Oceanpunk: Gear and Equipment

Introduction

Ah, the call of the ocean. There's something mystical about the fractal patterns of the waves that seems to beckon some of us to a life spent upon the high seas. It doesn't hurt that there's a hell of a lot of money waiting to be made either.

I've been fielding a lot of queries over the last few months from edgerunners just getting their feet wet about what kind of equipment is appropriate for the up to date oceanpunk. No surprise there- the explosive growth of the offshore industries and enclaves within the last decade has created a demand for skilled operators. I'm always happy to help a komrade in arms because I never know when I might need their help, but lately all this free consulting has been taking up a little too much of my time. That's why you're reading my Gear and Equipment download right now.

In here I've put together some pointers towards all those little techno-toys that can make missions on the wet side a lot easier. Everything from basic dive equipment to specialized aquatic bioware and deep immersion hardsuits. Not to brag, but I think there's enough information on tech in here that even an inveterate urban op could consider leaving shore and bidding on some wet side jobs. Just remember that good equipment is no replacement for proper planning and basic skills and you've got a good chance of working the ocean again.

If you like what you read, and think it's even more valuable than the 20 Euro I charged you to download it, drop by New Pacifica some time and buy me a drink. Come to Uncle Charlie's Dive Shop and Booze- o-rama on a Saturday night and I might even tell you the story about the time I was trapped on a rapidly sinking mining sub with a rabbi, a neo- dolphin, and a playgirl exotic. Hell, if you can top that story I'll be happy to buy *you* a drink.

Availability

Each of the commercial items listed in Oceanpunk: Gear and Equipment is given an Availability rating to simulate how easy it is to locate and purchase. As an example, you can walk into almost any store and buy a "Common" Bic pen, but it's going to take some work to locate a "Rare" Roland Aeroflo fountain pen with gold plated fixtures and engraved celtic cross design.

The chart below lists all four classes of availability and the average time necessary to locate and purchase an item by shopping, making phone calls, or hustling for it on the street. If a character desperately needs a piece of tech he can pay an amount equal to 150% of the item's purchase price to lower it's availability by one class. This accounts for money spent tracking it down and bonuses paid to fixers and merchandisers to insure fast delivery.

Availability	Time Required
Excellent	1-6 hours (1D6)
Common	4-24 hours (4D6)
Poor	1-6 days (1D6)
Rare	2-12 days (2D6)

Electronics and Communications

Option: Marine Rebuild

Any portable piece of electronics can be rebuilt to marine specifications for an additional 25% of it's original purchase price (minimum cost of $20). This includes a watertight case, corrosion resistant fittings, membranes in place of keyboards, etc. and increases the items SDP by 50%.

Broome OS-1200 Personal Sonar

The OS-1200 is a useful accessory for divers working in deep water or murky conditions. A comfortable imaging monocle is wired to an external sonar unit that attaches to the upper rim of any facemask using a universal mount. The 50m range of the standard setting gives you low resolution imagery while switching to fast pulse mode gives you crystal clear video of anything within 10m. Real diehards would go for cyber sonar, but that obvious bulge in the forehead isn't for everybody.

Weight: Negligible

Cost: $350

Availability: Common

Zetatech Dolphin Translator CompuMod

This is a combination software/hardware package designed for the ubiquitous Zetatech E-Book and compatibles. Just jack the included cigarette pack sized transducer into your marine E-Book, hook up your audio headset, and the included program will translate for you at Delphin-6 and Sonde-2

Weight: Negligible

Cost: $650

Program Size: 10MU

Avoscomb Inc. Lasercom

A sophisticated underwater communications system using a blue-green laser to carry voice and data. In tight beam mode the laser can communicate with a particular underwater target within a 4 km line-of- sight, while broadcast mode can be picked up by any receiver within a 2 km line-of-sight.

Cost: $250

Weight: Negligible

Fogorin UC-2 "Chirpset" Underwater Communications System

A simple, easy to use piece of gear from the company that developed the de facto standard for underwater com systems. The matchbox sized phased array transducer operates just like a personal multi-channel radio, but uses high frequency sound pulses instead of radio waves as a carrier. Range is 3-4 km underwater depending on local terrain and background noise. One feature that's not advertised is how easy it is to encrypt your communications by swapping out the factory standard chip containing the audio compression algorithm for a user configurable chip readily available on the street. You get close to a million possible encoding options and they other guy gets nothing but white noise. One drawback, common to all sonic systems, is that regular sonar gear and neo-dolphins can readily detect transmissions from quite some distance.

