### 1-Kg Satchel Charge

Notes: This is a cloth or plastic bag containing a 1-kilogram block of plastic explosive or 4 sticks of dynamite. An M2A1 timer is included, though other methods of igniting the satchel charge can be used. Anyone with Combat Engineer or Demolitions skill can make a satchel charge in 15 minutes. (Easy task). It can be tamped.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
1 kg Satchel Charge	Plastic Explosive	1.2 kg	\$50	C8 B20	4/16	6
	Dynamite	1.2 kg	\$60	C7 B20	3/14	4

#### 2-Kg Satchel Charge

Notes: This is a larger version of the above charge.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
2 kg Satchel Charge	Plastic Explosive	2.25 kg	\$80	C12 B28	6/24	12
	Dynamite	2.25 kg	\$100	C10 B28	5/20	8

#### **3-Kg Satchel Charge**

Notes: The largest charge normally carried by personnel other than engineers.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
3 kg Satchel Charge	Plastic Explosive	3.25 kg	\$110	C15 B36	8/30	18

	9ynamite 3.25 kg	\$140	C12 B38	6/24	12
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### 9-Kg Satchel Charge

Notes: A charge designed for spur-of-the-moment demolition work. US M2 and M112 plastic explosive blocks are packaged in cases of two 9-kg satchel charges, *without* fuses installed. This charge is designed to be carried as a backpack. The charge actually has only 8kg of explosive, and dynamite charges are not available.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
9kg Satchel Charge	Plastic Explosive	9.07 kg	\$300	C26 B36	13/52	54

# Alstex F-1 Cutting Charge

Notes: These are cutting charges resembling metal boxes with deep V-shaped cuts in one side. They attach to a structure with magnetic strips or metal bands. They are manufactured in France and use Hexolite.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Alstex F-1 Heavy	Shaped Charge	13 kg	\$500	C24 B36	Nil/100	48
Alstex F-1 Medium	Shaped Charge	2.5 kg	\$80	C10 B28	Nil/60	8

# Alstex Demolition Charges

Notes: These are the standard demolition charges of France, Belgium, and several allied and client nations. They are simple blocks of explosive or bags consisting of several blocks of plastic explosive.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV

Alstex 0.25 kg Block	Plastic Explosive	0.25 kg	\$7	C4 B20	2/8	1
Alstex 0.5 kg Block	Plastic Explosive	0.5 kg	\$15	C6 B20	3/12	3
Alstex 1 kg Block	Plastic Explosive	1 kg	\$30	C8 B20	4/16	6
Alstex 1 kg Charge	Plastic Explosive	1 kg	\$50	C8 B20	4/16	6
Alstex 5 kg Charge	Plastic Explosive	5 kg	\$170	C19 B36	9/38	30
Alstex 50 kg Case Charge	Plastic Explosive	50 kg	\$1250	C61 B52	30/122	300

### <u>Demex 400</u>

Notes: Demex 400 is basically high-explosive (normally RDX-based, mixed with a plasticizing agent) which is put into a calking gun or a toothpaste-type tube and extruded as necessary. This makes for a very controlled application of explosive which is more precise and more powerful than primercord. Demex 400 makes a good cutting charge for thinner materials, as well as a breaching explosive for certain walls or to blow out windows. It is detonated by blasting cap or primercord. The damage and penetration statistics below are for a 1-meter, one line application of Demex 400. Some other countries probably also have similar explosive to Demex 400.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Demex 400 (Caulk Tube)	High Explosive	0.29 kg	\$18	C2 B3	4/17	4
Demex 400 (Toothpaste Tube)	High Explosive	0.13 kg	\$8	C2 B3	4/17	4

#### Detasheet C

Notes: This is a sheet of PETN-based high-explosive (other manufacturers offer an RDX-based variant, which is slightly more powerful). The Detasheet C is about an inch (2.54 centimeters) thick in its base form, and has a flexible rubber-like consistency which makes it ideal for blowing holes in walls,

blowing out windows, or covering items so they may be destroyed. When cut into strips, it is also ideal for use as a cutting charge. The Detasheet C may be tamped, and any amount may be bound together to make larger charges. It may be cut with a knife or heavy-duty scissors to make smaller charges. It is a very stable explosive product, insensitive to small-arms fire, heat, water, pressure, or simple concussion. It is detonated with a blasting cap or primercord. The unfortunate drawback to Detasheet C is its expense compared to standard explosives. The data below is for a 1x1-meter sheet.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Detasheet C (PETN)	High Explosive	7.5 kg	\$338	C10 B25	25/50	51
Detasheet C (RDX)	High Explosive	7.5 kg	\$373	C11 B28	28/56	57

