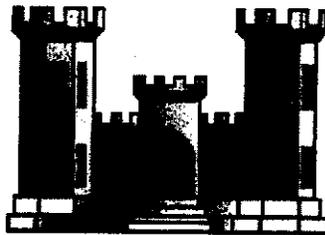


ORDNANCE IDENTIFICATION GUIDE OF THE ORDNANCE RECOVERED FROM THE FORMER BENICIA ARSENAL BENICIA, CALIFORNIA

Prepared For:

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Prepared by:

EOD TECHNOLOGY, INCORPORATED



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The views, opinions, and /or findings contained in this Identification Guide are those of the author and should not be construed as an official Department of the Army position, policy, or decision unless so designated by other documentation.

The drawings and photographs contained in this booklet are of the same type of ordnance located within the boundary of the Former Benicia Arsenal. Many of the ordnance items recovered during the ordnance removal action did not look like or resemble the actual item. These items may contain small detonators and/or explosive residues. If you should locate any item you suspect to be military ordnance please contact the local law enforcement authorities.

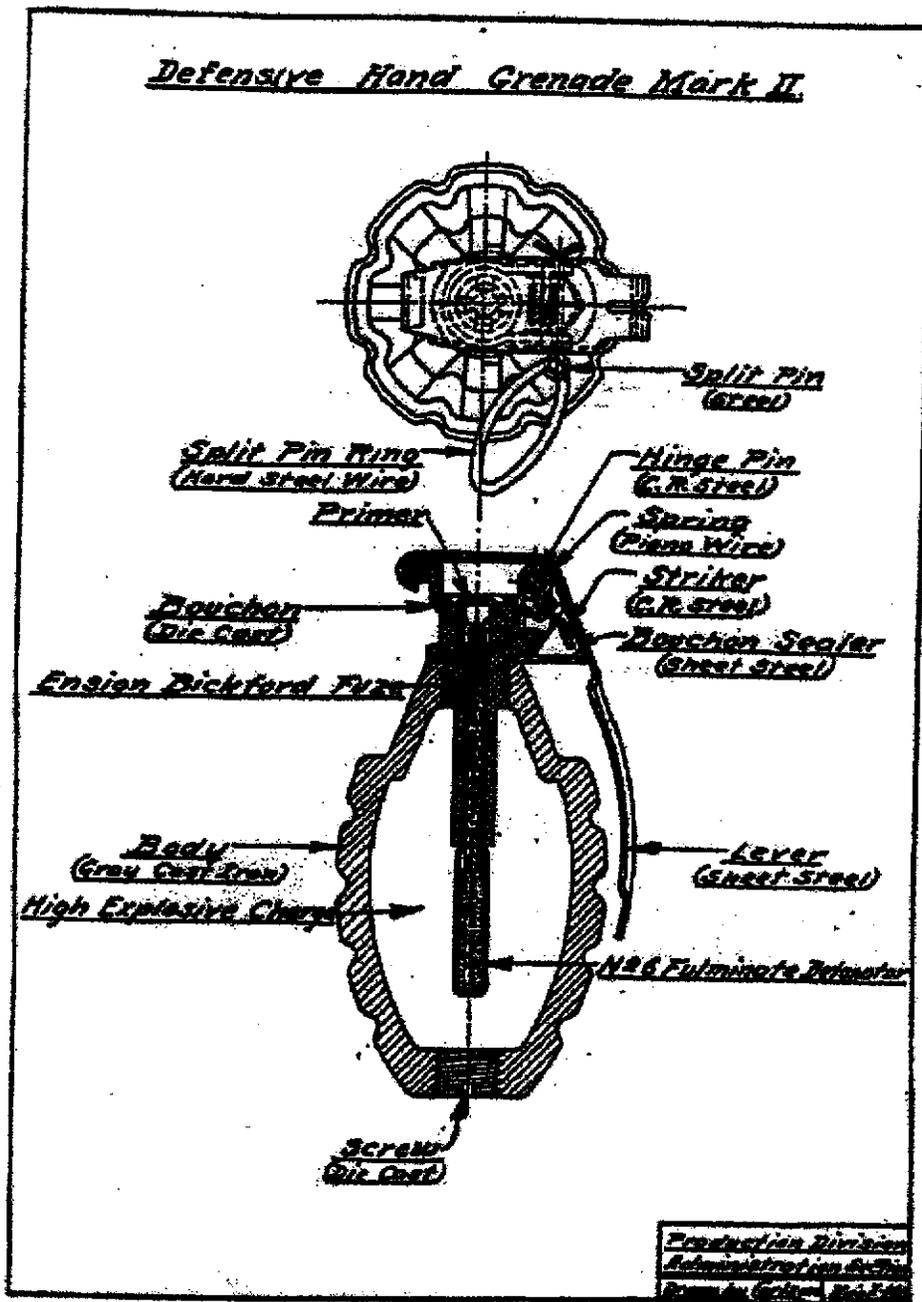
Benicia Police 707*745-3411

Benicia Fire 707*745-2424

Vallejo Police 707*648-4321

Vallejo Fire 707*648-4526

California Highway Patrol, Solano Area 707*428-2100



MK II Hand Grenade

These are similar to the later model grenades of the same nomenclature often seen in WW II photos and film and referred to as the "Pineapple" grenade. This earlier version has a screw or plug in the base that is similar to later model training grenades. These grenades should always be assumed to contain explosive filler. They were found near the Camel Barn Museum

