

APPENDIX A

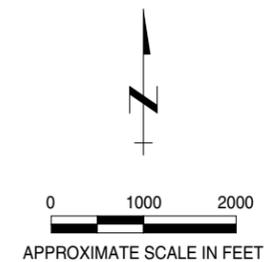
PHOTOS AND ORDNANCE DATA SHEETS

APPENDIX A-1

AIR PHOTO OF EAST ELLIOTT



Note:
The suspected tank maneuver area consists of elliptical tracks visible in the right center of the photograph. The west to east dirt road spanning the central two-thirds of the photograph is the southern boundary of East Elliott. From right to left the main north-south trending canyons are (1) Sycamore Canyon, (2) Little Sycamore Canyon (in the center of the photograph), (3) Spring Canyon, and (4) Oak Canyon. The northern boundary of East Elliott is approximately 3000' beyond the edge of the photograph.





0 2250 4500
APPROXIMATE SCALE IN FEET



MONTGOMERY WATSON

**FORMER CAMP ELLIOTT (EAST ELLIOTT)
ENLARGEMENT OF PHOTO OF
SOUTHERN PORTION OF EAST ELLIOTT
SHOWING SUSPECTED TANK MANEUVER AREA**

FIGURE A-2

APPENDIX A-2

PHOTOS OF EAST ELLIOTT PHYSIOGRAPHY



Sector 1. West margin of East Elliott, looking southeast toward MCAS Miramar.
Dense brush visible.



Sector 1. Spring Canyon, looking south toward Sector 3.



Sector 1. Roadway and firebreak along ridgeline, looking north toward MCAS Miramar.



Sector 2. View south toward San Diego. Portion of Sycamore Landfill in left-center of image.



Sector 2. San Diego Gas & Electric power transmission lines. View from northeast portion of sector looking southwest.



Sector 2. Sycamore Landfill looking northwest.



Sector 3. View across Spring Canyon looking west.



Sector 3. View northwest over Spring Canyon.



Sector 3. Southern portion of sector looking southwest toward Highway 52. Fortuna Mountain in background.



Sector 3. View west over Spring Canyon and Highway 52.



Sector 4. Quail Canyon looking southeast toward city of Santee.



Sector 4. Rock climbing area in southern portion of sector, looking southeast. West Hills High School in background.



Sector 4. View northwest over rock climbing area.

APPENDIX A-3

PHOTOS OF OE FOUND IN VICINITY OF EAST ELLIOTT



M15 Fuze



37mm high explosive projectile



57mm projectile



75mm high explosive projectile



75mm armor-piercing high explosive projectile with M66 fuze.



75 mm armor-piercing cap.



75mm white phosphorous projectile



M9 rifle grenade



105mm high explosive projectile



81mm mortar



37mm and 75mm projectiles



75mm projectile



37mm shell



OE fragments from exploded ordnance

APPENDIX A-4

ORDNANCE DATA SHEETS OF OE FOUND IN VICINITY OF EAST ELLIOTT

FUZE, PROJECTILE, POINT DETONATING, SQ & DELAY, M48

ECC Data Sht
Cl 06/15/93

Projectiles Used in: 75mm, 90mm, 4.2"

- * Length: visible 3.74", overall 4.59"
- * Weight: 1.41 lbs
- * Construction: Fuze body and flash tube made of steel, Ogive made of aluminum or stamped steel, setting sleeve made of brass.
- * Fuze is used with the M20 booster.

Function:

SUPERQUICK

When projo is fired, setback force combined with spring pressure holds fuze parts in the unarmed condition. As setback force decreases, centrifugal force causes interrupter to move outward, clearing the superquick passage. Upon impact, SQ firing pin is driven into the detonator. Flash from detonator passes through the clear flash hole directly to the detonator in the booster.