### Flexible Linear Shaped Charge

Notes: This charge is intended to blast holes in thin (about 2 inches, or 5.08 centimeters) steel plate, walls, wood, logs and trees, cables, chains, etc. It is basically a core of PETN, like a primercord, enclosed in a seamless lead sheath. The sheath and the explosive are shaped in the form on an inverted V, and this makes it a shaped charge when placed against an obstacle. The optimum standoff distance for this charge is 7.9 millimeters (about a third of an inch), but nothing is supplied in the charge kit to achieve this standoff. However, anything from foam rubber strips or thin plastic hose to sticks may be used to achieve this standoff; soft, flexible materials are preferred, since they can provide a good seal against the obstacle. If necessary, the charge may be placed directly against the obstacle, at reduced (75%) effectiveness. Detonation of the flexible linear shaped charge is accomplished by blasting caps, primercord, or various firing device; generally, anything that will detonate primercord will detonate this charge. The charge is automatically considered tamped. The flexible linear shaped charge is packed in 20-foot (6.1-meter) or 30-foot (9.14-meter) spools, generally two spools per box.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Flexible Linear Shaped Charge (6.1-meter Spool)	High Explosive	0.43 kg	\$114	C3 B6	NA/30	18
Flexible Linear Shaped Charge (9.14-meter Spool	High Explosive	0.64 kg	\$171	C5 B10	NA/36	27

#### Foo Gas

This is a pipe, or more commonly, a 55-gallon drum of electrically detonated napalm. Its detonation causes a brief sheet of fire (similar to a flamethrower) to shoot upward. Foo gas was developed for perimeter defense during Vietnam, and was used extensively by US Special Forces during that war. Foo gas comes in modified 55-gallon drums, which can be interlocked or chained.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/Tamped)	DPV
Foo Gas	Incendiary	50 kg	\$150	C2 B6	Nil/Nil	110

### Frame Charge

Notes: A prepared explosive charge used to blow in locked windows or doors, even those equipped with metal bars or metal plate up to 20mm thick. It requires two phases (10 seconds) to emplace (using prefitted double-sided tape or an internal wooden brace), and can be command or remotely detonated, or rigged with a timer. The charge can also be used to blow holes in walls, provided they are not too thick. The charge automatically counts as tamped.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Frame Charge	Shaped Charge	2 kg	\$100	C1 B0	Nil/8	6

### Giat F-1 Cutting Charges

Notes: These are newer charges used by France and her allies.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Giat F-1 (Light)	Shaped Charge	6.8 kg	\$150	C9 B28	Nil/32	30
Giat F-1 (Medium)	Shaped Charge	7.25 kg	\$220	C12 B28	Nil/60	44

#### **IMI Demolitions Blocks**

Notes: These blocks of TNT have been in long use by the Israelis. They are also in common use throughout the world, and are thus "deniable" by both Mossad assassination teams and terrorist organizations. These are prepared with fuses for quick use.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
IMI Demolitions Block #3	TNT	0.47 kg	\$23	C5 B20	2/10	2
IMI Demolitions Block #4	TNT	0.22 kg	\$11	C3 B12	2/7	1

# KZ-2 Shaped Charge

Notes: This is a Russian cutting and cratering charge, using a plastic explosive known as RDX. It is considered to be tamped.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/Tamped)	DPV
KZ-2	Shaped Charge	18 kg	\$400	C13 B16	Nil/54	60