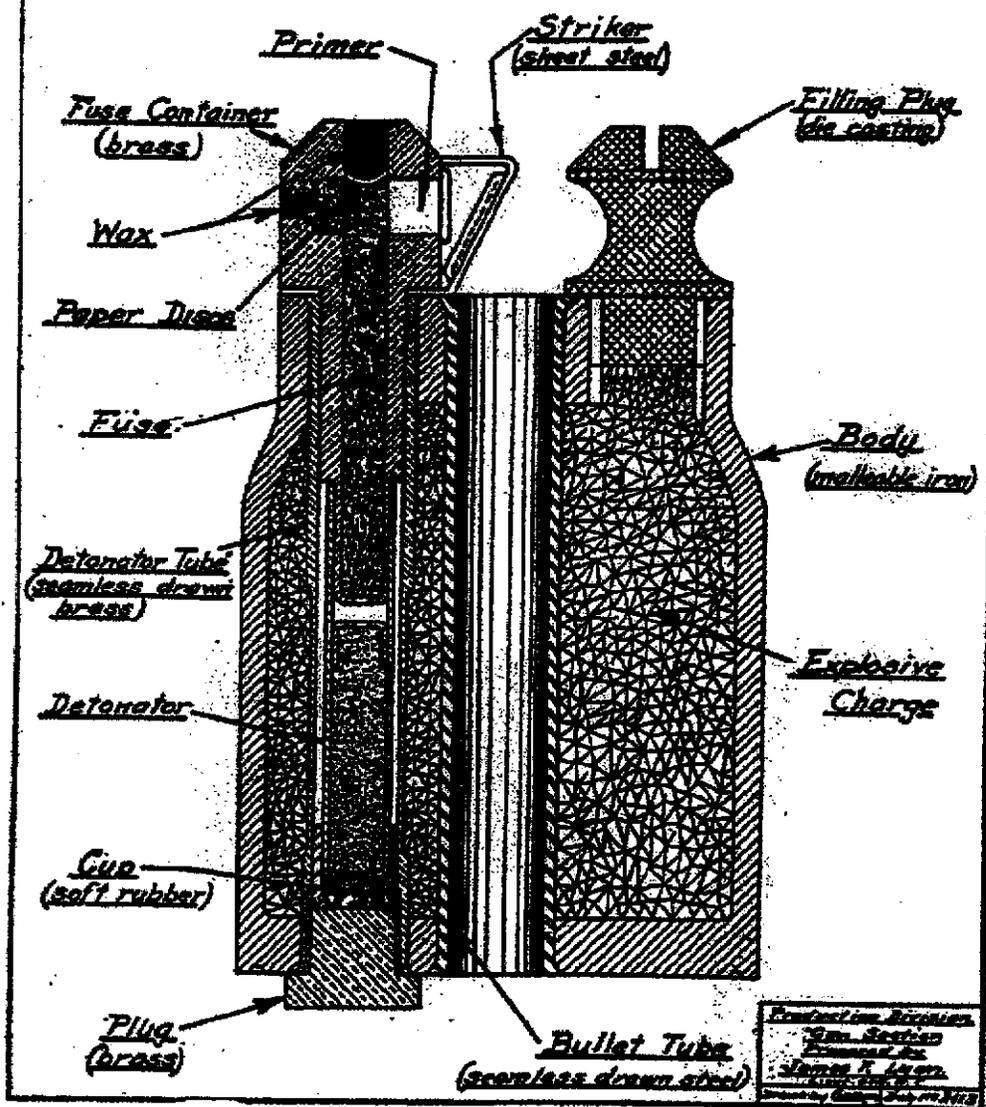


Figure 1, MK II Hand Grenade (4 Each), Side View Without Firing Pin



Figure 2, Mk II Hand Grenade, Top View Without Firing Pin

V.B RIFLE GRENADE MARK I



MK 1 VB Rifle Grenade

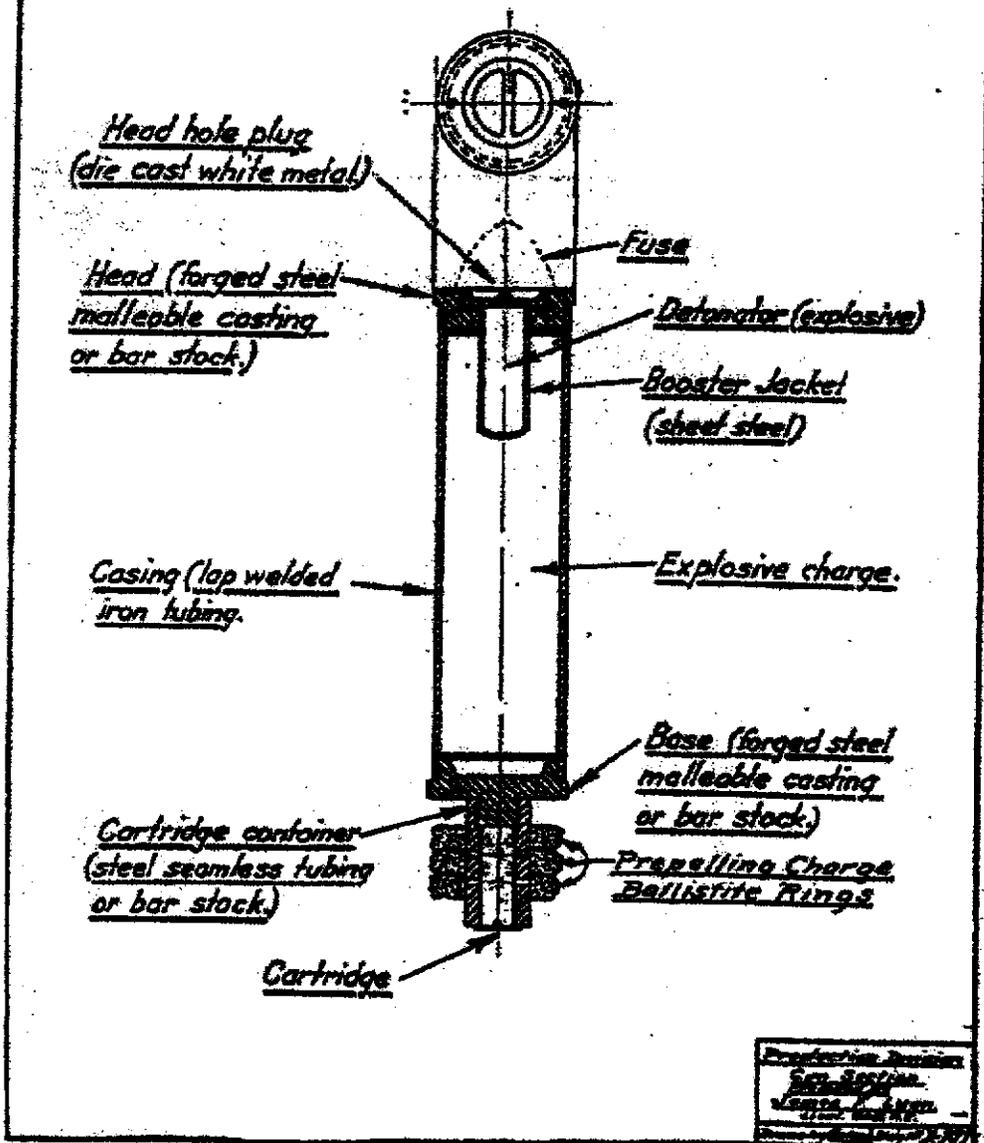
These World War I era grenades are a copy of the French version. They were found in large quantity around the Camel Barn Museum. Empty grenades cannot be distinguished from live and all grenades found should be assumed to be hazardous.