Cost: $175

Weight: Negligible (Black market encoding chip available for an additional $20-120 (2D6 X 10) on the street.)

Cyberware

Wavetech Marine Rebuild

I found out first hand that standard cyberlimbs don't react kindly to the ocean environment. The constant salt spray can corrode fittings, futz up the contraction rate of myomers, and in general wreak merry hell on your subsystems. Not to mention how much fun it is trying to swim when your balance is thrown off by a big hunk of metal and plastic filled with water. So the first thing you should do before walking up the gangplank is get all your cyberlimbs rebuilt to marine specifications with corrosion resistant diamond coat, composite replacements for reactive metal parts, and smart air bladders to maintain your limbs neutral buoyancy regardless of dive depth. It takes up one of your valuable option spaces, but I guarantee you'll be grateful for it eventually.

Type: Cyberlimb Option

Cost: $250

Humanity Cost: None

Rising Arc Dolphin Translator Package

The full name of this wholly owned neo-dolphin company translates roughly from Sonde into "rising shallow arc- moment before- fronting pressure wave- transforms (into)- empty swimming (flight)", but that gets tired pretty quick so everyone with legs calls them Rising Arc.

The clever little fins market this bundle to anyone who expects to have dealings with neo-dolphins or to a lesser extent with any of the feral cetacean species. It includes a modified form of the Enhanced Hearing Range cyberaudio option, a high frequency version of the AudioVox vocal synthesizer, and a mastoid mounted mini-comp programmed to translate Delphin or Sonde to and from the users native tongue.

Type: Cyberaudio Option Package

Cost: $1450

Humanity Cost: 3D6

Bioware

ConGen "Seabreath" Secondary Gills

The burgeoning oceanic population has created an intense demand for workers capable of long term work at moderate underwater depths. Now ConGen debuts the answer: the Seabreath respiratory rebuild. Our unique osmotic membranes are installed in flow channels located in slits between the ribs to maximize gas exchange with water passing through the mouth. By slightly reducing your excess lung capacity, and installing a secondary tracheal valve, we make it a simple matter to switch from breathing air to dwelling in the watery home of our ancient ancestors. After installing Seabreath we guarantee that whole new areas of underwater employment will open up to you or we'll refund your money! Take the first step towards a bright future by calling today to schedule your Seabreath rebuild.

Type: Seabreath Secondary Gills

Cost: $3000

HC: 2D6

Surgery Code: Critical

Effect: The user can breathe indefinitely in oxygenated water. The large absorption area of the gills make subjects with this modification especially vulnerable to airborne toxins (-3 to rolls), and the delicate tissues of the gills are sensitive to damage (additional +2 damage from any blow to the torso for shock to the structure).

Shukutei Biomed "Phibia" Aquatic Webbing

Return to your ancestral home in style! Our new webbing rebuilds let you move through the water with the greatest of ease- and with a speed that would put an unmodified Olympic swimmer to shame. Custom designed bone and skin lines are used to elongate your digits and create a frog-like membrane of skin between them. See ya' at the beach!

Type: Alpha level Aquatic Webbing

Cost: $500

HC: 1D6/2

Effect: Hands are webbed. Add +2 to your underwater MA. House rule is that aquatic MA is one half normal MA, consult with your Ref. for his ruling. Reduce REF by -1 for the purposes of manipulation.

Type: Beta level Aquatic Webbing

Cost: $800

HC: 1D6

Effect: Rebuild of hands and feet. Your underwater MA is equal to your normal MA rating. Reduce REF by -1 for the purposes of manipulation.

Ransom SK "Stinger" Injector

Seemingly innocuous forms of sea life like corals and jellyfish are equipped with a deadly form of injector mechanism called a nematocyst. Now you can look just as innocent while packing the same lethal punch! The Ransom SK Stinger is a shot glass sized bioimplant incorporating a meter long strand of coiled muscle tissue tipped with a razor sharp sliver of bone. At your mental command the strand explosively uncoils, deploying through a nearly undetectable slit in your skin, and strikes your target like a cobra with the toxin of your choice. We recommend implantation in the forearm to take advantage of the Stinger's rapid aim and fire potential, but you can pick anywhere on your body to hide our deadly surprise. (The Stinger requires a companion Venom gland to provide it's toxin supply. See the Bioware supplement for more details.)