# M-1 Chain Charge

Notes: This World War 2-era demolition charge is still employed by some third-world countries. It consists of eight blocks of tetrytol-based high explosive strung together with primercord in a flexible chain. Each end of each block also has a tetryl booster pellet surrounding the primercord channel. The charge may be applied as a unit, or cut apart into smaller charges. The M-1 is suited for general demolition work and for use as a cutting or line charge. Each block of tetrytol is 11 inches (27.94 centimeters) long, and the entire charge is 16 feet (4.88 meters) long. The tetrytol explosive is relatively insensitive to water (becoming useless only after 24 hours of direct exposure to water), making it quite useful to UDT, naval special operations, and marine forces, but it is otherwise very unstable and must be protected against heat, flame, and severe drops. The charge generally comes packed in canvas haversack. Statistics below are for a complete charge.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
M-1 Chain Charge	High Explosive	13.25 kg	\$748	C78 B156	64/240	51

#### M-1A1 Bangalore Torpedo

Notes: This is essentially a steel pipe filled with explosive. Each kit contains seven two-meter sections and a dummy section. Used primarily for clearing paths through barbed wire, it is also useful for making footpaths through minefields. The sections may be joined to clear a 15-meter path, with the dummy in front to prevent boobytraps from setting off the torpedo while it is being pushed through the obstacle. A torpedo will clear a two-meter-wide path through wire and a one-meter path through a minefield -- sufficient for a footpath. It requires a demo kit to detonate.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
M-1A1 Bangalore Torpedo	TNT	15 kg	\$3000	C20 B20	16/64	32

### M-2A3/A4 Shaped Charge

Notes: This is a smaller version of the M-3A1 Shaped Demolition Charge. It is used when a larger charge is not called for. The M-2A3 shaped charge is 50/50 pentolite explosive, which can be set off by small arms fire; the M-2A4 is based on Composition B plastic explosive and is not sensitive to small arms hits, though it does have a very small (50-gram) pentolite booster. The body of the charge is made from pressed fiberglass, as is the standoff sleeve. The standoff sleeve is scalloped on one end to allow it to stand on irregular surfaces. The shaped charge cavity is made from high-density glass rather than metal; this makes for a larger, but less deep hole. It also means that a second demolition charge may be used immediately after detonation of the M-2 shaped charge, because the resultant glass slug left in the hole cools almost immediately and can be removed to place the second charge.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/Tamped)	DPV
M-2A3/ A4	Shaped Charge	6.8 kg	\$225	C6 B10	Nil/36	16

### M-3A1 Shaped Demolition Charge

Notes: This is a shaped charge used for breaching walls or cratering roads. The original M-3 charge had a 50/50 pentolite explosive filler, but this was quickly replaced by the M-3A1 which had a Composition B filler. The casing of the M-3A1 is of steel, with three steel legs welded onto the bottom of the cone-shaped charge. Most of the explosive force of the charge is channeled in one direction, and the M-3A1 is considered already tamped. When used as a cratering charge, the planting of a conventional charge to widen the hole usually follows the M-3A1. By laying the charge on its side, the M-3A1 can also be used as an impromptu Claymore mine, or blow a clearing in jungle or forest of 9x30

meters.

V	Veapon	Туре	Weight	Price	Damage	Pen (Untamped/Tamped)	DPV
I	M-3A1	Shaped Charge	18.14 kg	\$800	C9 B18	Nil/128	26

#### M-112 C4 Demolition Block

Notes: This is a standard plastic explosive block in the US and several of its allies. It measures 25x50x275mm. One face has an adhesive strip already applied to it, enabling the block to be stuck where desired.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped0	DPV
M-112 C4 Demolition Block	Plastic Explosive	0.5 kg	\$15	C6 B20	3/12	3

### M-118 Flex-Ex Demolition Block

Notes: This is a standard US block of plastic explosive, measuring 30x80x312mm.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
M-118 Flex-Ex Demolition Block	Plastic Explosive	1 kg	\$30	C8 B20	8/16	6

