# **Crash Dive**

## Version 0.1 Beta

By Stephen Esdale

| Welcome Gato to the Beta version of Crash Dive, the underwater<br>supplemental material for Maximum Metal. These rules are<br>_extremely_ rough. These will be expanded and inproved in a future<br>edition of the Wavebook, whenever Morninman and I decide to<br>work on it. | Hvy Boat<br>SDP Range: 1200 - 4000<br>SDP Limits: 4 SDP per Space  |
|--|--|
| Vehicle Stats  | SDP Cost (per SDP): 3000eb   |
| <b>Boats</b><br>Jet-Ski  | Spaces: 300 - 1000   |
|  | Top Speed: 35 mph  |
| SDP Range: 15-30   | Range: 3700 mi   |
| SDP Limits: 15 SDP Minimum   | Mass: 2 tons per SDP   |
| SDP Cost (per SDP): 100eb  | Ship of the Line   |
| Spaces: 1  | SDP Range: 4000 - 40 000   |
| Top Speed: 42mph   | SDP Limits: 2 SDP Space  |
| Range: 450 mi  | SDP Cost (per SDP): 4000eb   |
| Mass: 4 kg/SDP   | Spaces: 2000 - 20,000  |
| Light Boat   | Top Speed: 30 mi   |
| SDP Range: 40 - 80   | Range: 5600 mi   |
| SDP Limits: 8 SDP per Space  | Mass: 2 tons per SDP   |
| SDP Cost (per SDP) 1000eb  | Examples of Ships of the Line Kirov Class Cruiser: 2725 Spaces<br>Iowa Class Battleship: 11,125 Spaces Enterprise Class Aircraft<br>Carrier: 18 825 Spaces |
| Spaces: 5-10   |  |
| Top Speed: 35 mph  |  |
| Range: 1400 mi   |  |
| Mass: 2 tons per SDP   |  |
| Med Boat   | Submersibles   |
| SDP Range: 120 - 600   | SDP Range: 15-30   |
| SDP Limits: 6 SDP per Space  | SDP Limits: 15 SDP Minimum   |
| SDP Cost (per SDP) 2000eb  | SDP Cost (per SDP): 200eb  |
| Spaces: 20 - 100   | Spaces: 1  |
| Top Speed: 35 mph  | Ton Sneed: 30 mph  |
| Range: 1400 mi   | Range: 350 mi  |
| Mass: 2 tons per SDP   | Mass: 4 kg/SDP   |

SDP Range: 400 - 700

SDP Limits: 20 SDP/Space

SDP Cost (per SDP): 3000eb

Spaces: 20 - 35

Top Speed: 25 mph

Range: 1100 mi

Mass: 2 tons per SDP

#### Heavy Submersible

SDP Range: 750 - 3000

SDP Limits: 10 SDP/Space

SDP Cost (per SDP): 4000eb

Spaces: 75 - 300

Top Speed: 25 mph

Range: 2900 mi

Mass: 2 tons per SDP

#### Submarines of the Line

SDP Range: 3000 - 32,500

SDP Limits: 5 SDP/Space

SDP Cost (per SDP): 5000eb

Spaces: 600 - 6500

Top Speed: 20 mph

Range: 4400 mi

Mass: 2 tons per SDP

## Examples of Submarines of the Line

Los Angeles Class (90 ft): 3500 spaces

IEC Cargo Sub (125 - 155 ft): 5500-6000 spaces

Note about Speed: This is submerged speed - Increase speed on surface by 20%

#### Light Torpedo

HVY -3 N P 12D10AP 1 1 UR 15 km 1/3 space Light Torpedo is designed for small vessels or minisubs for defense. Moving at speeds up to 130 km/h, the Light Torpedo is inaccurate (unless guided; +150% cost and give Skill +15) but powerful. Launch Tube costs 3250eb, while Torpedo co

Weapons

□ st 1500eb.

## **Medium Torpedo**

HVY -3 N P 18D10AP 1 1 UR 20 km 1 Space The Medium (or Standard) Torpedo is of the type most commonly used in submarine and Torpedo Boat warfare. Can travel up to 140 km/h, but is still unreliable unless guided (+150% cost; Skill +15). Torpedo Tube costs 13000eb, while the Torpedos cost 3500eb

#### **Heavy Torpedo**

HVY -3 N P 24D10AP 1 1 UR 25 km 3 Spaces Rare except for the huge submarine missile platforms, the Heavy Torpedo is designed solely to damage ships of the line. Able to move at 160 km/h, the most common Heavy Torpedo is the American Sea Viper, which is exclusively used on the USS Reagan, the one-of-a-kind Super Sub built during the Gang of Four's infamous reign. Again guidance (+150% cost; Skill +20) is necessary. Torpedo Tubes cost 52000eb while each Torpedo costs 7750eb.