Type: Stinger Injector

Cost: $250

HC: 2D6

Effect: Stinger can strike targets within one meter with +1 to accuracy. A specialized form of martial arts called Stingdance takes advantage of the injectors close combat capabilities and is gaining in popularity on oceanic platforms

Diving Gear

Opogomo Dive Rig

A basic set of old-tech dive equipment including mask, fins, wetsuit, weight belt, air tank, regulator, etc. Opogomo has a reputation for rugged reliability and targets the beginner and casual diver with inexpensive, plain vanilla equipment. You won't win any fashion awards wearing it, but in certain dive circles that puts you right on the cutting edge of cool. Usable down to the recreational dive limit of 40m and holds a 2 hour single tank air supply.

Weight: 10kg

Cost: $140

Availability: Common

Gleason Hydrotech "Manta" Long Duration Air Supply

The Manta is one of the best air systems on the market. The streamlined hard shell backpack contains a standard 2 hour air tank and a battery powered electrolytic system that extracts oxygen from sea water. With a full battery charge a diver can stay submerged for up to 48 hours and then insert new batteries to extend his time underwater indefinitely. Industrial users love the fact that dive time is limited only by user fatigue, but the obvious bubble trail and traceable electrical field has made it a tough sale to military forces. Good for dives down to 60m.

Weight: 8kg

Cost: $850

Availability: Poor

GaltCo AB-4 Osmotic Rebreather

The only thing better than a diver with this system is a neo- dolphin. The backpack unit looks intimidating, but it's filled with a lightweight osmotic aerogel that removes oxygen from the surrounding water while the diver swims. A bellows style compressor regulates breathing pressure while integral scrubbers in the mouthpiece prevent CO2 buildup. Total silence and no bubble trail make this the premier air supply for the covert community. The only drawback is that the aerogel becomes saturated in about ninety minutes and needs to de-gas on the surface for an equal amount of time before another dive. Dive depth limited to 40m.

Weight: 4kg

Cost: $1300

Availability: Poor

PanOceanic Emergency Ascent Pod

It's a sad fact that accidents happen deep underwater. If help isn't available at depth there's a good chance the victim will die from their injuries or from pressure sickness induced by rapid surfacing. PanOceanic solves the problem with a carbon fiber/kevlar pod equipped with a single use rapid ascent bag. Once the victim is placed in the unfolded pod all you need to do is seal it up and activate the attached gas generator to fill the ascent bag and get him to the surface. The EAP has mounts for an external air supply and is guaranteed to maintain up to 10 atmospheres of pressure at the surface to prevent decompression until a hyperbaric chamber is available. Voted "Best Product of the Year" by Pro Diver infozine.

Weight: 9kg

Cost: $850

Availability: Poor

Wave Technology "Hotsuit"

It's amazing how fast your body heat gets sucked out underwater. The Wave Technologies Hotsuit looks just like a standard full body wetsuit, but contains an integral battery powered heating system and automatic hermal regulator that can keep you comfortable for 3 hours in water temperatures down to 10C. Just the thing for late season surfing or winter diving.

Weight: 3kg

Cost: $150

Availability: Common

GaltCo Osmotic Skin ("Mythsuit" may be a better name.)

As far as I know this is just a rumor, but I include it out of a sense of completeness. From what I've heard it's a full body wetsuit that incorporates GaltCo's osmotic aerogel and links to the circulatory system through shunts mounted in a neck ring. Blood, or possibly a synthetic replacement, flows directly into the suit where it picks up oxygen and expels carbon dioxide and nitrogen into the surrounding water. I know it sounds wiggy, but there are too many stories about "guys in funny wetsuits without air tanks" floating around to discount the idea out of hand. If you run across more information feel free to contact me anonymously.

Weight: 4kg?

Cost: $2500?

Availability: Rare?