### Mk 1 Cable and Chain Cutter

Notes: This is a special type of charge designed specifically to cut heavy chains and cables which are beyond the capabilities tool-based cable, chain, or lock cutters, such as ship anchor chains and bridge cables. The first version, the Mk 1 Mod 0, was first used in 1942 during Operation Torch; this was replaced by the Mk 1 Mod 1, which is still being used. The primary difference between the Mod 0 and Mod 1 are the explosives used in the charge, with C3 being used for the Mod 0 and C4 used in the Mod 1. The charge comes in a U-shaped case, with an internal V-shaped liner to form a shaped charge with a built-in standoff for maximum effect. The container is typically shipped empty with the explosive in a separate compartment of the shipping container, and filled by the users, packed around the V-shaped liner as necessary. This means that more or less explosive may be used as necessary,

but the statistics below are for a full charge and lesser charges may be extrapolated from this. Due to the nature of the charge, it is automatically considered tamped. The container is shaped like a thick horseshoe magnet, and the ends have spring-loaded securing hooks to allow attachment to the target. The kit also has a wooden handle at the apex of the horseshoe-shape to allow the user to tighten the hooks and springs as necessary. At the base of the wooden handle is a charge well which accepts standard blasting caps, primercord, firing devices, or timers. The Mk 1 charge may operate underwater to a maximum depth of 30 feet (6.1 meters), with further depths limiting effectiveness due to water pressure. The charge may be kept underwater for no more than 3 hours without compromising it. Both the Mk 1 Mod 0 and Mod 1 are identical for game purposes.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Mk 1 Cable and Chain Cutter	Shaped Charge	1.7 kg		C2 B4	Nil/27	5

# Mk 8 Flexible Linear Demolition Charge

Notes: Also known as the Mk 8 Explosive Hose or Mk 8 Demolition Hose, the Mk 8 is essentially a length of fabric-reinforced rubber hose (similar to a firehose) filled with explosive. The Mk 8 Mod 0 is based on TNT, while the Mk 8 Mod 3 is based on Composition A-3 plastic explosive. (The Mod 2 and Mod 3 are essentially the same, except for the end caps.) Each end has end caps appropriate to the type of explosive. The Mod 0 uses one end cap with female coupling that has a charge well for a blasting cap or other firing device, and the other end has a male coupling that has a small TNT booster allowing it to be connected to another Mk 8 Mod 0 charge or a bail loop for towing or anchoring it. The end caps of the Mk 8 Mod 2 both are of the slip ring/locking ball type, meaning that a bail loop or blasting charge could be attached to either end, and no tools were required for their use. It also meant that the connections broke frequently or jammed due to dirt, mud, or sand. The Mk 8 Mod 3 end caps use threaded fittings, but are otherwise the same. Mk 8 charges are quite useful as cutting charges, as flexible Bangalore Torpedo-type charges, or to clear paths through minefields. They may also be formed into a unique type of charge pattern known as a mat-weave, where ten such charges are laid out in a net pattern and lashed together; these are often used to blow away coral reefs or rocks to form a boat channel (or ship channel, if enough Mk 8s are used). A standard Mk 8 charge is 7.62 meters (25 feet) long.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Mk 8 Mod 0	TNT	34 kg	\$1358	C35 B142	22/76	17
Mk 8 Mod 2/3	Plastic Explosive	34 kg	\$1591	C41 B165	26/88	20

#### Mk 20 Demolition Charge

Notes: This World War 2-era demolition charge was designed specifically for Naval Combat Demolition Units, the predecessors of the UDTs and SEALs. It was first used at Normandy, and is perhaps better known as a Hagensen Pack, after the inventor of the charge. The Mk 20 is based on the then-new plastic explosive Composition C2, and a second then-new item, primercord. Though first examples of the Mk 20 were guite crude, they were guickly refined. The Mk 20 Mod 0 uses a 2-pound (0.91kilogram) block of C2 in a canvas container, with a charge well for the insertion of primercord and some 5 feet (1.52 meters) more wrapped around the block, with an additional 6 feet (1.83 meters) of primercord wrapped around the container. 3.5 feet (1.07 meters) of sash cord were attached to the pack for lashing it to obstacles, with a metal hook at the end of the sash cord. The Mk 20 can be used for series detonation by unwrapping the primercord from around the canvas container and inserting it in the next Mk 20 charge, and so on. The Mk 20 was so successful and useful that it remained in the US Navy inventory for decades, though it was updated first by replacing the block of C2 with C3 (the Mod 2), and then C4 (the Mod 3). The different explosives are identical for game stat purposes; however, C2 is 40% likely go explode if hit by small arms fire, and tends to break down in hot conditions. C3 may also go off if hit by small arms fire, but the resultant explosion will only at 1/4 strength, and it is much less sensitive to heat. C4 is insensitive to heat or small arms fire.

