



## DEFENCE UNEXPLODED ORDNANCE WEBSITE ORDNANCE INFORMATION SHEET

**ALL UXO MAY BE HAZARDOUS IF DISTURBED  
DO NOT TOUCH – TAKE A PHOTO – MARK THE LOCATION – CALL THE POLICE**

### PROJECTILE – 105MM

#### Description

- The 105mm Howitzer (M2, M101) was the standard light field artillery gun for US Forces in WW2 and was extensively used by the US in Australia and the Pacific. Variations of the 105mm Howitzer have been developed including the M102 (mid-1960s), the UK L118/US M118 Light Gun (1970's) and the UK L119/US M119 (c. 1989). The L118 variant was manufactured in Australia in the 1990's as the Hamel gun and the L119 is currently used by Australian forces. M2A2/L5 Pack Howitzers were also used by Australian forces during the Malay Emergency and the Vietnam War. The Leopard AS1 Tank also uses a 105mm gun as its main armament.
- Many variants of the 105mm projectile were produced including the following:
  - **High Explosive (HE)** - contains a nose fuze and TNT high explosive.
  - **High Explosive, Anti-Tank (HEAT)** – contains a base fuze and Pentolite high explosive.
  - **Chemical (Chem)** - fitted with a fuze and burster charge; filled with a toxic agent (usually Mustard Gas).
  - **Smoke (Smk)** – either White Phosphorus (WP) or Hexachlorethane (HC); base ejection and burster types used.
  - **Shrapnel /Canister (Shrap/Can)** - consists of lead balls and a bursting/propelling charge.
  - **Anti-Personnel, Tracer (APERS-T)** - Flechette, used during the Vietnam War. Similar to the canister, but uses 8000 small flechettes as shrapnel.
  - **Illumination (Illum)** – normally a base ejection projectile containing a parachute flare.
  - **Practice (Prac)** - M3 howitzer only – 127 g of black powder and 1.37 kg of inert material.
- Unexploded items of this type are most often found in/near areas used by the Army for artillery practices - typically on the ground surface up to 1.5m deep. Dumped items may occasionally also be found offshore.

#### Technical Data

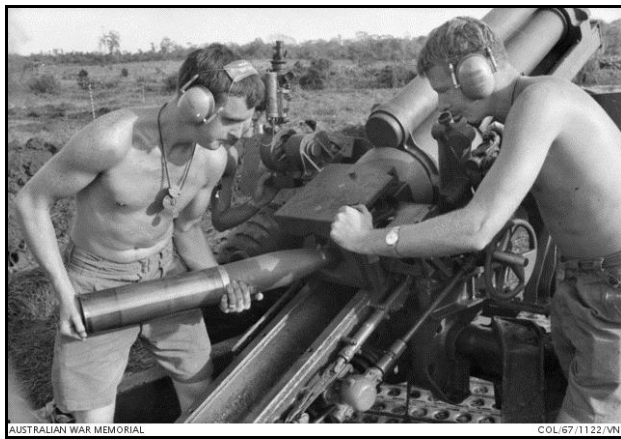
- Mmunition length : approx. 830-950 mm
- Projectile length : approx. 380-420 mm
- Projectile diameter : approx. 105 mm
- Total weight : Projectile - approx 13.0-15.5 kg
- Fuse/Burster : Frequently contain an explosive fuse & burster/base ejection charge. Super-quick or delay fuses were used.
- Filling : varied between 65-750 grams of high explosive (TNT, Dunnite, Explosive D) depending on munition.
- Identification : Normally cast iron/steel. Hazardous variants of the projectile are often painted yellow, green, black or grey with bands of yellow, red, green or blue. **Caution – this munition has been widely used by various countries over a long period of time - other colours may have been used or colours may have faded over time. Treat all found munitions as dangerous.**

The information in this document is provided for interest only, it is not to be used or relied on for any other purpose. Further information on UXO can be found at: <http://www.defence.gov.au/uxo>

**Images**



**Figure 1 - 105mm projectiles made at the St Mary's Ammunition Factory (Sydney). LtoR: Smk (WP), Illum, Prac, Smoke (HC) and HE. Foreground – 105mm cartridge. (AWM ID P05173.002)**



**Figure 2 - A 105mm artillery shell being rammed into the breech by Australian artillery gunners - Vietnam, 1967 (AWM ID COL/67/1122/VN)**



**Figure 3 - Various 105mm projectiles used during the Vietnam War. LtoR: Anti Personnel (Flechette); High Explosive; Parachute Flare, Smoke (WP) (AWM ID P01636.017)**



**Figure 4 - Unexploded 105mm HE projectile found in the Rockhampton area, QLD.**



**Figure 5 - Expended 105mm Smoke showing expended smoke pots.**