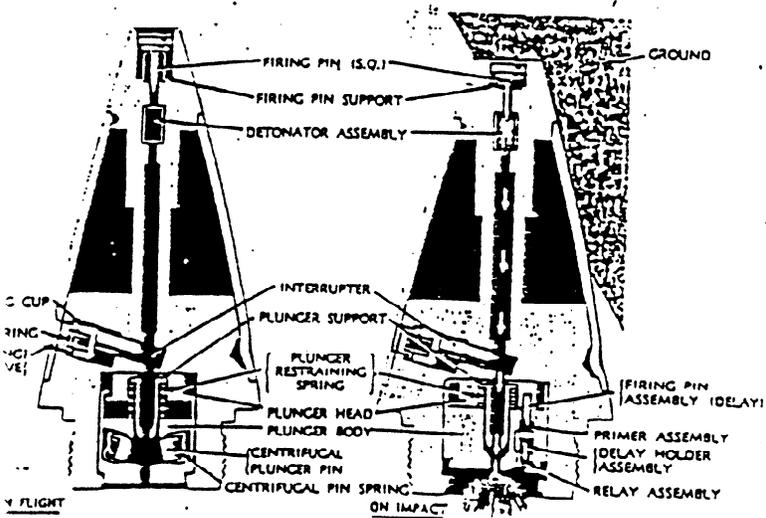
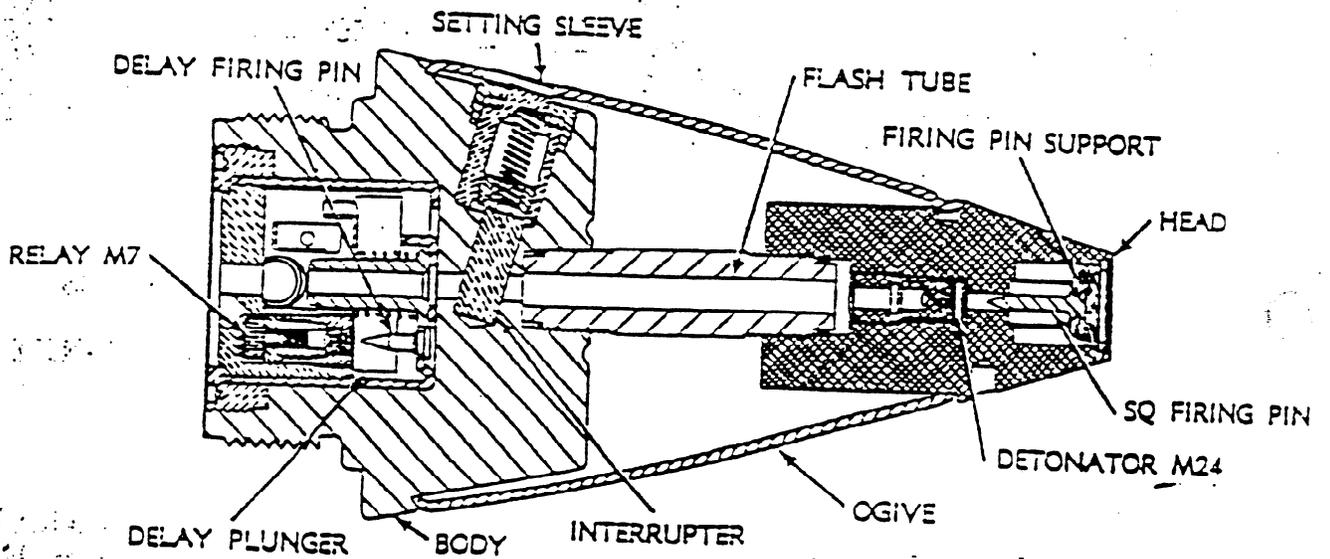
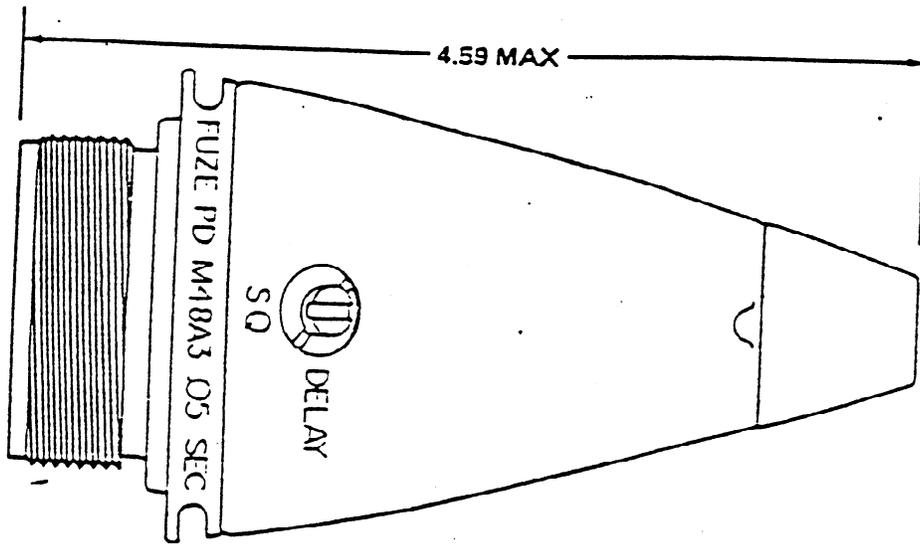
DELAY

Delay plunger is armed by centrifugal force which withdraws plunger lock pins. Upon impact, plunger assembly with primer is driven into the firing pin assembly. Flash from primer ignites delay, which burns to relay. Relay sends flash to detonator in the booster.

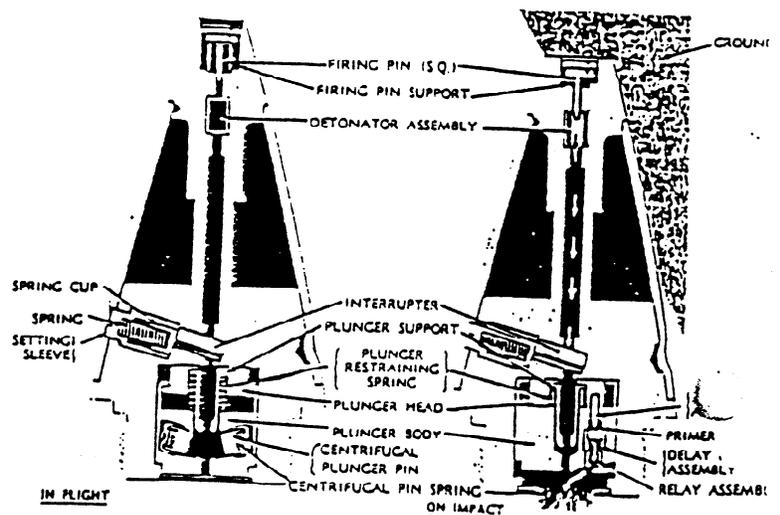
NOTE

The delay train will always function even though the fuze may be set for superquick. If set on "delay" the flash from "superquick" is blocked and fuze functions through the delay assembly.