The Mk 20 is often found carried in a modified haversack for 60mm mortar shells, called the Mk 127 Demolition Charge. The haversack has pockets for twenty Mk 20 charges, and either side of the haversack is a 10-foot (3.05-meter) sash cord for general use, along with a metal securing hook. The Mk 127 could be used simply to carry Mk 20 charges, or the charges may be connected together and the Mk 127 used as a huge demolition charge, or any number of the twenty charges used. The statistics below are for the entire twenty charges being used as one.

A Mk 135 Demolition Charge is a special haversack for Mk 20 charges designed specifically for UDT swimmers. It has a floatation bladder contained within the haversack, which is adjustable for buoyancy. On top of the haversack is a long, adjustable shoulder strap, and underneath is a tow ring, to which any number of Mk 135 haversacks may be attached. Like the Mk 127, the Mk 135 could be used as one giant charge or simply to carry Mk 20 charges; in addition, several such haversacks could be connected together to create truly huge explosions if necessary. The Mod 0 versions, based on Mk 20 Mod 0 or Mod 1 charges, could not be carried underwater for more than three hours due to the nature of the C2 or C3 explosives; the Mk 135 Mod 1, used with Mk 20 Mod 3 charges, did not have this limitation.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Mk 20	Plastic Explosive	1.35 kg	\$107	C14 B32	11/36	17

Mk 127	Plastic Explosive	23.13 kg	\$1833	C280 B640	220/720	340
Mk 135	Plastic Explosive	11.11 kg	\$881	C140 B320	110/360	170

# Mk 34 Demolition Charge

Notes: This improved version of the Mk 20 charge is of World War 2 design. The changes from the Mk 20 were primarily to facilitate manufacture and application. The Mod 0 version is a 2.5-pound (1.13-kilogram) block of C3 plastic explosive in a rectangular cotton duck bag, with a 9-foot (2.74-meter) length of primercord for detonating and as a booster charge. 3 feet (0.91 meters) of this primercord is wrapped around the C3 charge to serve as booster charge. The bag has the remaining primercord looped and secured on one end of the bag, and the other end has a 3-foot (0.91-meter) length of sash cord with a flat hook for securing it to items to be destroyed. If necessary, the charge inside can be removed and placed in direct contact with the item to be demolished, and it can be shaped as necessary if removed from the bag. The Mod 1 charge is identical, but uses C4 instead of C3. The Mod 1 charge is normally not issued separately, but is issued as a part of the Mk 137 demolition charge assembly.

The Mk 137 demolition charge assembly is contained in a large canvas field pack containing ten Mk 34 Mod 0 or Mod 1 charges. It has an adjustable flotation bladder, and the floatation bladder may be carried in the top flap of the field pack or the bottom of it, to make the charge float face up or face down. One side of the pack has a 17-foot (5.18-meter) length of sash cord with a flat hook attached to it. The other side of the pack has a flat hook attached directly to the pack and a snubber assembly (a metal strap with a notch cut into it and a piece of spring steel riveted over the notch) near the bottom of that side. The pack also contains a total of 90 feet (27.34 meters) of primercord, with 30 feet (9.14 meters) used as booster charges for the Mk 34 charges and the rest used for detonation and looped and secured to one side of the pack. The stats below are for the Mk 137 being used as one massive charge, but any number of Mk 34 charges may be removed and used individually.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Mk 34	Plastic Explosive	1.56 kg	\$133	C16 B36	12/40	19
Mk 137	Plastic Explosive	12.56 kg	\$1071	C160 B360	120/400	190