#### Harpoon II Anti-Ship Missile

HVY N P 20D10AP 1 1 VR 112 km 2 Spaces A popular anti-ship missile, the Harpoon II is secondgeneration active homing (Skill +15) missile with IR guidance. Available in Ground/Ship, Air and Sub-launched versions. Costs 21 000eb

#### **Cruise Missile**

Special Special N R 80D10 (?) 1 1 VR 3000km 6 Spaces Though no longer nuclear-armed (due the Massdrivers of the ESA), Cruise Missiles are still valuable weapons in warfare. Able to carry extremely heavy payloads over huge distances at speeds near Mach 1, the Cruise Missile has replaced Naval Guns are the weapon of choice of shore bombardment and precision strikes. The system is controlled by a complex onboard system (Skill +25) and needs precise co-ordinates of the strike zone (meaning you need to have someone near the site to give co-ordinates. Spy Satilites are mostly used for this). Made my most nations of the world (Especially the USA, EEC, and USSR), Cruise Missiles come in Ground/Ship, Air, and Sub-launched variants. Launcher costs 150,000eb, while a Cruise Missile can cost over 1.5 Million euro.

#### **16-inch Naval Guns**

HVY -2 N R 800D10AP (Pen 80) 1 1 VR 1000 Spaces 6250m The Iowa-Class vessels used this terrible guns for maximum effect during both WWII and Vietnam. Since all large ships are little more than missile carriers these days, the Naval Gun is included here only to demonstrate the destructive power of the old style weapons. There are rumours about an Iowa-class vessel still operating in the pacific, though no one knows for sure if this is true...or why? To use a 16 inch gun, your vehicle must be on ground (tracked and stabilized chassis) or sea and weigh at least 2500 tons! But then again, who can beat the damage (Though I can't see someone rolling EIGHT-HUNDRED 10-siders). Cost is upwards of 5 000 000eb.

## **Blue-Green Lasers**

#### **Light Blue-Green Laser**

HVY +1 N R 1-10D6AP (special) 30 2 150m UR 2 Spaces 104,000eb

Equivalent to the "Photon" laser system of ACPA fame, the Light BG Laser to provide close-up firepower that Torpedoes cannot provide. See CP2020 rulebooks on the effects of lasers against targets.

## **Medium Blue-Green Laser**

HVY +1 N R 1-15D6AP (special) 60 2 300m UR 3 Spaces 256,000eb

A heavier version of Blue-Green Laser, designed for heavy submersibles. Pretty Rare.

#### **Heavy Blue-Green Laser**

HVY +1 N R 1-20D6AP (special) 100 2 450m UR 5 Spaces 512,000eb

Currently the most heavy BG Laser system known to exist and is limited to American and Euro-arsenals (built into in their largest submersibles). Note: Vessels have Nuclear Powerplants could be able to shunt some power in a direct feed to the Submersible, effectively giving the weapons unlimited shots. GM's call whether this can be done and the effects on the ship.

## **Other Weapons**

**Dual Stage Missiles** This modification is designed to operate in both water and air. If guided, the user must designate in which mode the guidance system is for. A Sub launched SAM would have its guidance in air only, while an air launched torpedo would have its guidance in the water. Note that by sending continuous feed from your vessels sensors, you can have the vessel guided in both modes (missile guidance for air and sub-transmitted guidance for the water). This can make for some nasty pop-up attacks. Cost for such a modification is x5 cost of the missile. **Depth Charge Bomb Option** This modification makes the bomb detonate when a certain depth is reached. Advanced version of the Depth charge have built-in sonar and discharge when either close to a sub or at the same depth. Normal versions have a cost multiplier of x2, while the advanced version have cost multiplier of x5.