Hardsuits

"We'd been installing a new thermal tap for the farm down at about 120 meters. Over the past couple of weeks GaltCo had been cranking up the heat 'cause they were trying to get all us independents to sign on with them for distribution, but we'd been holding out pretty well despite all the crap. There had been a couple of "accidents" and we expected more problems as the new platform came on line. I was in the middle of welding a leader line to the anchorhead when I picked up something coming down on my sonar. Then the explosions started.

He'd fired his bubblers a little too late to cover his trace, but all hell broke loose when he did. The billowing clouds of silt kicked up by the blasts were picked up by the current and fogged out everything as we all scrambled around trying to find out what was going on. The silt was futzing up the com and we couldn't see a damn thing. We were going to be sitting ducks if we stayed under, so I told everybody to pop their drogues and get to the surface. I popped and was coming up from the silt cloud when I saw a guy in a wetsuit hovering over the anchorhead. He was a stupid kid.

He must have ridden a weight down to get on top of us so fast and I could see the pain in his eyes through the cheap facemask. He hadn't taken the time to compress and the pressure was squeezing down on his head like a red hot vise. I flashed by him in just a second or two and could tell he was in trouble, but didn't have the time or inclination to try and help him as I rode the drogue up. I'd gotten up to about 30 meters when his charge went off.

When we took a look later the anchorhead has intact. I can just imagine how they recruited him to try and blow it. A couple of corp sharpies come up to some tough little nomad kid hanging around at the local bar 'cause he ain't got anything else to do. He's all pumped with himself when they buy him a couple of drinks and start flashing more money than he's seen in his life and talking the talk. He doesn't have a clue about diving other than what he's picked up watching the sport divers at the watering hole, but I'm sure the corpy boys knew that and picked him for just that reason. They get themselves a nice expendable nobody to deliver a warning and the kid thinks he's Joe Bigtime living on the edge. The stupid thing is that if he'd had a hardsuit he might of pulled it off. I don't blame the poor kid for what he did, but those corp bastards are gonna pay."

- "Crabby" O'Brien, Kalver Freehold

Hardsuit Development

Underwater depths up to 150 meters are accessible for a limited time with standard dive gear, but the excessive decompression time needed to avoid the bends is a major stumbling block to any extended underwater work. In the early days of underwater industry technological limitations forced divers to pressurize at their working depth and spend weeks, sometimes months, living in cramped underwater facilities. By the 1990's it became increasingly clear from research and experience that even the use of exotic breathing mixtures to prevent nitrogen absorption wasn't preventing neurological damage caused by living in a high pressure environment. Even when N2 was removed from the air mix entirely the human body's own reserves of the gas would turn on it to attack nerve and connective tissue like a slow acid. The results were scores of perfectly healthy divers creeping around like old men with Parkinson's before their 30th birthday.

It took a series of high profile lawsuits, astronomical insurance claims, and blistering media reports to finally convince the major corporations that something had to be done. They wanted something that would keep the divers working and cut down on the time wasted in decompression; the divers wanted to stop worrying about becoming cripples from pressure induced nerve damage. The answer to everyone's problems was the full development of the long neglected hardsuit: a one man diving suit built using advanced powered armor technology that allows industrial users to work kilometers beneath the ocean's surface in a shirt sleeve environment.

Hardsuits work around the pressure problem by maintaining a normal atmosphere inside an armored shell that protects workers from the crushing pressure of deep water. The mass and inflexible nature of the hardsuit makes some activities difficult, but clever joint engineering and strength augmentation can keep dexterity penalties to a minimum. With a good suit an experienced user can snatch a shrimp from the water or rip the hull plates off a ship with equal finesse.

The most notable difference between an underwater hardsuit and conventional powered armor is the lack of legs. Why would anyone want to walk along the sea floor when thrusters are more efficient and provide greater mobility? The complex and expensive articulated limbs are replaced by a one piece tubular shell that provides greater protection and more room for internally mounted equipment. It not only saves money, but makes it easier to maintain a good seal by placing the only break in the two piece suit at one of it's strongest points.

PanOceanic Sea Sprite

It must have taken some work, but PanOceanic has managed to produce a hardsuit even more mediocre than GaltCo's. Not that there's anything wrong with the Sprite II- it's actually a well built little machine, but it's almost Russian in it's austerity. Crude, unsophisticated, and serviceable pretty much sums it up. The company has manufactured so many of these things in the last 10 years, and they last so damn long, that you can usually find a rebuilt one for bargain prices at dive shops in the platform cities.