Reference: TM9-1904, TM43-000-128, TM9-1385-51, 147 Data Sheet



Superquick Functioning



Delay Functioning

PROJECTILE, 37mm, APC, M51 & M59 w/TRACER

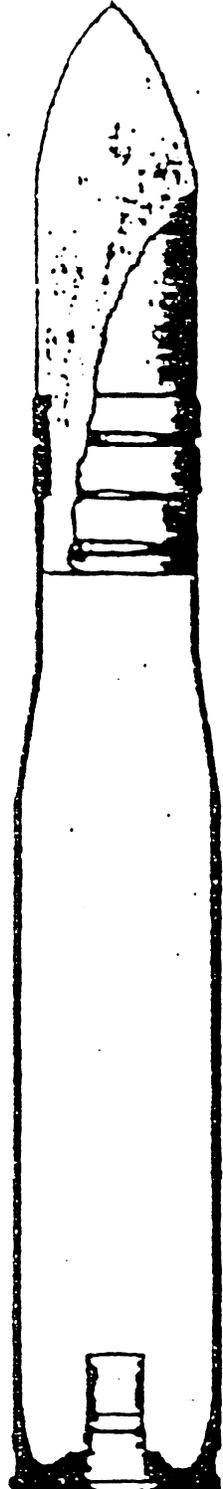
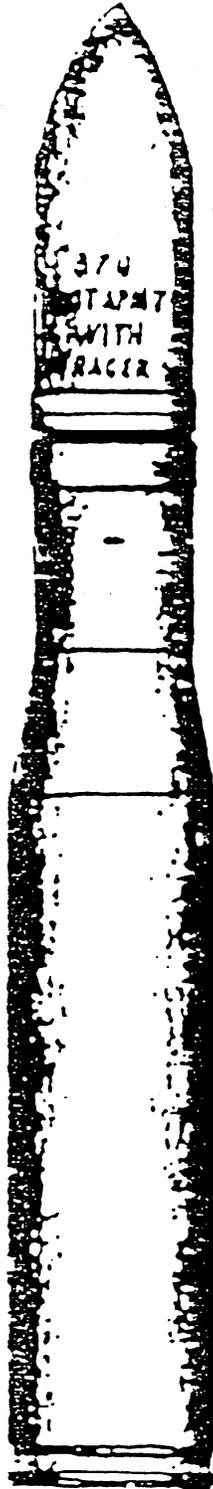
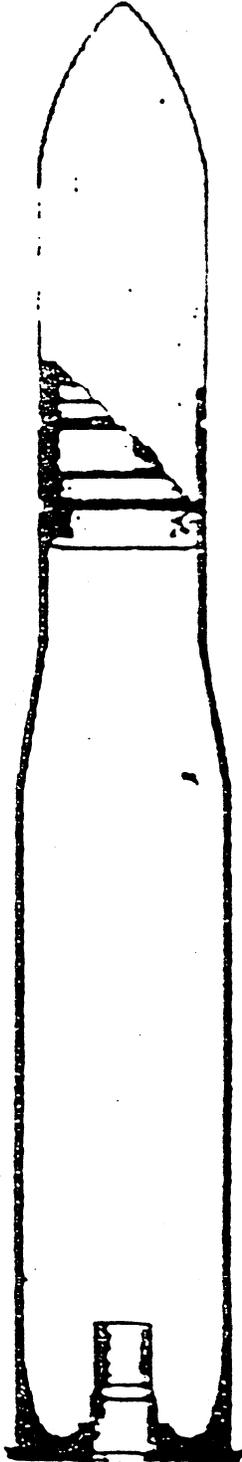
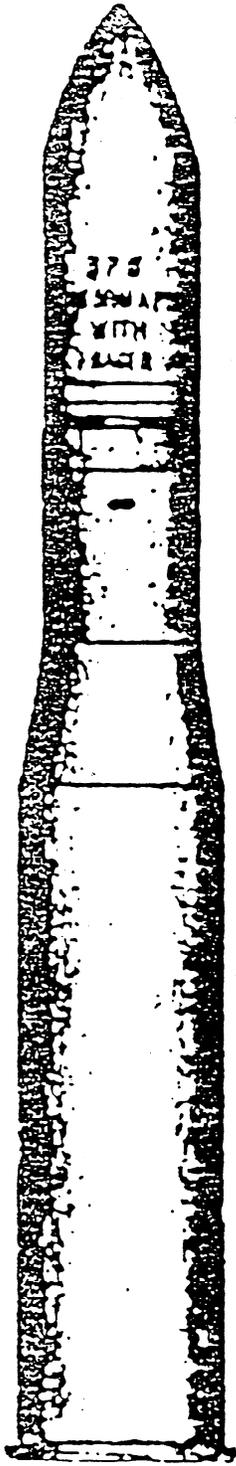
ECC Data Sht
C1 06/02/93

No fuzing or filler.