### Mk 36 Mod 1 Demolition Charge

Notes: The Mk 36 Mod 1 is a pan-shaped limpet mine designed primarily for sabotage of shipping by divers. The pan-shaped aluminum body of the charge has a wide flange around the rim of it; this flange has six powerful curved magnets, in essence making it a type of limpet mine. The charge's explosive is based upon H-6 high explosive, which is quite a bit more powerful than plastic explosive. In addition, the Mk 36 Mod 1 is considered tamped, due to its design. The casing of the charge has two charge wells, each with internal booster charges. These can accept firing charges or devices or antidisturbance devices. An activator well on the rear end of the casing has a further booster charge and accepts the Mk 39 Mod 0 arming and safety device as well as any additional fuzing or firing devices required for the mission. Mk 36 Mod 1 charges have been known to totally break the keel of a small-to-medium warship, and blow gaping holes in larger ones.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Mk 36 Mod 1 (Above Water)	High Explosive	4.76 kg	\$168	C18 B46	NA/35	13
Mk 36 Mod 1 (Below Water)	High Explosive	4.76 kg	\$168	C20 B52	NA/40	13

# Mk 40 Mod 0 Depth Charge

Notes: This is essentially a massive concussion grenade, developed by the SEALs for use against enemy swimmers, and also having on-land applications. The charge is pressure-fuzed; throwing it in the water closes a switch which starts a 6-second delay. This means that if thrown into water less than 4 meters deep, it probably will not detonate without an external sympathetic explosion (such as another standard grenade or detonator). The Mk 40 Mod 0 can be set to actually go off anywhere from 6 seconds to 30 minutes later. The concussion and blast figures below are for an underwater explosion, if used with an external detonator and exploded above land, halve the concussion and double the burst radius.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Mk 40 Mod 0	Plastic Explosive	1.63 kg	\$49	C10 B24	10/20	7

### Mk 70 Mod 0/Mk 5 Mod 0 LAM

Notes: The Mk 70 Mod 0 Explosive Charge is the explosive module of the Mk 5 Mod 0 LAM (Limpet Assembly, Modular). The Mk 70 takes the form of a 12-inch-long, 16.5-inch wide canister with four rings around the canister for reinforcement due to the huge amount of explosive it contains. The

explosive is 50 pounds (22.68 kilograms) of H-6 high explosive, which is one of the more powerful demolitions explosives. Surrounding the charge is an annular flotation chamber (it goes around the charge, but not on top or the bottom of it); this chamber gives the Mk 70 neutral buoyancy in sea water, but additional buoyancy aids must attached in fresh water. Due to the design of the Mk 70, it is automatically considered tamped if placed properly, though if it is simply laid on a surface, it is not tamped.

The Mk 5 Mod 0 LAM kit contains a V-band coupler which is used to connect multiple Mk 70 charges together (and holds in place a clamp for a protective cap for the H-6 explosive's face). Another V-band coupler is also in the kit, to attach a control/detonation unit to the charge. The V-band couplers are equipped with special breakaway nuts that may be tightened, then the hex portion broken off, making the clamp assembly virtually impossible to loosen if it is discovered by the enemy. The Mk 5 Mod 0 LAM kit also contains various detonation, delay, timing, and priming devices.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Mk 70 Mod 0 (Above Water)	High Explosive	33.57 kg	\$1185	C62 B160	30/121	45
Mk 70 Mod 0 (Below Water)	High Explosive	33.57 kg	\$1185	C69 B180	34/138	45

# Mk 133 Chain Charge

Notes: Also of World War 2 vintage, the Mk 133 was designed to address some of the failings of the M-1 chain charge. The Mk 133 Mod 0 and Mod 1 versions use TNT blocks; the Mod 0 uses a further TNT booster pellet, while the Mod 1 uses a 50/50 pentolite booster pellet. Mod 2 versions use blocks of HBX-1 explosive, but use the same 50/50 pentolite booster pellet. The Mk 133 consists of eight blocks of explosive, each 12 inches (30.48 centimeters) long, and are cast around a long primercord. The entire charge is 17.5 feet (5.32 meters) long, but a further 5 feet (1.52 meters) of primercord extend from each end of the charge. The Mk 133 is contained within a waterproof canvas haversack containing a flotation bladder which may be deflated or adjusted for the proper buoyancy required. Several of these charges may be joined together to form a longer charge, but the statistics below are for a single charge. The charge is also equipped with a 10-foot (3.05-meter) cord at either end of the charge to facilitate lashing to objects, and on opposite sides of the haversack are two metal hooks to do the same thing.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV

Mk 133 Mod 0/1	TNT	13.25 kg	\$623	C71 B144	58/219	47
Mk 133 Mod 2	Pentolite	13.25 kg	\$922	C86 B174	71/266	57

### Mk 138 Mod 1 Demolition Charge Assembly

Notes: This charge pack was developed towards the end of World War 2 and is still in use today. It contains ten Mk 35 C4 charges (the Mk 35s may be used separately, but are not issued separately). The charges are placed in the same field pack as the Mk 137 demolition charge assembly, except that the adjustable flotation bladder is permanently sewn into the top flap of the pack. It is designed primarily for underwater demolition, but is also suitable for demolition on land. A Mk 35 charge is a 2.5-pound (1.13-kilogram) block of C4 in a waterproof cloth bag, with 3 feet (0.91 meters) of primercord wrapped around it, and a further 9 feet (2.75 meters) of primercord attached for use as an explosive lead. Each Mk 35 charge bag has a sash cord attached to one side with a flat hook at the end of it, and webbing loops on the other side to enable it to be lashed to the item to be demolished. The Mk 35 charges may be used individually, or as part of a larger charge. Several Mk 138 Mod 1 demolition charge assemblies may also be connected together to produce even larger explosions.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Mk 35	Plastic Explosive	1.56 kg	\$133	C16 B36	12/40	19
Mk 138 Mod 1	Plastic Explosive	12.56 kg	\$1071	C160 B360	120/400	190

### **PN-4 Demolition Charge**

Notes: This is a Czechoslovakian-made block of Tritol used for general demolition work.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/Tamped)	DPV
PN-4	Plastic Explosive	6.4 kg	\$650	C40 B44	20/80	128

# PN-14 Demolition Charge

Notes: This is a massive satchel charge used by Czech forces. It is often broken into smaller sections,

but is ready-fused to be used as one charge. The Hexogen used in the charge is little more efficient than dynamite.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/Tamped)	DPV
PN-14	Hexogen	22 kg	\$1450	C60 B52	30/120	288

#### **Primercord**

Notes: A rope-like plastic explosive used in various demolition jobs. Primercord can be wrapped around conduits or small girders to sever them or taped to a wall (In a circle) to blow an entry hole. It can also be used to link other explosive charges together for almost instantaneous detonation (it will detonate other explosives by itself, without the need for a blasting cap). Primercord itself requires a blasting cap for detonation, though it will burn in a non-explosive manner with conventional lighting.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Primercord, 1 meter	Plastic Explosive	0.5 kg	\$15	C1 B2	3/12	3

### **Russian Prepared Demolitions Charges**

Notes: These are Russian plastic explosive blocks and satchel charges. Smaller blocks are used in canvas bags to form satchel charges.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Small Block	Plastic Explosive	0.07 kg	\$2	C2 B12	1/5	0.4
Medium Block	Plastic Explosive	0.2 kg	\$6	C4 B20	2/8	1
Large Block	Plastic Explosive	0.4 kg	\$12	C5 B20	3/11	2
1 kg Satchel Charge	Plastic Explosive	1.2 kg	\$50	C8 B20	4/16	6

3 kg Satchel Charge	Plastic Explosive	3.25 kg	\$110	C16 B36	8/30	18
5 kg Satchel Charge	Plastic Explosive	5.25 kg	\$170	C19 B36	10/39	30

#### SMI Instant Cratering Charge

Notes: This charge takes only 5 minutes to emplace -- but a hole must have been bored or blown ahead of time. It is, however, capable of blowing a crater 10 meters wide and 2 1/2 meters deep.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
SMI Instant Cratering Charge	HE	21.5 kg	\$600	C39 B44	19/78	120

#### SMI Rapid Cratering Kits

Notes: Several NATO countries also use these Austrian-made kits. A kit typically comes in cases that contain the hole charge or the actual cratering charge. Hole charges are cylindrical HEAT charges; cratering charges contain egg-shaped HE charges (with the exception of the 12/28CA, which is a tube-shaped plastic explosive charge).