Type: PanOceanic Sea Sprite

Cost: $13,500

Linear Frame: STR 12

Weight: 126 kg

Armor: Alloy-Ceramic (SP 30)

Max Speed: 12 kph (MA 10)

Range: 40 km

Life Support: 8 hours, 1 hour emergency reserve

Max Depth: 6000 m

Equipment: Lasercom, Anti-dazzle and Image Enhance Optics (same as cyberwear), Sonar (same as cyberwear), Searchlight

GaltCo Blue III

If you at first you don't succeed, try, try again. That seems to be the defining statement for the boys at the GaltCo labs if the Blue III is any indication. The first two models were downright dangerous thanks to a defect in the section coupling mechanism along the waist, but it looks like the problem may finally be licked. Overall, this is a basic suit featuring alloy armor well designed for comfort and utility backed up with a reliable linear frame. The sensor suite is a little better than you'd expect and comes in handy in low-visibility conditions. One nice touch is the pair of harpoon style tethers available with magnetic or molecular adhesive heads for work in areas with strong currents like the North Atlantic.

Type: GaltCo Blue III

Cost: $16,000

Linear Frame: STR 13

Weight: 142 kg

Armor: Alloy (SP 35)

Max Speed: 12 kph (MA 10)

Range: 50 km

Life Support: 10 hours, 30 minute reserve

Max Depth: 8000 m

Equipment: Lasercom, Anti-dazzle, Low-light, and Image Enhance Optics (same as cyberwear), Sonar (same as cyberwear), Emergency Ascent Drogue, Tether Harpoons, Searchlight

Titania Sea Resources, Inc. Seawolf

Say what you will about their business practices, but you have to admit TSR knows how to build a hardsuit. The Seawolf is a big, comfortable suit designed for long duration dives at deep depths. The twelve hour life support gives you plenty of time to loiter at a work site while the thruster package gives you the power to get down to depth and cover territory. The communications gear includes a fiber optic link to the surface that can handle two way voice, data, and video simultaneously, a feature that really comes in handy when you run into a technical problem and need a little help. The Seawolf has some of the thickest armor around and I've heard some stories about a certain company mounting stealth pods, torpedoes, and mini-mine dispensers on it to create a very tough underwater assault unit. Not that anyone would attack defenseless ocean installations without provocation, of course.

Type: TSR, Inc. Seawolf

Cost: $24,000

Linear Frame: STR 16

Weight: 211 kg

Armor: Composite (SP 40)

Max Speed: 24 kph (MA20)

Range: 80 km

Life Support: 12 hours, 1 hour emergency reserve

Max Depth: 10000 m

Equipment: Lasercom, Fiber Optic Link, Anti-dazzle, Low-lite, and Image Enhance Optics (same as cyberwear), Sonar (same as cyberwear), Bodyweight Medic auto-doc, Searchlight, Heavy Tool Suite

Spearguns

Spearguns can be treated as a type of bow and the same variety of devilishly clever specialized heads used on arrows can be adapted for use on bolts. At the discretion of the Ref. bolts may qualify as edged weapons and be entitled to AP bonuses.

PanOceanic Seaflite

EX - 0 - L - C - 3D6 - 6 - 1/2 - VR - 10m (20m) - $40 ($10 for 6 additional bolts)

A good, basic gun for spearfishing and shark defense. The high tension polymer stretch band produces ample power for close-in work, but has the drawback of being manually drawn (hence the low ROF). If you expect to do anything more than spike groupers you'd be better off getting an air driven model. The range in brackets applies when the Seaflite is fired out of the water.

Lewis S-3

EX - +1 - L - C - 4D6 - 10 - 1 - ST - 10m (20m) - $200 ($30 for 10 additional bolts)

The clip fed S-3 is typical of the current crop of professional spearguns. The screw in air cylinder doubles as the weapons stock and is equipped with a variable release valve that automatically adjusts gas volume to account for depth. Each cylinder is good for 50 shots and can be readily refilled at any commercial dive shop. The range in brackets applies when the S-3 is fired out of the water.