- * Length: M51 = 6.36" w/windshield, 4.84" without. M59 = 4.59".
- * Diameter of bourrelet: 1.45"
- * Diameter of base: 1.44"
- * Width of rotating band: .74"
- * Total weight: M51 = 1.92 lb, M59 = 1.91 lb.
- * Construction: Body made of hardened steel with tracer recess. Cap made of forged, heat treated steel alloy, sweated on nose of body, and (aluminum windshield for streamlining, M51 only).
- * Paint and markings: Painted black with white stenciling; "37 G, SHOT APC M51 or M59, WITH TRACER."
- * Both projos are very similar except the M51 has an aluminum windshield and the M59 does not.
- * Tracer is made up of red tracer composition, and igniting composition, and a celluloid cup which fits over the tracer charge and is sealed with with adhesive. The tracer burns for approx 2000 yds of flight.

References: TM9-1904, 147 data sheet

Location Found: TS



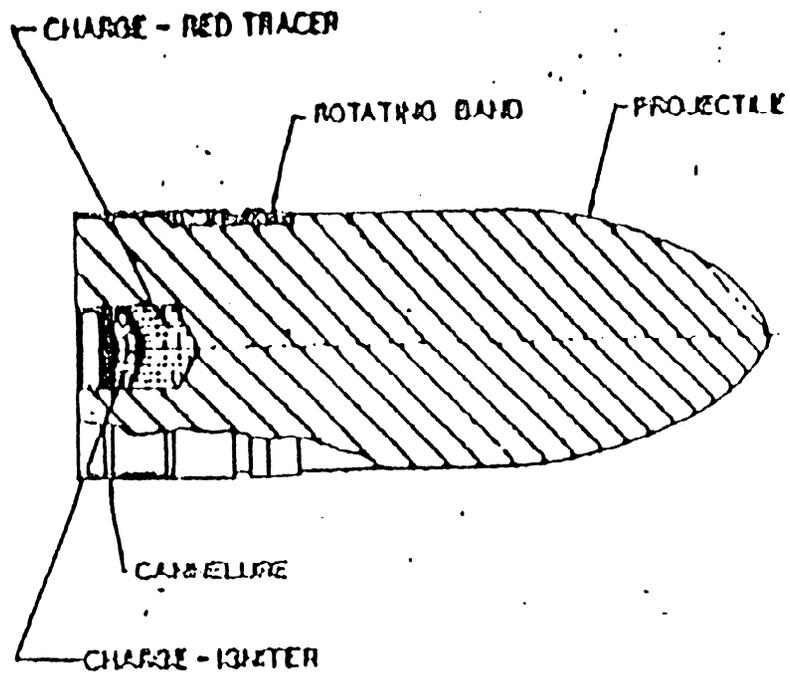
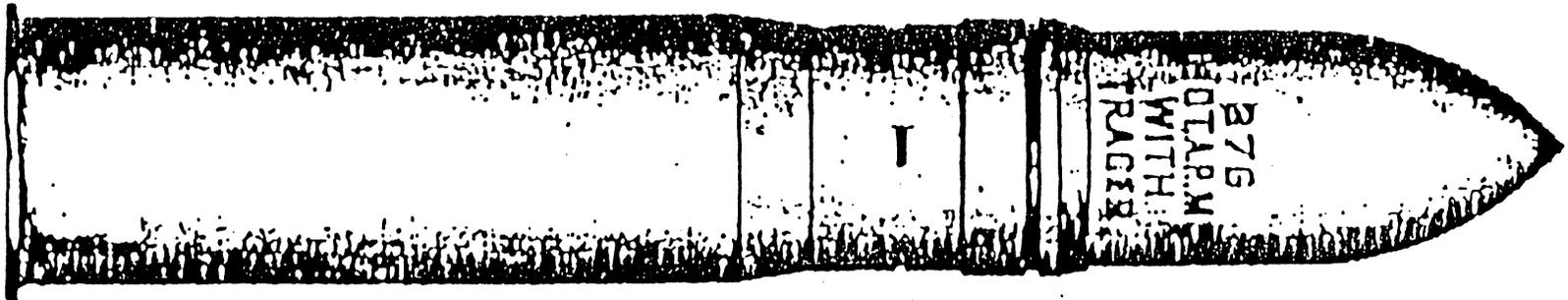
PROJECTILE, 37mm, AP, M80 w/TRACER

ECC Data Sht
C1 06/15/93

No fuzing or filler.

- * Length: 4.23"
- * Diameter of bourrelet: 1.45"
- * Diameter of base: 1.44"
- * Width of rotating band: .74"
- * Total weight: 1.66 lb
- * Construction: Made of solid steel with blunt nose and tracer recess. Very similar to M74 AP, but shorter and lighter weight.
- * Paint and markings: Painted black with white stenciling;"37 G. SHOT A.P. M80, WITH TRACER."
- * There is no armor-piercing cap or windshield fitted to this projo.
- * Tracer is made up of red tracer composition, and igniting composition, and a celluloid cup which fits over the tracer charge and is sealed with with adhesive. The tracer burns for approx 2000 yds of flight.