Figure 3, VB I Rifle Grenade(2 Groups of 4 Wrapped With Tape for Explosive Demilitarization

3 INCH STOKES TRENCH MORTAR SHELL.

Tubing Construction



3 inch Stokes Mortar

These were found in small quantity near the Camel Barn Museum. All the mortars found were determined to contain no explosives after investigation however there is no external features to distinguish empty from live mortars so they should always be assumed to be hazardous. The Fuze and tail booms are often found separate from the mortar body.

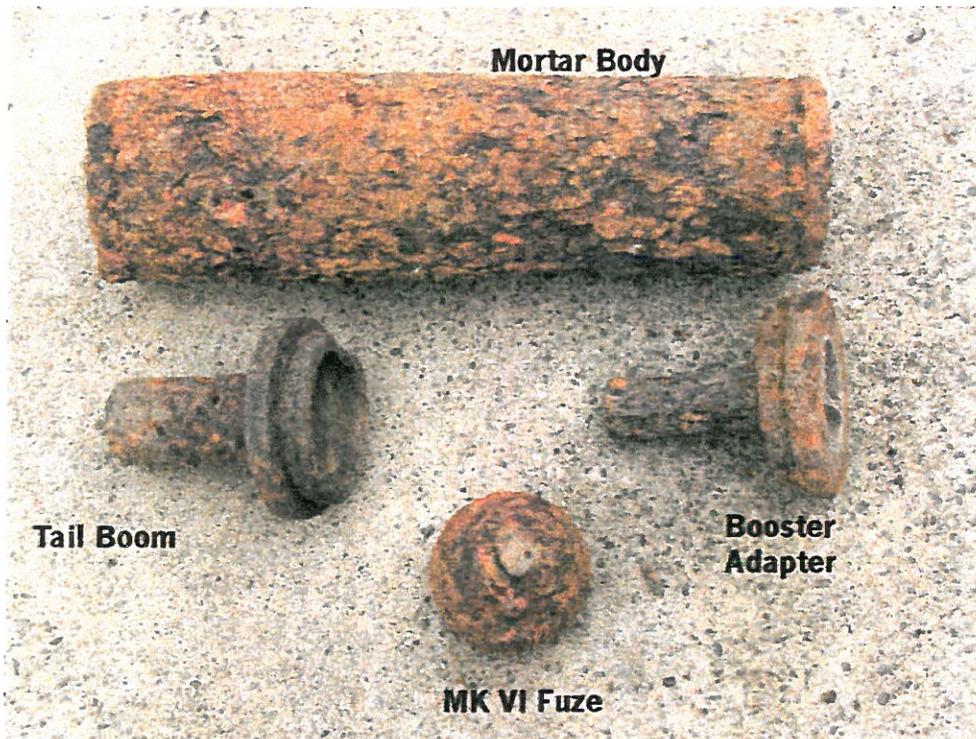
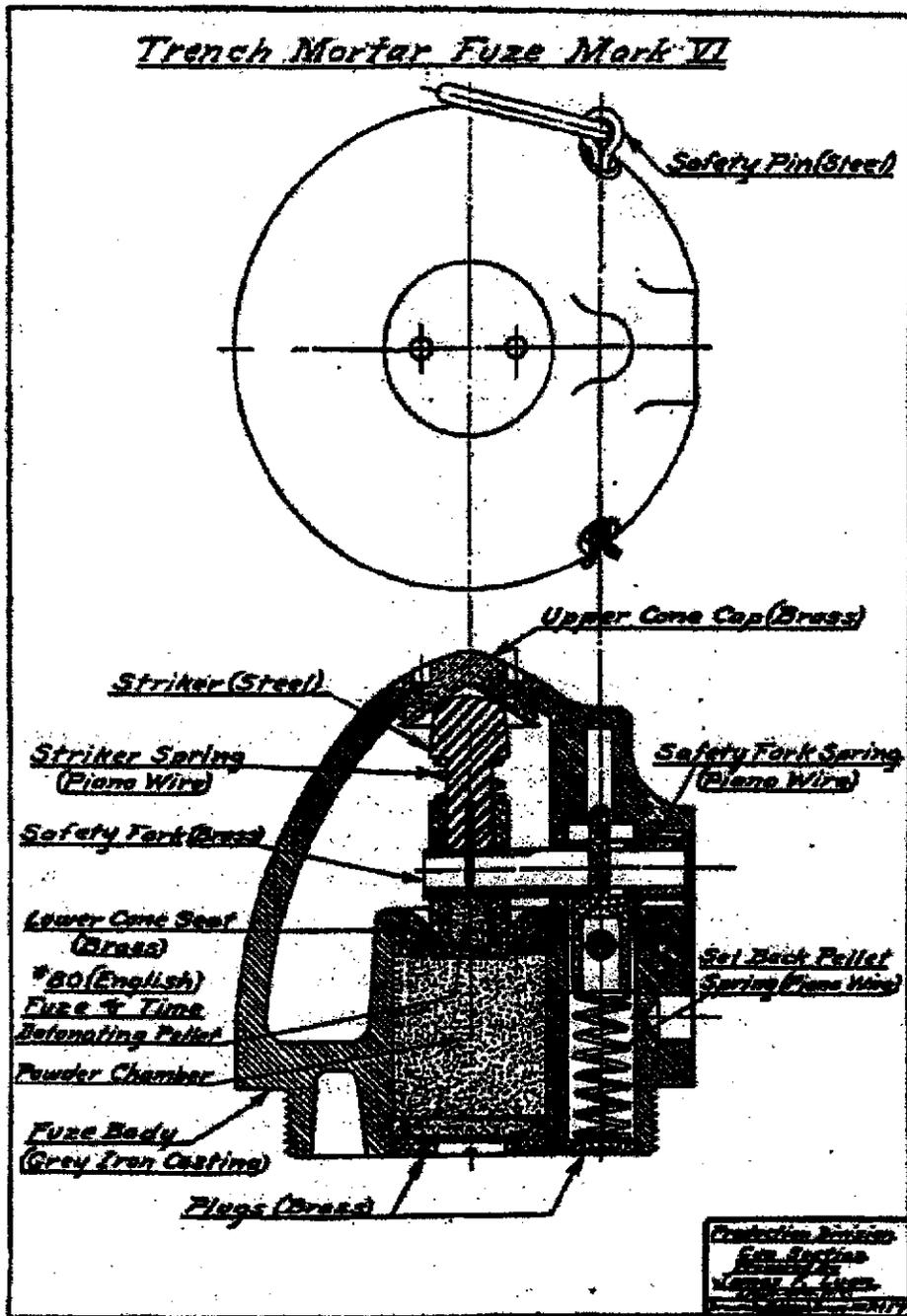