Wave Technology Quickfire

EX - 0 - P - P - 3D6 - 1 - 1 - ST - 10m (20m) - $135

The underwater equivalent of a derringer. The 16cm cylinder straps under the forearm and fires it's single bolt using a standard CO2 cartridge. Inductance sensors in the wristband trigger the firing mechanism in response to the hand being flicked upward and the fist clenched. A nice holdout weapon, but it would seem smarter to carry a full sized air gun and keep yourself from getting in a jam in the first place.

Boomsticks

Boomsticks are close combat weapons utilizing a modified shotgun mechanism to deliver an explosive blast to the target. While intended for underwater use it's not unheard of for them to be used in surface combat with predictably gruesome results. Boomsticks get a large Accuracy bonus because they have to be in contact with a target to fire; after making a hit in HTH combat there's only a slight chance the weapon will snag on clothing or drift from the contact point so it's pretty tough to miss, but still possible. Don't forget that point blank shots from weapons in actual contact with the target do maximum damage. Ouch! The range in brackets is for when the weapon is used out of the water.

Gleason Hydrotech "Lancer" Boomstick

Gleason advertises this little baby as a shark defense weapon. The truth is that even in the unlikely event that a shark wanted to munch on you he'd probably bite your arm off before you were able to do anything about it. Any moron can see just from the Lancer's design that it's meant to kill people underwater. It's a slim meter long cylinder with a recoil cylinder in front of the rubberized rear handgrip and a projecting T-grip for close in work. The clip is inserted just behind the head of the weapon and holds 10 standard 12mm rounds that fire when the trigger is squeezed and the tip of the boomstick is pressed against the target. It's not fancy or complicated, but at that range it blows a hell of a hole through you. For an additional $200 there's a version that neo-dolphins can use as a snout mounted weapon.

EX - +5 - N - P - 4D6(00 shotgun shell) - 10 - 1 - ST - 0(10m) - $700

Anderson Sea Technologies "Hammerhead" Slamglove

The first time I saw one of these things I had some serious doubts about it's utility, but after seeing it in action I became a believer. The Hammerhead is basically a chopped down boomstick mounted in an artillery shell shaped gauntlet that fits over your forearm. You throw a punch, connect, and ruin someone's day with a point blank shotgun blast. Personally I loathe underwater hand to hand combat, but I once saw a guy wearing just a wetsuit take down a TSR Seawolf hardsuit fully fitted out for combat with one of these things. 'Nuff said.

EX - +5 - L - P - 4D6(00 shotgun shell) - 6 - 1 - ST - 0(10m) - $550

Torp Guns

Up until the last couple of years it's been impossible to find an effective underwater projectile weapon. Some marine rebuilds of conventional rifles were produced, but they were all handicapped by limited range and power because water resistance rapidly decelerates projectiles. The Armscor division of GaltCo finally found a solution to the problem by adapting conventional micromissile technology for use underwater.

Torp guns fire self guiding, rocket propelled rounds that continually accelerate using a solid fuel rocket engine containing a high proportion of oxidizer to insure reliable ignition and an even burn regardless of water pressure. After lock-on is achieved and the projectile is fired a sophisticated active sonar guidance system in the nose of the projectile guides it to the target using steering vents mounted in the engine chamber. The standard micromissile warhead detonates at impact with enough force to make torp guns suitable for both the anti- personnel and light anti-vehicle role. For safety the torpedo warhead isn't armed until the round travels 5 meters from the launcher.

Torpedo active homing systems slightly modify the normal attack procedure in combat. If the initial to-hit roll using the weapons accuracy modifier fails the round has a chance to correct it's course and reacquire the target. Roll a D10: on a 5-10 the torpedo attains a second lock on to the target and a second to hit roll using the same modifiers as the first can be made. If the second to hit roll fails the round goes wild: use the Grenade Table on pg. 99 of the Cyberpunk: 2020 rulebook to determine where it ends up. The engine will sputter out and the warhead will automatically be disabled if the torpedo travels more than 200m without hitting anything.