References: TM9-1904, 147 data sheet



PROJECTILE, 75mm, CHEMICAL, Mk II

ECC Data Sheet
Cl 06/15/93

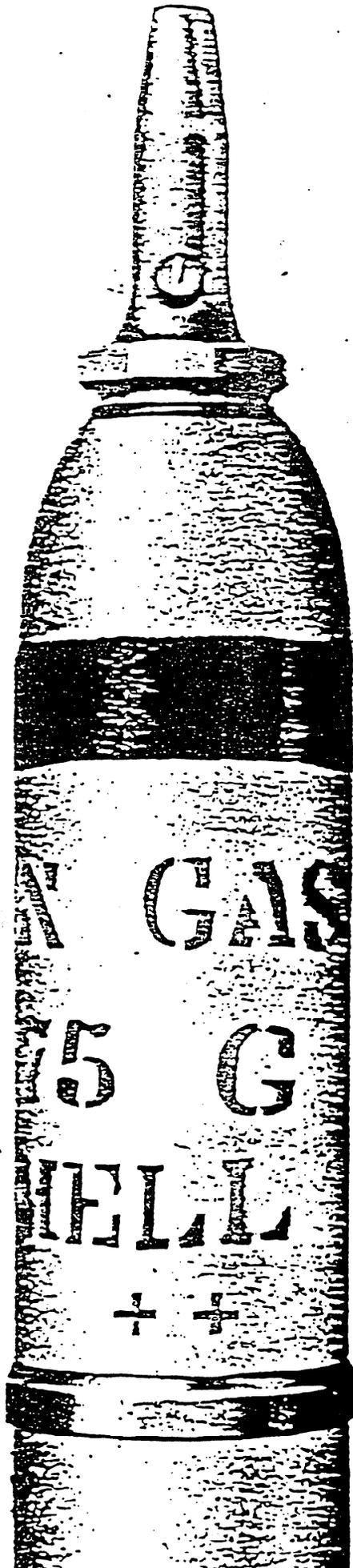
Fuzes Used: M46

Adapter booster used: Mk IV

- * Length: 10.49"
- * Diameter of bourrelet: 2.938"
- * Width of rotating band: .49"
- * Diameter of base: 2.85"
- * Total weight, less fuze: WP = 12.12 lb, FS = 12.20 lb
- * Weight of filler: WP = 1.82 lb, FS = 1.90 lb
- * Construction: Steel with pipe-threaded nose.
- * Old style WW I type projectile.
- * Differs from the Mk I HE projo only in that it is pipe-threaded in the nose and has no base plate.
- * Pipe threads in the nose insure gastight seal between adapter booster and nose of projectile.
- * Adapter booster performs the function of bursting the projo.
- * Adapter booster not entirely efficient in bursting the projo, sometimes fragmenting only the upper half and leaving the lower half in the form of a cup, which may carry a portion of the chemical filler onto the ground undispersed.
- * Projo will be found with 5 different fillers; FM, FS, H, NC, and WP.
- * The base color of chemical projo regardless of agent contained, is gray.
- * The marking of projo for the various fillers is shown in the following table.

Chemical Filler	Marking on Shell	
	Present Color Scheme	Old Color Scheme
H—persistent gas	H—GAS and 2 bands (all in green)	3 red bands
NC—persistent gas	NC—GAS and 2 bands (all in green)	1 white, 1 red and 1 yellow band
FM—smoke	FM—SMOKE and 1 band (all in yellow)	2 yellow bands
FS—smoke	FS—SMOKE and 1 band (all in yellow)	None
WP—smoke	WP—SMOKE and 1 band (all in yellow)	1 yellow band

References: TM9-1904, 147 data sheet



INCHES 1 2 3

PROJECTILE, 75mm, HE, M48

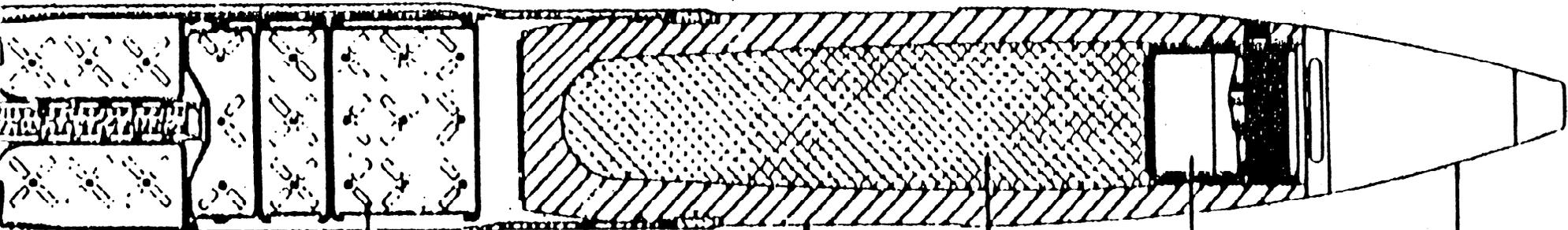
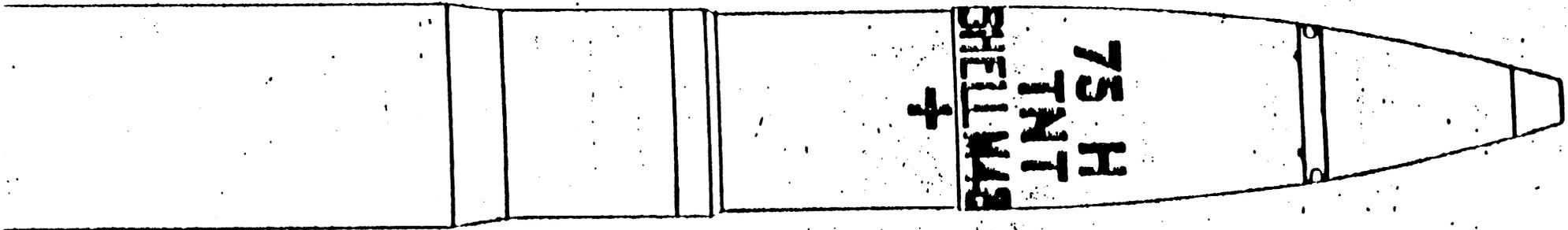
ECC Data Sht
C1 06/15/93