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
01/11C Hole Charge	HEAT	16 kg	\$685	C5 B10	Nil/200	41
02/4C Hole Charge	HEAT	7 kg	\$280	C3 B6	Nil/120	24
03/2C Hole Charge	HEAT	5 kg	\$145	C2 B4	Nil/80	16
08/1C Hole Charge	HEAT	2 kg	\$60	C1 B3	Nil/60	12
11/14CA Cratering Charge	HE	15 kg	\$420	C32 B44	16/64	84
12/20T Cratering Charge	HE	21.5 kg	\$600	C39 B44	19/78	120

12/28CA Cratering Charge	Plastic Explosive	28 kg	\$840	C46 B44	23/92	168	
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### Tactical Nuclear Device, Portable

A standard nuclear weapon, suitable for use by special forces or atomic demolition munitions personnel, packaged in a standard nylon backpack. US and Soviet weapons are virtually identical for game purposes. This weapon requires a separate chemical detonator, five minutes, and Warhead skill to arm and disarm. The timer can be adjusted to detonate anywhere from 10 seconds to 12 hours afterward. The radiation dissipates quickly to 375 rads in 24 hours and a mere 23.43 within 48 hours.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
Tactical Nuclear Device, Portable	Nuclear	3 kg Detonator, 22 kg Device	\$2,500,000	Crater 100 m, Fireball 500 m, Total Destruction 470 m, Heavy Destruction 680 m, Medium Destruction 1042 m, Light Destruction 1303 m, Radiation Cloud 1500 m; Initial Rads 6000, Half-Life 6 h	Special	Special

# US 40-Pound Cratering Charge

Notes: This charge, based primarily on ammonium nitrate and with a TNT booster, is used for postassault demolitions or to prepare defensive earthworks. It is not considered suitable for assault use or when quick explosions are needed, due to the long time required for preparation and its comparative instability and vulnerability to small arms fire and overpressure. The charge normally comes packed inside a wooden box; inside this box is a metal can containing the actual charge. This can is airtight since the ammonium nitrate filler can be destroyed or reduced in effectiveness by moisture (including high humidity). The charge is difficult to detonate; some 25% of the center of the can is taken up by a TNT booster, which actually detonates the ammonium nitrate. A further 1-pound (0.45-kilogram) charge of plastic explosive, TNT, or primercord, with blasting cap, is further required to set off the charge. To maintain the integrity of the airtight container, there is no fuze or charge well; instead, there is a cleat at the top of the can over the central TNT charge, and this has two small tunnels, one for a blasting cap and one for the end of a primercord. There is also a wide steel ring circling the top rim of the can, for use in handling the explosive. This charge requires a hole large enough for the can (which is 21 centimeters wide and 43.2 centimeters long) to be bored prior to the use of the charge; the charge is placed in the hole. The charge is considered tamped unless it is not placed in such a hole.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
40-Pound Cratering Charge	High Explosive	19.5 kg	\$453	C28 B114	18/62	61

# US TNT Blocks

Notes: These were in common use by the US until satchel charges and plastic explosives became common, and they can still be found in use by US client states and by civilian firms such as oil well firefighters, miners, building demolishers, and others who use explosives professionally. The blocks are prepared with fuse wells, but a blasting cap and fusing must be added.

Weapon	Туре	Weight	Price	Damage	Pen (Untamped/ Tamped)	DPV
1/4-Pound TNT Block	TNT	0.11 kg	\$4	C2 B12	1/5	1/2
1/2-Pound TNT Block	TNT	0.23 kg	\$9	C3 B12	2/7	1
1-Pound TNT Block	TNT	0.45 kg	\$18	C5 B20	3/11	2
8-Pound TNT Block	TNT	3.63 kg	\$145	C14 B58	9/31	7

# UTN-2/UTN-600 Linear Shaped Charge

This is a cutting charge found in 200mm strips that can be linked together (usually using primercord). The UTN-2 is a newer version that uses TNT; the UTN-600 is an older, lighter 100mm charge of Hexogen.

Weapon Type Weight Price Damage Pen (Untamped/	amped) DPV
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UTN-2	Shaped Charge	2.8 kg	\$200	C7 B14	Nil/30	18
UTN-600	Shaped Charge	1.45 kg	\$85	C5 B14	Nil/20	8