Figure 4, 3 Inch Stokes Mortar Parts



Figure 5, 3 Inch Stokes Mortar (Complete) Partly Buried



MK VI Fuze for the Stokes Mortar

These fuzes were found near the Camel Barn Museum and should be considered hazardous at all times. Even when used with training mortars the fuze would be live and it has an all-ways acting firing mechanism that is sensitive to impact from any direction.

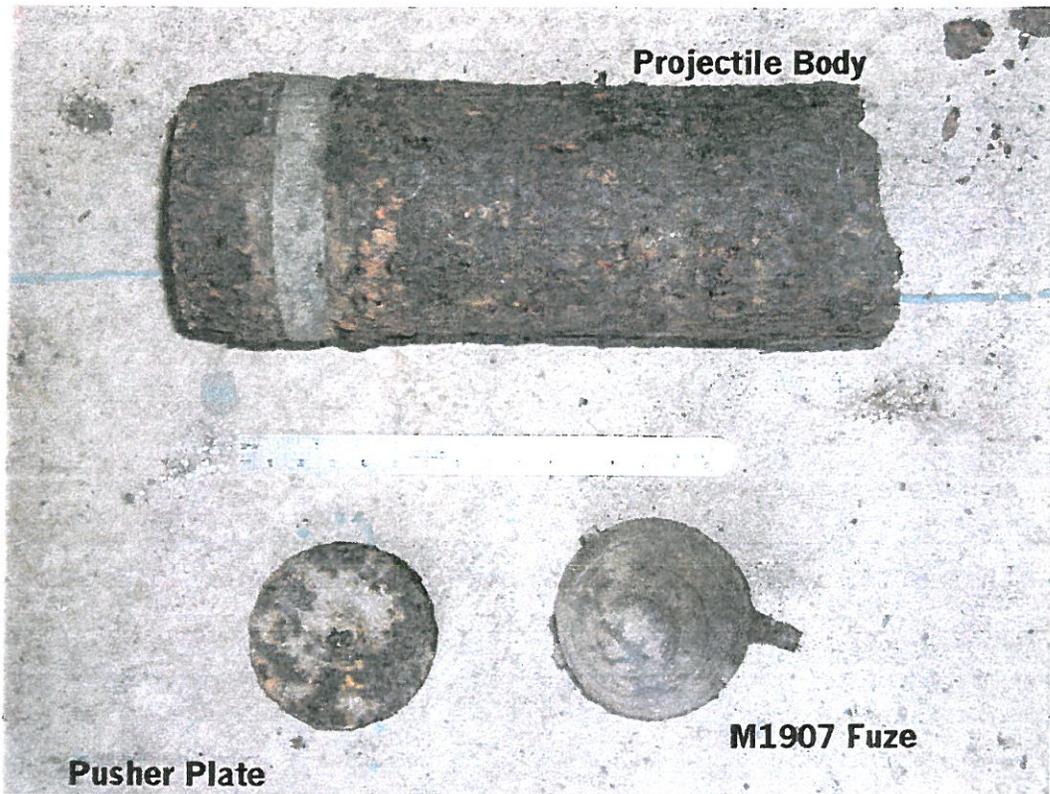


Figure 6, 3 Inch Stokes Mortar Parts

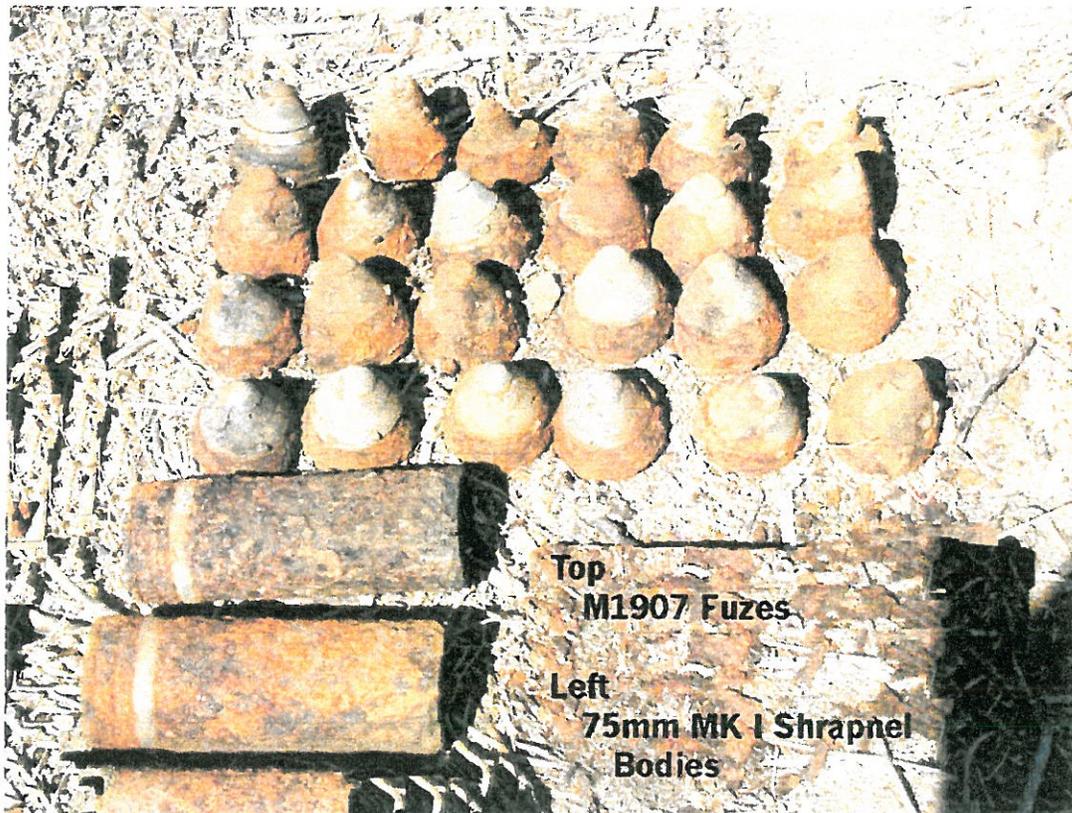
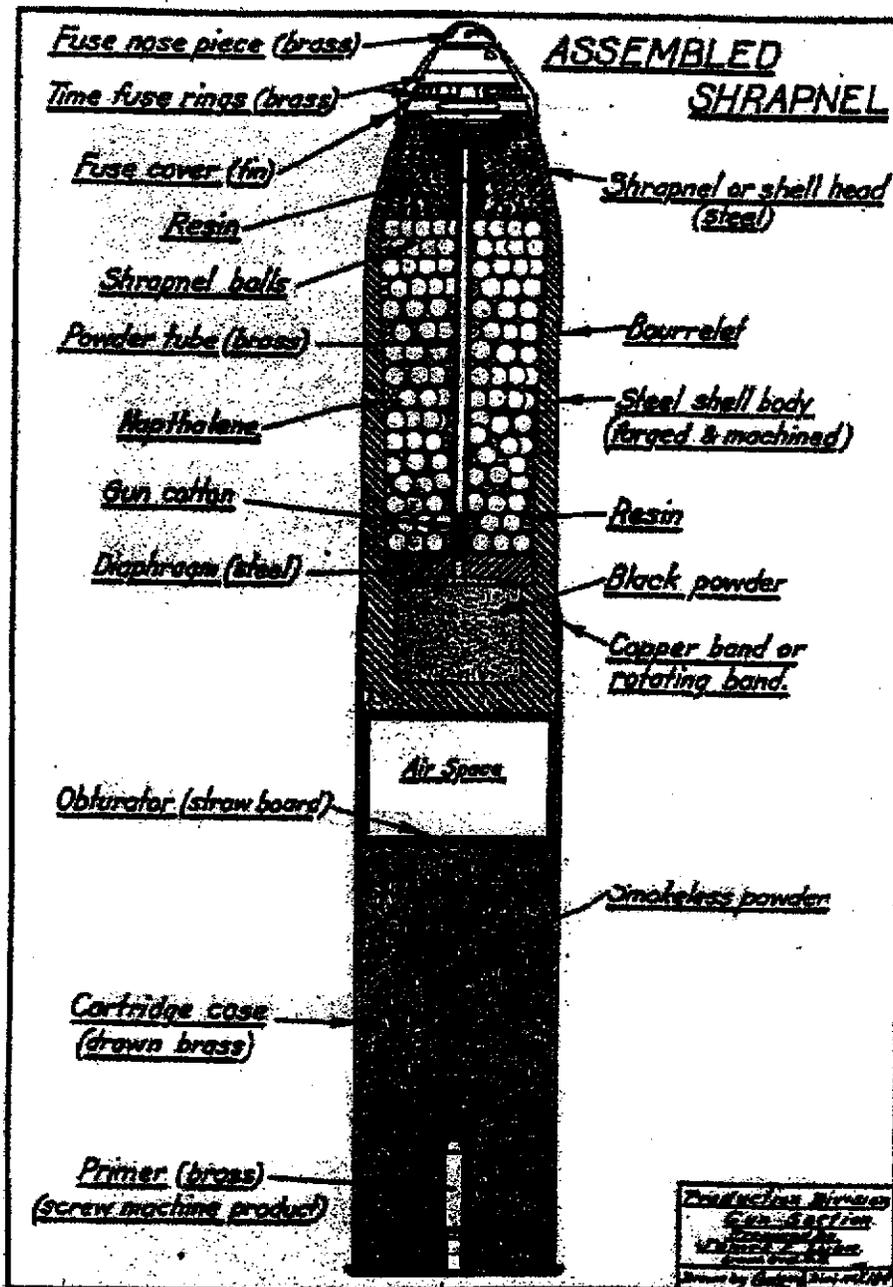