Fuzes Used: M48 PD, M54 TSQ

Booster Used: M20 & M20A1

- * Length less fuze: 11.26"
- * Diameter of bourrelet: 2.945"
- * Width of rotating band: .49"
- * Diameter of base: 2.48"
- * Total weight with fuze: 14.6 lb with M48 fuze.
- * Weight/Type filler: 1.47 lb cast TNT
- * Construction: Body made of forged steel with boat-tail base.
- * New type streamlined projo.
- * Paint and markings: Olive Drab with yellow markings or yellow with black marking. " 75H, TNT, SHELL, M48"
- * Booster held in place by set screw in nose and fuze is screwed into and staked to booster.

References: TM9-1904, TM43-0001-28, 147 data sheet



CARTRIDGE CASE
M54

PROPPELLING CHARGES
& ZONES

SHELL IS FREE FIT
IN CARTRIDGE CASE

BODY

EXPLOSIVE CHARGE

BOOSTER M22AU

FUSE PD M48
OR M54

PROJECTILE, 105mm, HE, M1

ECC Data Sht
C1 06/15/93

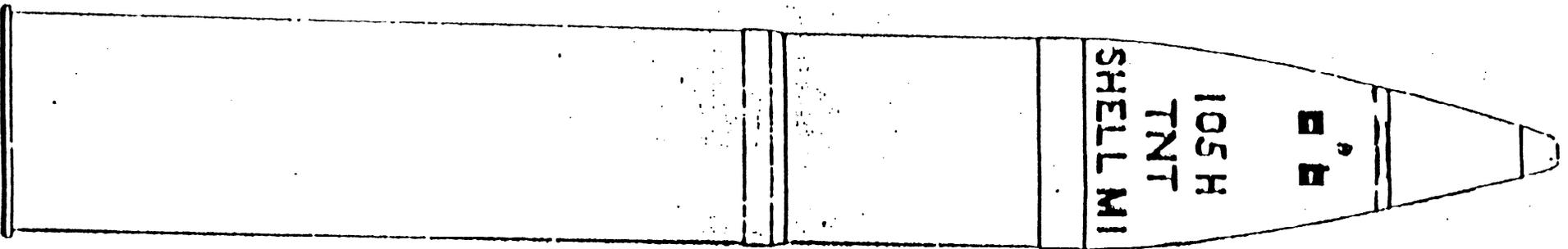
Fuzes Used: M39A2 PD, M48 PD, M54 TSQ

- * Length: 19.33"
- * Diameter of bourrelet: 4.146"
- * Width of rotating band: .81"
- * Diameter of base: 3.45"
- * Weight: 33 lbs.
- * Weight/Type filler: 4.9 lb. cast TNT, 4.57 lb 50/50 Amatol, or 4.96 lb. Trimonite.
- * Construction: Made of forged steel with boattail base and welded base cover.
- * Paint and markings: Painted yellow with black stencilling or OD with yellow stencilling: "105 H, TNT, SHELL M1."
- * A base cover of thin steel is welded to the base to minimize the danger of premature detonation of the bursting charge by the propellant.

References: TM9-1904, TM43-0001-28, 147 data sheet

Location Found: TS

Page P-61



FUZE, P.D., M48
OR T.S.Q. M54

FUZE WELL CUP

BOOSTER
M20A1

SHELL BODY

BURSTING CHARGE

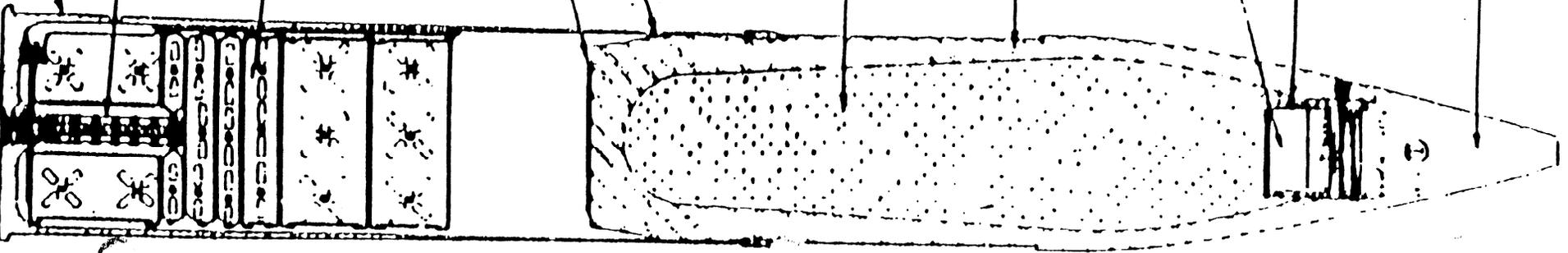
SHELL IS FREE
FIT IN CARTRIDGE
CASE

BASE COVER

PROPELLING CHARGE
(7 BAGS)

