

## HAND GRENADES

Hand grenades first appear at TL4: hollow cannonballs – or containers made of pottery or heavy glass – filled with about a quarter-pound of gunpowder and fitted with a length of burning fuse (p. 187). They're a favorite naval weapon at TL4-5, as they have a devastating effect on the crowded decks of a warship . . . and a grenade in the powder magazine can sink a vessel that might withstand *hours* of pounding by cannon. Grenades of this type gradually disappear as firearms and artillery improve, although specialists such as combat engineers continue to use them until TL6, especially for sieges.

Modern hand grenades result from the perfection of time and impact fuses at mid-TL6. Historically, WWI played a decisive role in reestablishing grenades as important infantry weapons – almost all militaries (re-)introduced them during and after the Great War. This era saw the development of the most common subtypes:

- *Concussion* grenades have little or no fragmentation, relying on the blast of their explosive filler. Their small casualty radius allows use while advancing (that is, on the offensive, which is why these are also called *offensive* grenades). There may still be incidental fragmentation (p. B415) if a concussion grenade explodes on a hard surface (such as asphalt), in a pile of scrap metal, etc.

- *Fragmentation* grenades propel fragments farther than they can be thrown, so the thrower needs cover (such as a defensive position, which is why these are also called *defensive* grenades). These are the most common hand grenades.

- *Incendiary* grenades contain phosphorus (pp. 172, 188), thermite (p. 188), or a similar burning agent. While primarily used to create smoke, they're sometimes employed against personnel or to destroy artillery, maps, radios, vehicles, etc., at immediate risk of falling into enemy hands.

- *Smoke* grenades produce smoke for concealment or signaling. The smoke isn't harmful to humans and animals, although its aroma is a little unpleasant.

Various *nonlethal* grenades for police operations (e.g., riot control) appear at TL7-8.

### Dirty Tech: Hand-Grenade Booby Trap

Booby traps involving hand grenades are common in guerrilla warfare. A classic example – widely encountered during the Vietnam War – is a fragmentation hand grenade placed inside a can fixed to a stake or a tree. The can is tilted downward so that a little pressure from the tripwire (p. 203) causes the grenade to slide out of the can, releasing the arming lever. The grenade explodes seconds later. Setting such a trap takes a couple of minutes and requires a roll against Soldier or Traps+4.

At TL4-5, grenadiers normally prepare their own grenades just before going into action. At TL6-8, hand grenades require little preparation but come unprimed. Grenade and detonator are shipped separately, and only combined before combat (10 seconds per grenade).

Except as noted below, *all* hand grenades are activated by pulling out the safety pin with its attached ring and letting the arming handle fly off (a Ready maneuver). The fuse doesn't begin to act until the handle is released, but the handle need move only a fraction of an inch. The pin can be reinserted.

Veteran fighters often “cook off” a hand grenade by letting the arming handle fly off, taking two Wait maneuvers, and *then* throwing the weapon. With a four-second fuse, this leaves no time for a defender to pick it up and throw it back (see p. B410). If a critical failure on Throwing causes the attacker to drop a cooked-off grenade, *he* may have no time to pick it up!

Diving on a live grenade is often portrayed in film and fiction as the ultimate sacrifice by a soldier for his comrades (see pp. B377, 415).

#### *Grenade à Main (France, 1670-1850)*

The *Grenade à Main* (simply “hand grenade”) was the main weapon of French grenadiers for two centuries: a 4-pounder iron ball, about 3.2” across, with a removable screw-plug for loading the powder. The plug held the fuse – a short length of match (p. 187). Other militaries fielded similar designs. Use of these unreliable and somewhat fumble-prone grenades declined during the 18th century but never quite broke off until the late 19th century.

The grenadier had to light the fuse prior to throwing the grenade (a Ready maneuver). This was *impossible* in rain, etc. A typical fuse burned for around five seconds.

The *Grenade à Main Mle 1882* (1882-1914) was the same basic grenade given a mechanical time fuse for improved safety and reliability (Malf. 16): Wt. 2.6, Fuse 5. It was armed by pulling a ring (a Ready maneuver). This weapon was still in use during WWI.

#### *Stielhandgranate (Germany, 1915-1928)*

During WWI, the Germans adopted a style of concussion grenade that remained standard until the end of WWII: the *Stielhandgranate* (“stick hand grenade”). Americans nicknamed it the “Potato Masher” after its appearance. German military influence manifested itself in similar or identical patterns in Bolivia, China, Finland, and elsewhere.

The long wooden handle gave good leverage for a throw, compensating for the extra weight (+2 ST to figure distance; see p. B355). It also made the grenade awkward to carry and hide; German soldiers stuck it in their belt or even their boot, and improvised carriers from sandbags. To activate the grenade before throwing, the user twisted the end cap off the handle and pulled sharply on the string inside (two Ready maneuvers).

Several models existed during WWI and the interwar years. During WWII, the standard type was the *StiHGr24* (1928-1945), filled with TNT rather than black powder: Dmg 7d cr ex, Wt. 1.4. From 1943, one in three had a detachable 0.3-lb. fragmentation sleeve: Dmg 5d [2d] cr ex, Wt. 1.7. A 33-lb. case held 15.