One of the peculiarities of torp gun combat is that the relatively slow speed of the projectiles, about 10 meters per second under full burn, allows opponents to target an incoming torpedo as it travels through the water towards them. Detecting a torpedo in the water requires an Awareness roll with a Difficulty determined by the Ref. based on the

surrounding environment (sonar clutter, visibility, distractions, etc.). Any fire at the torpedo using a torp gun receives a +5 bonus to hit from the loud acoustic signature of the target.

You'll note that the explosive radius of torp gun rounds is limited in comparison to conventional micro-missiles using the same warheads. The mass of incompressible water surrounding the detonation point limits the immediate damage area while concentrating the explosive energy, so torpedo rounds tend to cause more damage in a smaller area. Ref.'s may want to institute a house rule calling for a Stun save from anyone within 5m of an underwater explosion to reflect the possibilities of concussive effects from the pressure wave.

Armscor "Sea Viper II" 20mm Torp Gun

The sequel to Armscor's original torp gun model has been adopted by the United States Navy, International Seabed Authority, Cetacean Enclave Ranger Corp, and GaltCo's elite "Tigershark" security squad. If that's not an endorsement I don't know what is. But who could resist it? The sleek lines of the fully sealed ceramic housing cut down on water resistance and snagging, while you have to experience the balance provided by the internal buoyancy compensator to believe it. One major change from the original is that the torpedo rounds are now pre-packaged in a six round ammo cylinder you insert into the top of the weapons butt. Replacing the old cassette feed with the cylinder cuts down on the Sea Viper's overall length by allowing the adoption of a bullpup design and provides a tighter seal for trouble free deep water use.

EX - +2 - L - P - 5D6 (1m radius) - 6 - 2 - VR - 100m - $1200

Segoyovich KR-3 30mm Torp Gun

It took ol' mother Russia a while to get her feet wet, but she dove in all the way when she did. The KR-3 was originally designed for use by elite aquatic forces in the Red's ever expanding underwater oil drilling operations. After unsuccessfully trying to get a production license from Armscor they decided to go it alone with a round developed from the smart version of the 30mm Racate mini-missile. The result has all the traits you've come to expect from Russian craftsmanship: it looks kludgy, is powerful to the point of overkill, and could probably keep working after taking a hit from a tactical nuke. It may not be very pretty, but steady demand and black marketers inside the military depots keep the KR-3 in heavy circulation.

EX - +1 - N - P - 6D6 (1m radius) - 10 - 2 - ST - 100m - $1450

Other Weapons

Sea Systems AM-12 "Swarm Mine" Aquatic Perimeter Defense Unit

Own some underwater real estate that needs protection? Want to keep infiltration teams from swimming through a choke point? Installing a Swarm Mine PDU will give second thoughts to anyone thinking about trespassing on your territory. The main unit, about the size of large briefcase, can be tethered at any desired depth to maximize sensor coverage regardless of terrain. The passive sonar system will detect anything man-size or larger within 500m and then fire a spread of 20mm torpedo rounds from it's internal 12 round magazine if the intruder comes within 200m of the unit. You can even reprogram the internal computer's firing parameters to specify the size or speed of targets, have it ignore certain profiles, or shrink the danger zone below 200m to give the intruder less warning. The internal fuel cell is good for 30 days before replacement is needed and a sonar transmitted passcode automatically shuts the unit down for maintenance and reloading.

Weight: 15kg

Cost: $2550 (12 round magazine reloads for $480)

Availability: Poor

Neo-Dolphin and Orca Equipment

Rising Arc "Digit" series Cetacean Gloveset

Sure, they're the masters of the open ocean, but watching a cetacean trying to operate sophisticated equipment with it's snout is pathetic. Until the neo-cetaceans get fully functional fingers (about three generations from now) they'll continue to rely on glovesets: matched pairs of specialized cyberarms that slip over the pectoral fins.

The Digit series from neo-dolphin owned Rising Arc has been widely hailed as one of the best lines available because of it's sophisticated design and innovative engineering. Everything from the custom fitted fin sleeve and improved conduction point interface has been designed to make using them as comfortable as possible. To facilitate long term wear the mantis-like manipulator arms fit perfectly into the recessed contours of the ventral pod, minimizing drag and and fatigue. They're pricy, but worth every penny.

The initial fitting and calibration for a gloveset takes about 2 hours with an experienced tech. The orca version can be used by beluga's, but cost an additional $2000 and must be custom built to account for the differences in anatomy. The drag of a gloveset reduces underwater MA by -2 in the retracted position, -5 in operational position.

