



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**

MORTAR - 3 INCH

Description

- The British 3-inch Stokes Mortar was invented during WWI and the bomb originally had no tail vanes (10-11lb/4.5-5.0 kg). A subsequent variation of the bomb was constructed with 3 tail vanes (approx 7lb/3.2 kg). Both variants were widely used by Commonwealth forces until superseded by the ML 3-inch Mortar bomb Mk II with 6 tail vanes in the early 1930s (approx 10lb/4.5 kg).
- The Mk II bomb was subsequently further modified to the Mk II Long Range (LR) and was extensively used by Australian units throughout WWII. The Mk II remained in service with the ADF up until the late 1960s, although some types of ammunition were still in use for training up until the mid 1980s.
- Several types of 3-inch bomb were produced or used including:
 - **High Explosive (HE)** – all variations ('Marks'/Mk) of HE bombs contain a fuze and High Explosive (HE).
 - **Smoke (Smk)** - Bursting, Screening, Coloured and Observing Smoke; weights and types of fill varied with the nature of the round.
 - **Chemical (Chem)** – contains a fuse and hazardous chemicals; limited stocks were used in Australia at few locations – all were reported to have been dumped at sea after WWII.
 - **Illumination (Star)** - the standard illumination round was known as a Star round and contained a white Star unit attached to a parachute to illuminate specific areas.
 - **Flare** - Similar in design to a smoke bomb but contained a candle producing a coloured flare for marking areas.
 - **Practice (Prac)** - several types were manufactured including powder-filled and sand-filled.
- The 3" mortar bomb was produced in large quantities at various factories around Australia. All Australian infantry units (Regular, Reserve and Militia) and numerous other military personnel fired the 3" mortar at many live firing ranges throughout Australia and many were dumped at sea. UXO of this type are one of the most common found by the civilian population and have caused a number of fatalities over the years. Usually found on the surface or shallow buried (<0.5m).

Technical Data

- Bomb length : approx. 370-500mm
- Bomb diameter : approx. 81-82mm
- Total weight : approx 3.2-5.0 kg
- Fuse/Burster : May contain a sensitive fuse and explosive which can be easily detonated
- Filling : HE - approx 500 g high explosive (Amatol, TNT, etc)
Smoke – White Phosphorus (WP), Titanium Tetrachloride (FM) or Chlorosulphonic Acid/Sulphur Trioxide mixture (CSAM)
- Identification : The main body is cast iron and may have one or more bands of colour. Red, yellow or green bands were most often used to denote hazardous munitions however other colours may have been used or colours may have faded over time.

Images

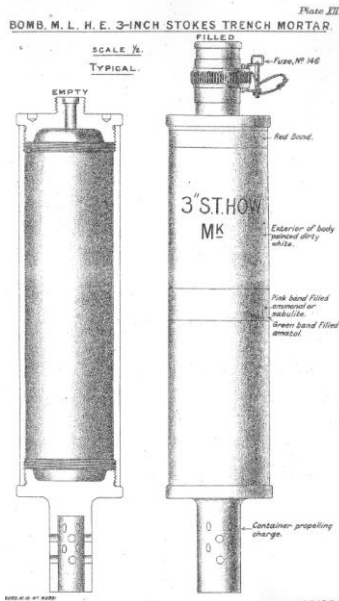


Figure 1 – Example original 3" Stokes HE Mortar (c. 1914)

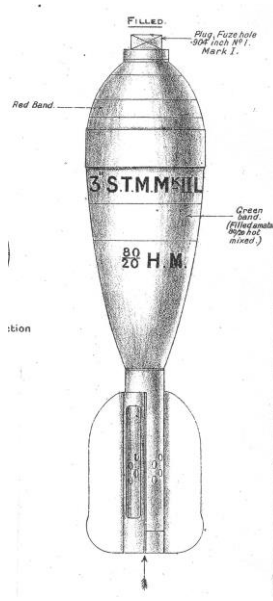


Figure 2 - 3" Stokes Mortar Mk II (3 vanes; WWI era)

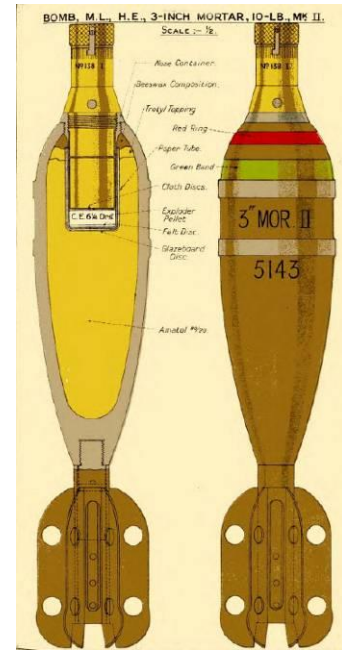


Figure 3 - ML 3" Mortar Mk II (6 vanes; WWII era)



Figure 4 - 3" Mortars - HE, HE (6 vane), Illumination (6 vane), Smoke WP (possibly earlier 3 vane)



Figure 5 - Duntroon cadets firing the 3" mortar - Canberra, 1941 (AWM ID number 008006)



Figure 6 - Unexploded 3" HE Mortar - found on the Atherton Tablelands, Nth Qld



Figure 7 - Unexploded 3" Mortar found at Canberra, ACT

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>