Figure 7, 3 Inch Stokes Mortar Parts

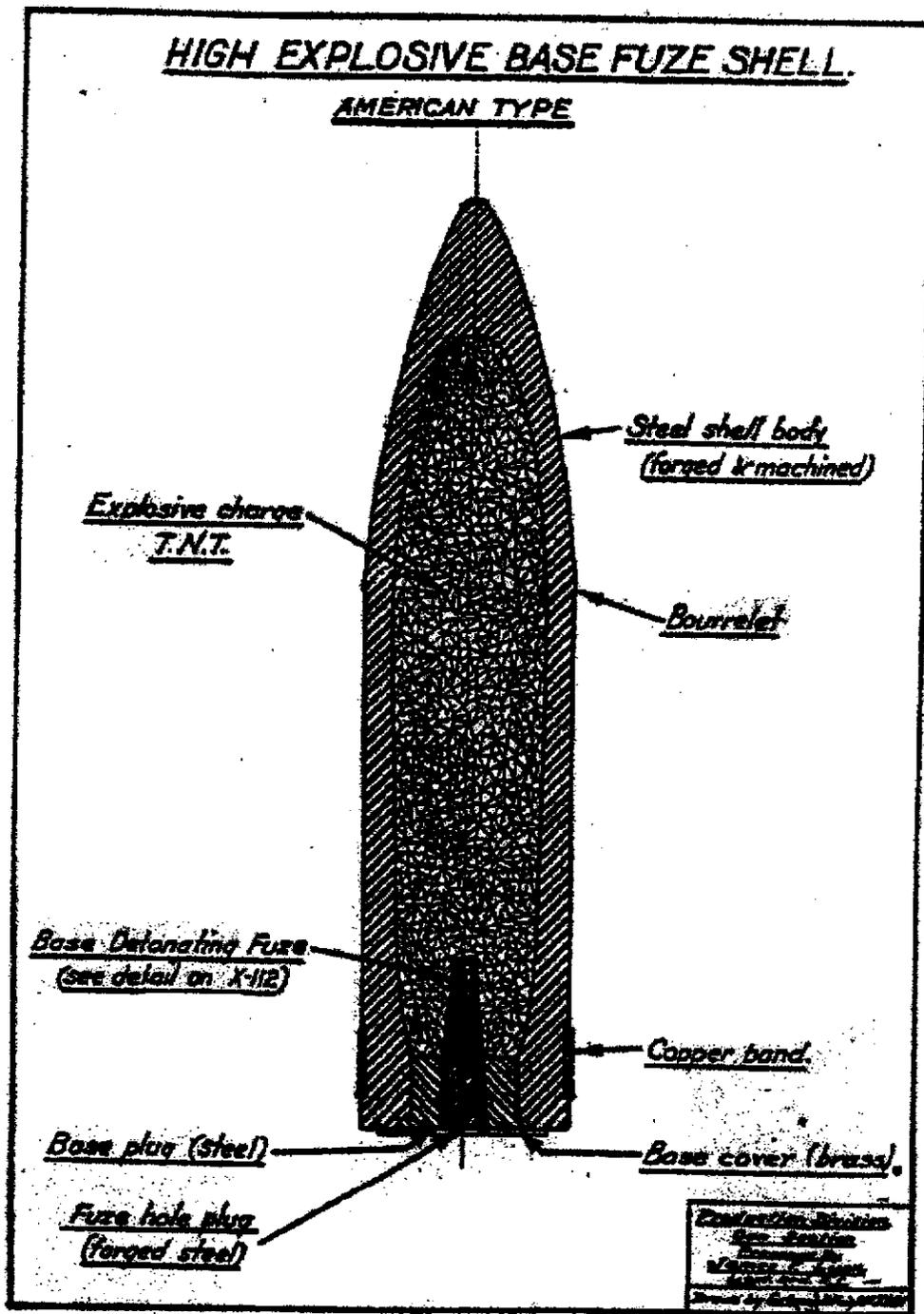


75mm MK I Shrapnel Projectile

This projectile uses a Powder Train Time Nose Fuze. Only a few of the projectile bodies were found however a large number of the separated fuzes were found near the Camel Barn Museum.



