrorist bombing at the Government Center in Haven.

Responding to continuing violence in the Sierra Nueva and rumors of violence between natives and Hanover Security Service personnel in Westcape, the GEO begins shipping thousands of new military personnel to bases throughout Poseidon.

blue planet 2e CHARACTER SHEET 00.01

NAME _____

AGE _____ **HEIGHT** _____

SPECIES _____ **GENDER** _____

WEIGHT _____ **STATURE** _____

COMPLEXION _____ **EYE COLOR** _____

HAIR COLOR _____ **HAIR STYLE** _____

SPECIAL _____

CHIPS _____

PROFILE

Goal _____

Motivation _____

Attitude _____

Player's Choice _____

Role _____

TRAINING PACKAGES

Origin _____

Backgrounds _____

Professional _____

_____

PRIMARY ATTRIBUTES

BUILD _____

FITNESS _____

AGILITY _____

DEXTERITY _____

AWARENESS _____

- **CHEMICAL** _____
- **HEARING** _____
- **INTUITION** _____
- **TOUCH** _____
- **VISION** _____

INTELLECT _____

PRESENCE _____

WILL _____

DERIVED ATTRIBUTES

ENDURANCE _____

REFLEXES _____

STRENGTH _____

TOUGHNESS _____

ADMINISTRATION ☐
- Bureaucracy _____
- Economics _____
- Law _____
- Management _____

AGRICULTURE ☐
- Animal Husbandry _____
- Aquaculture _____
- Farming _____
- Hydroponics _____

ATHLETICS ☐
- Aquatics _____
- Archery _____
- Freefall _____
- Parachuting _____
- Sports _____
- Throwing _____

CLOSE COMBAT ☐
- Armed Combat _____
- Unarmed Combat _____

COMMAND ☐
- Leadership _____
- Logistics _____
- Strategy _____
- Tactics _____

COMMUNICATION ☐
- Language _____
- Negotiation _____
- Oration _____
- Persuasion _____
- Writing _____

CULTURE ☐
- Cetacean _____
- Colonial _____
- Earth _____
- GEO _____
- Incorporate _____
- Military _____
- Native _____
- Spacer _____
- Street _____

FINE ARTS ☐
- Acting _____
- Artisan _____
- Dance _____
- Music _____
- Painting _____
- Photography _____
- Sculpture _____

FIREARMS ☐
- Handguns _____
- Longarms _____

HUMAN SCIENCES ☐
- Anthropology _____
- Archeology _____
- History _____
- Politics _____
- Theology _____

LIFE SCIENCES ☐
- Biochemistry _____
- Botany _____
- Genetics _____
- Zoology _____

MEDICINE ☐
- First Aid _____
- Forensic Medicine _____
- General Medicine _____
- Pharmacology _____
- Psychology _____
- Surgery _____
- Veterinary Medicine _____

MILITARY WEAPONS ☐
- Heavy Weapons _____
- Gunnery _____

PHYSICAL SCIENCES ☐
- Astronomy _____
- Chemistry _____
- Geology _____
- Meteorology _____
- Physics _____

STEALTH ☐
- Hiding _____
- Shadowing _____
- Sneaking _____

SUBTERFUGE ☐
- Bribery _____
- Disguise _____
- Fast-Talk _____
- Forgery _____
- Lockpicking _____
- Sleight of Hand _____

SURVIVAL ☐
- Fishing _____
- Foraging _____
- Mountaineering _____
- Navigation _____
- Orienteering _____
- Tracking _____

TECH ☐
- Computers _____
- Damage Control _____
- Demolitions _____
- Electronics _____
- Mechanics _____
- Remote Operation _____

VEHICLES ☐
- Driving _____
- Piloting _____
- Sailing _____

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GEAR

ITEM	LOCATION	WEIGHT

BIOMODS

ARMOR

ARMOR	ARMOR RATING

WEAPONS

	ROF	MAG	PB	S	M	L	DR

PERSONAL INFORMATION

RESIDENCE

EMPLOYER

FINANCES

FAMILY

FRIENDS AND CONTACTS

RESOURCES

PROFILE DETAILS

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