Type: Dolphin Digit Gloveset

Weight: 7kg

Cost: $9000

Humanity Cost: None (non-invasive externally mounted hardware)

Option Spaces: 4 in each arm, 3 in ventral pod

Type: Orca Digit Gloveset

Weight: 12 kg

Cost: $12,000

Humanity Cost: None (non-invasive externally mounted hardware)

Option Spaces: 5 in each arm, 4 in ventral pod

Wavetech "Slickskin" Gear Harness

Tired of being bogged down by obsolete gear harnesses? The new Slickskin system from Wavetech gives you all the room you need to store your equipment and fits more comfortably than any other harness on the market. The unique flex-plastic fitting straps won't chafe thanks to our patented "Smartfit" technology and are rated for work down to the abyssal level. The streamlined storage pods are side mounted, give you plenty of room for gear, and feature boundary layer texturing to produce the same drag coefficient as natural cetacean skin! Get out of the past and up to speed with Wavetech!

Type: Slickskin-20 Gear Harness

Weight: 5kg

Cost: $250

Availability: Common

Notes: Can carry up to 10kg in either storage pod. Torp guns and the like can be installed, but each mounting requires a hardpoint and costs an additional $50. Drag reduces underwater MA by -1 and normal Encumbrance rules apply to whatever is carried.

Type: Slickskin-40 Gear Harness

Weight: 9kg

Cost: $400

Availability: Common

Notes: Can carry up to 20kg in either storage pod. Weapons and movement penalty are handled as above.

Type: Slickskin-80 Gear Harness

Weight: 16kg

Cost: $725

Availability: Common

Notes: Designed for use by larger cetaceans (orca, beluga, etc.) and can carry up to 40kg in either storage pod.

Miscellany

Reflex "Dryad" Series Life Rafts

If you find yourself stranded in the middle of open water this is the raft you can trust to get you through alive. Reflex has licensed technology from companies better known for their space equipment to produce the state of the art in emergency shelter craft. The non-tip inflatable hull is topped off with a fully sealed shelter incorporating flexible solar cells into the upper roof panels to power a ten channel radio, water purifier, combination optical/radio locator beacon, and an environmental system that can keep you comfortable from 0 to 50C. On top of that every Dryad series raft includes a one week supply of food bars for every occupant and a well stocked survival kit! They don't come cheap, but when you need them you'll know it's the best money you ever spent.

2-person Weight: 10kg Cost: $900 Availability: Common

4-person Weight: 16kg Cost: $1600 Availability: Common

10-person Weight: 40kg Cost: $4000 Availability: Common

Wave Technology "Sea Crane" Ascent Bag

An opened ended polymer bag used to lift objects from the sea floor to the surface. Once you unfold it and fill it with 3-5 minutes worth of your air supply it'll lift 100kg to the surface at an ascent rate of 1m/second.

Weight: .5kg

Cost: $20

Availability: Common

McHarris Aquatics "Seahorse" Diving Sled

If you plan on covering any kind of distance underwater it would be a good idea to buy a sled. You not only move faster, but get to conserve your own energy for when you really need it. The Seahorse is typical of the models available and features a meter long torpedo shaped body with a battery powered prop and diving planes controlled from the rear mounted handgrips. Attachment points for external equipment like lights, spare air tanks, and the occasional mini-torpedo launcher are built- in to the streamlined casing.

Weight: 45kg

Cost: $575

Availability: Common

Max Speed: 30kph

Acc: 5kph

Range: 100km on a full battery charge

Wave Technologies "Fastbreak" Emergency Ascent Drogue

Standard hardsuit buoyancy systems can get you to the surface at a rate of 1-2m/second, but that's not nearly fast enough when your life depends on getting up fast. Very fast. The Fastbreak system is a backpack mounted sealed unit containing a large polymer drogue chute and gas generator. When the package is triggered by the hardsuit operator the drogue inflates with gas and pulls you up like a parachute operating in reverse at a rate of 2m/second in addition to your normal buoyancy system. It's a little pricey for anyone working near the surface, but if you're down more than 5 km this thing can save your life.

Cost: $850

Weight: 9 kg

Availability: Poor