Figure 8, 75mm Shrapnel Round

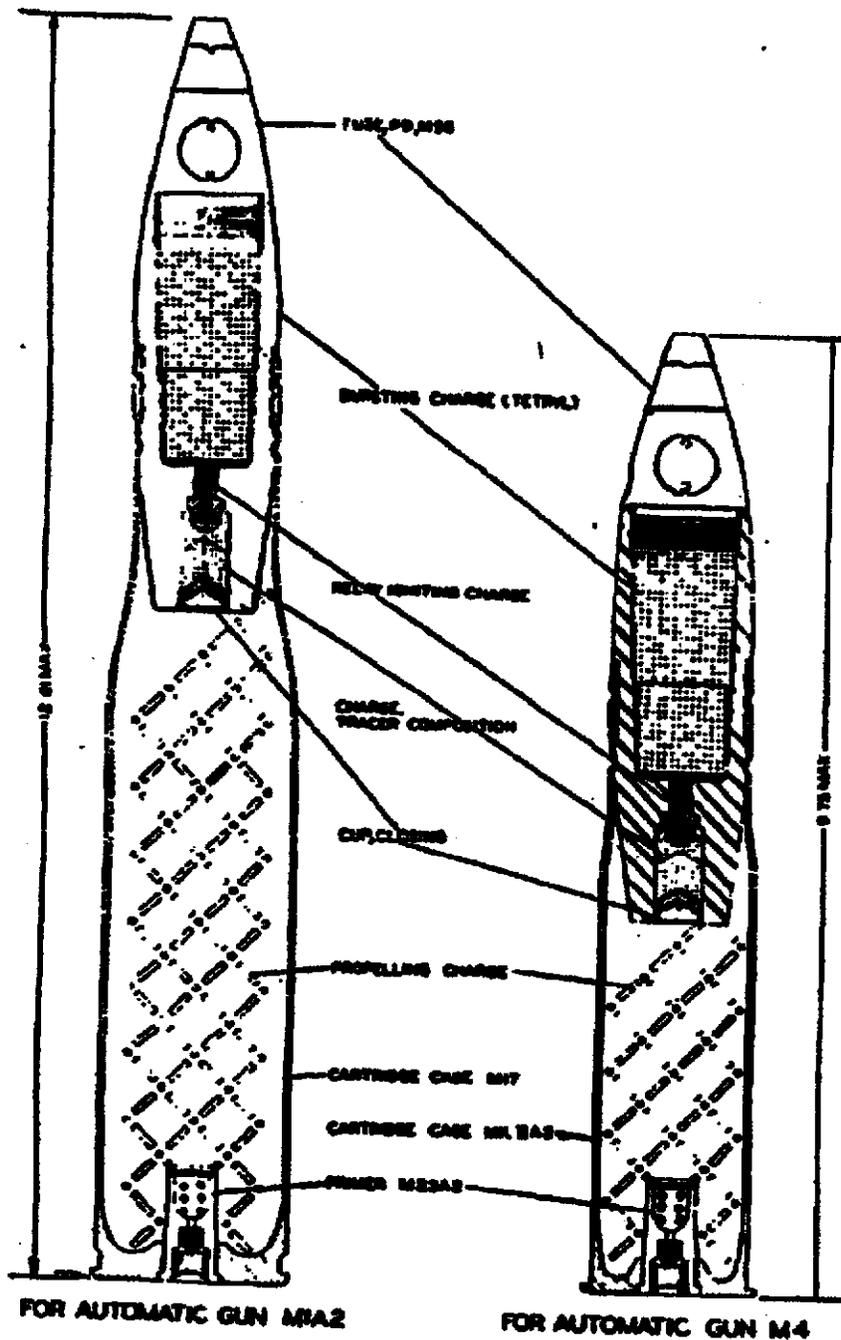


Typical High Explosive Projectile (Base Fuzed)

Shells of this type were found in sizes from 57mm (2.25") to 75mm (3") near the Camel Barn Museum. Some base fuzed projectile as in this example have an internal fuze and should not be confused with inert training or practice projectiles.



Figure 9, From Top to Bottom, 75mm High Explosive, 75mm Armor Piercing, 57mm High Explosive



SHELL, H.E. M54, for 37-mm Guns M1A2 and M4

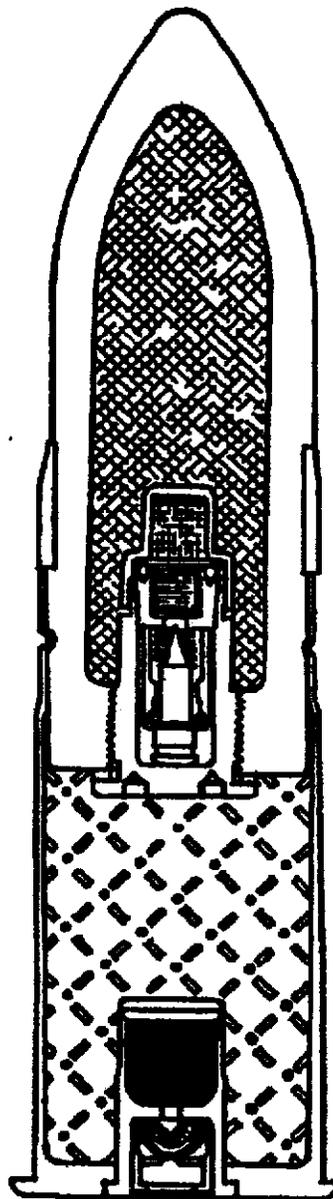
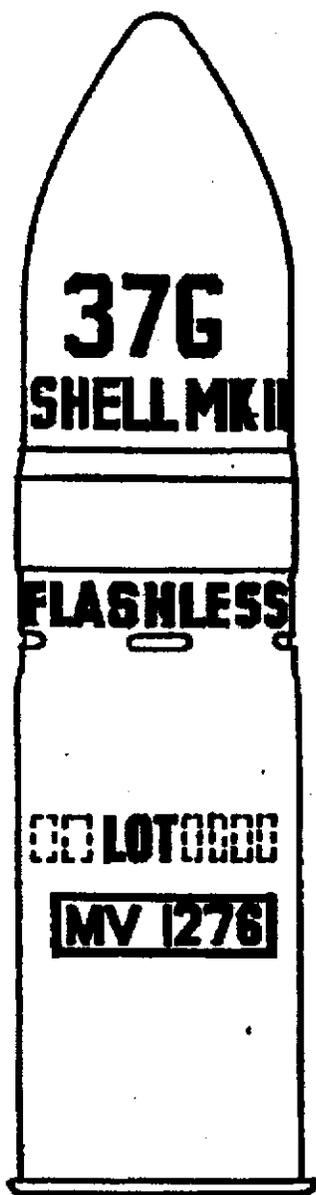
These were found in small quantity in the area west of the businesses on Channel Road. The ones found had not been fired and may have been residue from explosive disposal operations. These projectiles are of WW II era vintage.



Figure 10, The Explosive Charge from the M54 Shell (Side View)



Figure 11, The Explosive Charge From the M54 Shell (Side View)



GA PB 2700

SHELL, H.E., Mk. II, for 37-mm Gun M1916

These were found in small quantity near the Camel Barn Museum. A large number of these were also destroyed in the valley east of I680.



Figure 12, 37mm Projectiles may Contain a Sensitive Base Fuze, DO NOT MOVE



60mm HE Mortar (Typical)

One live mortar of this type was found in the valley in the sector to the west of Channel Road. Many of the tail boom sections were also found. Any item resembling this should be considered explosive filled until examined by ordnance specialists.