PRIMER PERCUSSION
MIBIA2

CARTRIDGE CASE
M14



MORTAR, 81mm, HE, M43, M43A1

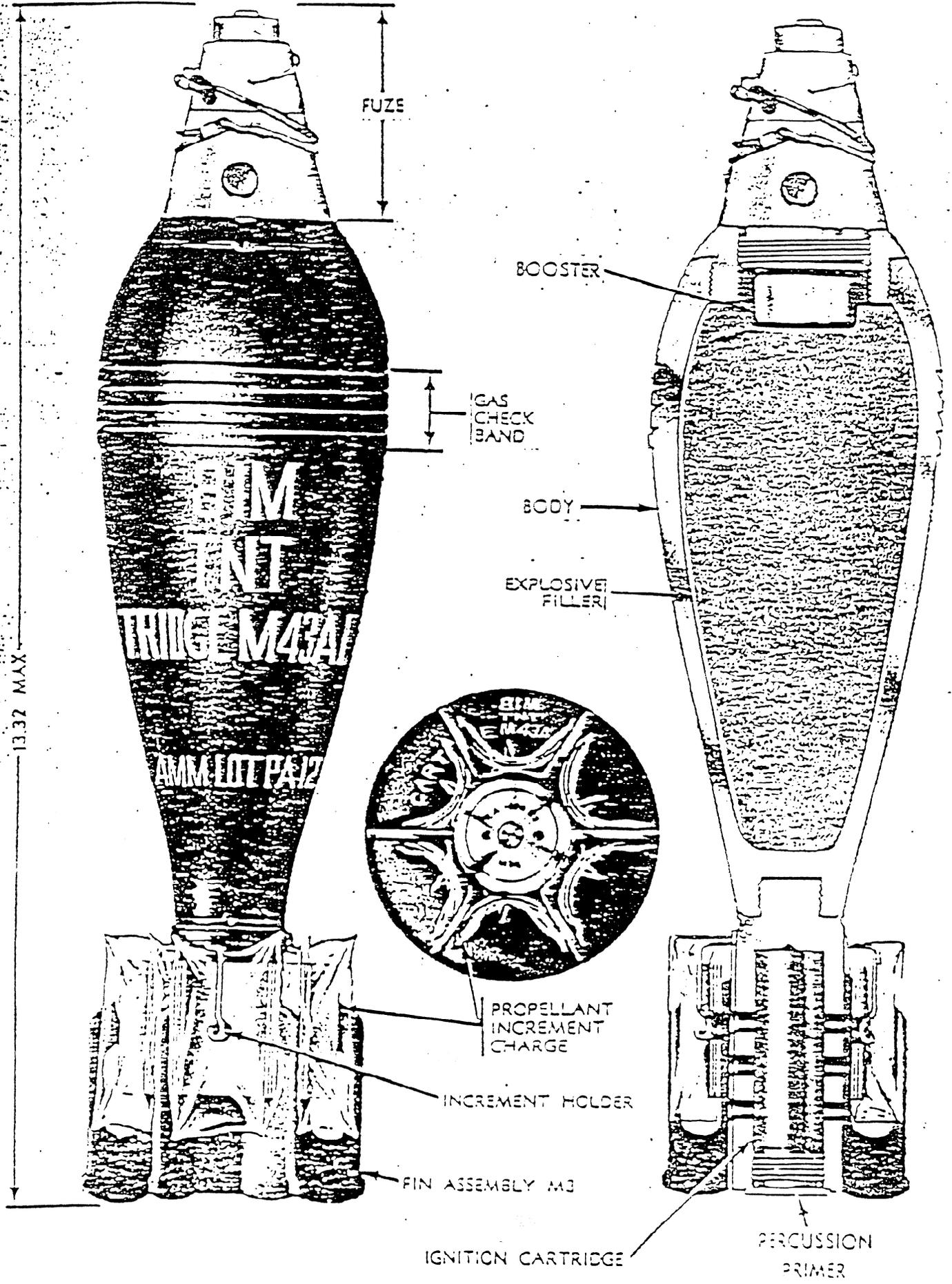
ECC Data Sht
C1 06/16/93

Fuzes Used: M43 = M45 PD, M43A1 = M52 PD

- * Length: 13.32"
- * Weight: 7.15"
- * Weight/type filler: TNT or Comp B, 1.29 lbs.
- * Construction: Made of forged steel.
- * Paint and markings: Painted OD with yellow markings " 81M,
COMP B or TNT, M43 or M43A1".

Function: The PD fuze functions on impact, detonating the fuze booster charge and, in turn, the high explosive charge.