## Accessories

**Pressure Windows** These windows are mainly for noncombat vessels and allow the those inside the sub to see the outside. Pressure doors automatically close when the sub dives below 200m, to prevent the pressure breaking the glass and flooding the ship. Each man-sized window takes up 0.5 spaces and costs 1000eb

**Nuclear Power** By replacing the old gas or diesel turbines of submarines and water vehicles with steam-generating nuclear reactors, the subs can literally traverse the world and survive for months without docking in port. Nuclear power is still quite expensive and getting a reactor raises the SDP cost of your ship twenty times (basically SDP of ship x [20 x base SDP cost]) and reduces total spaces on ship by half. However, with this modification, your ship has basically an unlimited range (or around 2 years of active service) before refuelling with Uranium is ready. Note the Uranium fuel rods can really cost!

**MSD Turbines** These turbines electrically accelerate saltwater though a tunnel and force it out the other end, propelling the sub. While this means the vessel is incapable of moving in fresh water, it also mean that vessels engines are almost completely silent to Sonar. Increase base SDP cost of vessel by 25% while reducing spaces by 25%

**Enhanced Compartmentalisation System** Though most ships are compartmentalised, these enhancements add quicksealing doors and complex water sensory equipment to prevent the spread of water to other compartments. It also leaves the crews hands free for other duties. Doubles base SDP cost of the Vessel.

**Sonar** Sonar acts in two modes: Active mode sends out sound "pings" to get a reading of distance and is used mainly for targeting of weapons, since it immediately gives position to any passive sonar in the area. The other mode is Passive, which listens for noise in the water like those generated by propellers, boats on the water, or active sonar pings. Normal sonar models have ranges of up to 100km (2000eb, 1 space) while Military version are known to have models with a 500km range (20000eb 2 spaces). Such models now have computers to identify noises and display them graphically on a screen (like radar does) with speed, range, and possible identification. **Decompression Chamber** Allows people to slowly decompress after a deep excursion in the ocean and avoid the "bends". Costs 250eb and 1.5 spaces per man (six-man and 12-man capsules are common)

**Dual Environment System** An enhanced version of the Amphibious Modification, it allows ground and air vehicles not only float but be submersible as well. Note that speed underwater is a tenth of above water speeds and other underwater accessories will have to be bought. Doubles SDP cost of the vehicle and reduces spaces by 20%.

**Periscope** A 50-75 foot visual device which allows subs to peer above the surface of the water without having to surface. It can be set up with up to 5 cyberoptic options (as per CP2020 rulebook and chromebooks). Note that some ships have more than one periscope (with more than one set of cyberoptic options). Costs 1000eb, 1 space retracted.

**Sensor Buoy/Drogue** A floating buoy has two models. The first model is a helicopter or ship towed device that has built in military sonar and a military hydrophone. Its used to communicate with friendly subs or locate enemy subs (30 000eb, 4 spaces stored). The other version has military radar, a military radio and sat uplink (20 000eb, 2 spaces stored)

**Hydrofoils** These blades all the vessel to move smoother and more quickly on the water while making it difficult for Torpedoes to hit them (-6 modifier to torpedoes). Vessel top speed also increases by 20% Only Small to Large Boats can have Hydrofoils (no Hydrofoil Battleships :). Cost 50% of SDP cost of the ship.

**Carrier Deck** A flattened top designed to handle aircraft and other flying vehicles. Costs 10eb per space of the vehicle but does not take any spaces. Only large "ships of the line" can have carrier decks (and jets must be V/STOL for all but the largest carriers). Can hold a number of "spaces" worth of planes on the deck equal to its size in spaces divided by 10. Note that though the spaces for planes is only internal room left for accessories (not the actual size of the plane), that has been taken into account in the calucations.

**Hanger** A enclosed area to hold vehicles. To calculate the number of spaces need for the vehicle, take its size in spaces and multiply it by three (four if underwater). That is the number of spaces need to hold the vessel in the hold. Costs 3000eb per space used (for airlocks, elevators, hatches, other necessities for boarding and securing the vessel, etc.).

**Hydrophone** A underwater radio used by subs to contact each other underwater. Note that this is not usually done during wartime, since using a hydrophone will alert passive sonar. Available in civilian (800km; 400eb 1 space) or military (5000km; 5000eb 2 spaces)

## Some rules: These are abstract rules - future versions (if any) will improve on them.

Armor: Maximum 500 SP

Silent Running: 60% top speed (submerged) max.

Max Depth: 10 x SP in meters

Countermeasures (Noisemakers): +10 Diff. hit with accoustic torpedos.

Detection: INT + Sonar Systems + 1D10 vs difficulty number

EASY if making noise/tight turn

AVE if normal

DIFF if silent running

Increase on level if MHD turbine.

Interception Missiles: Torpedo's Skill + 1D10 vs. Intercept + 1D10