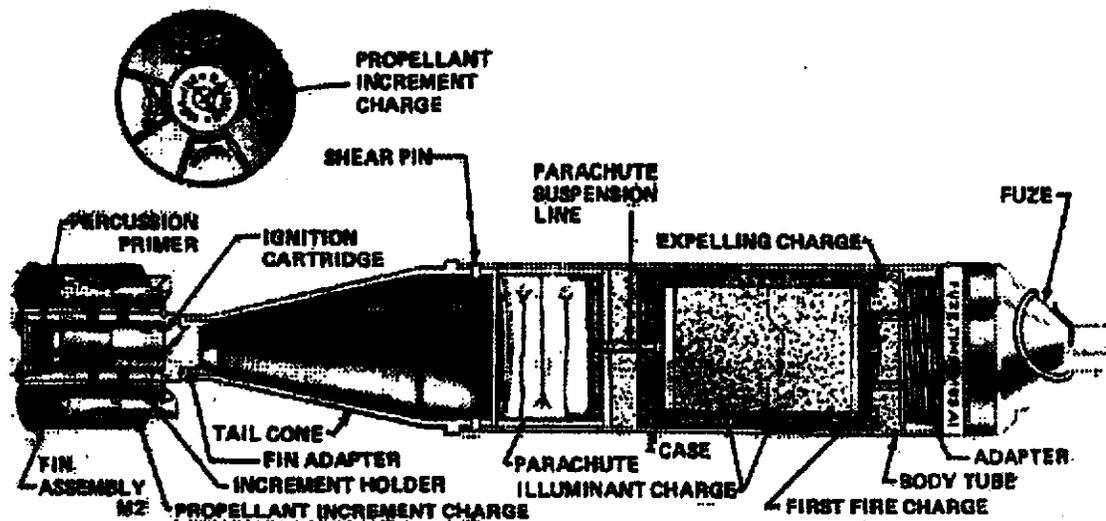
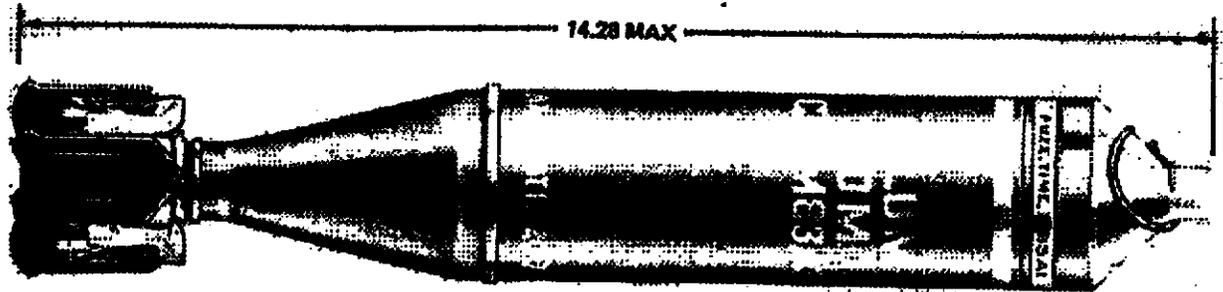


Figure 13, The Body of the 60mm Mortar



Figure 14, The Nose of the 60mm Mortar Without a Fuze

CARTRIDGE, 60 MILLIMETER: ILLUMINATING, M83A3, M83A2, AND M83A1



Numerous components of these mortars were found in the in the sector west of Channel Road. These are illumination mortars and contain a candle that presents a fire and burn hazard.

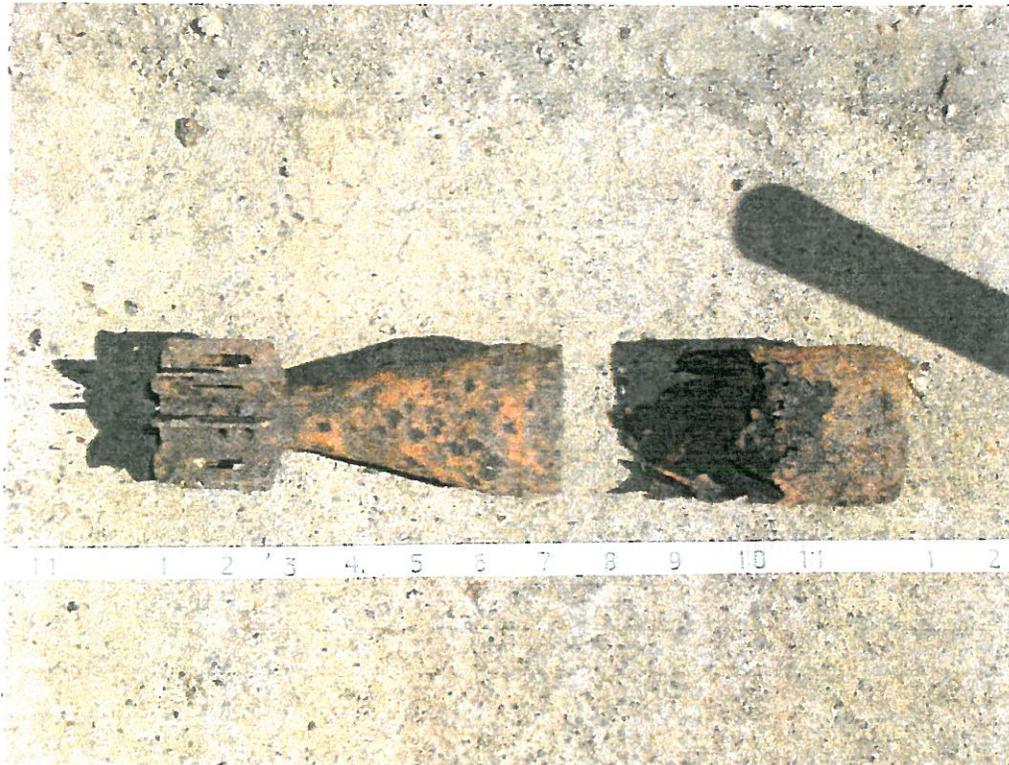


Figure 15, The 60mm Illuminating Round (Side View)



Figure 16, The Nose Portion of The 60mm Illuminating Round