References: TM9-1904, TM43-0001-28, TM9-1300-203



FUZE

BOOSTER

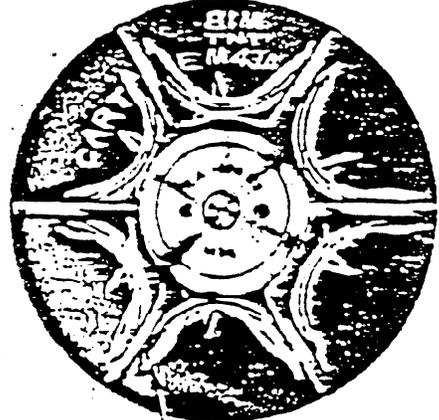
GAS CHECK BAND

BODY

EXPLOSIVE FILLER

1332 MM

M43A1
AMM LOT PA 12



PROPELLANT INCREMENT CHARGE

INCREMENT HOLDER

FIN ASSEMBLY M3

IGNITION CARTRIDGE

PERCUSSION PRIMER

GRENADE, RIFLE, AT, M9A1

ECC Data Sht
C1 06/16/93

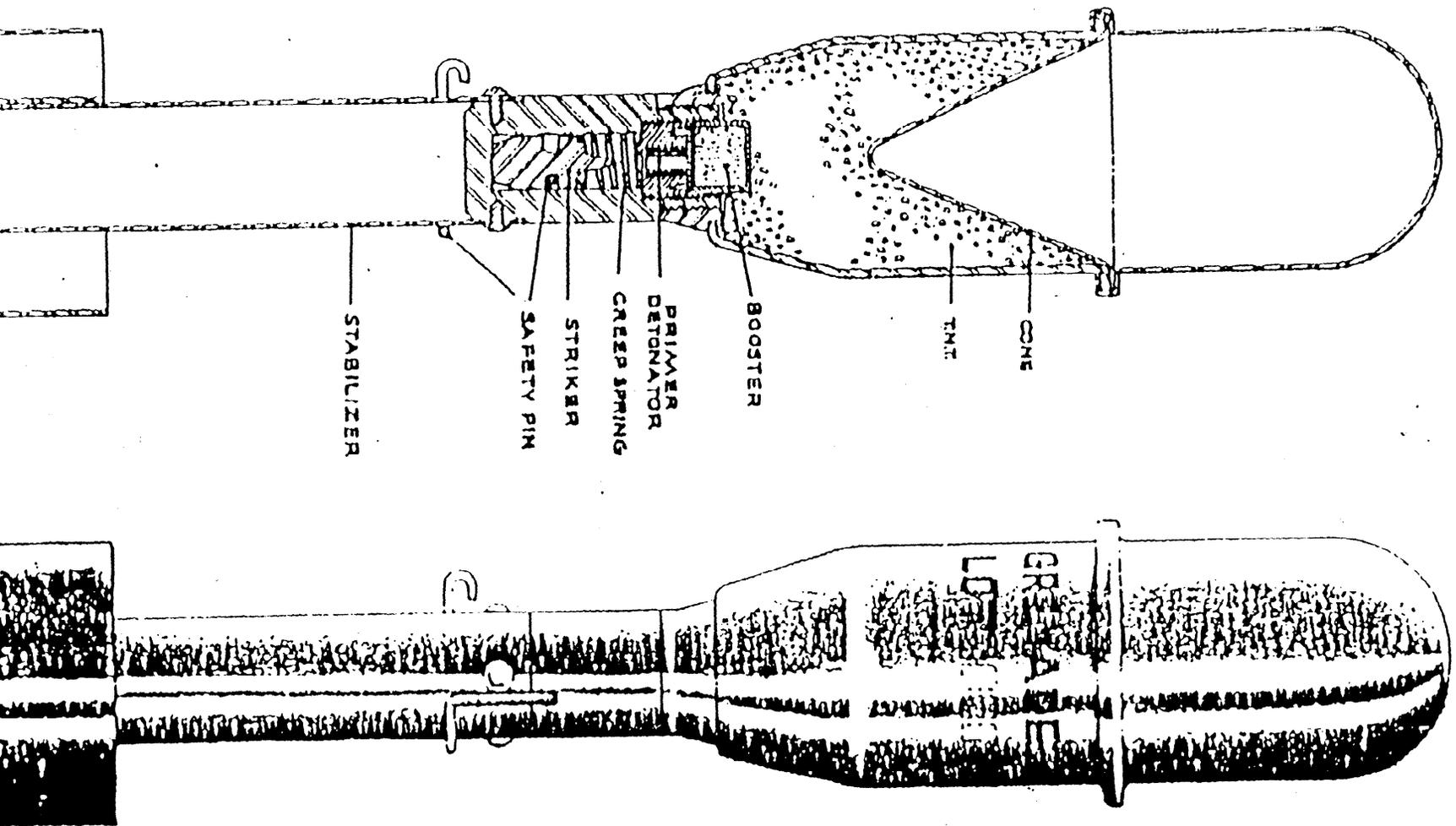
Fuzes Used: Integral impact-inertia BD

- * Length: 11.24"
- = Diameter: 2.25'
- = Weight: 1.23 lb
- = Weight/Type filler: 4 oz TNT shaped charge.
- * Construction: Body made of cast steel, ogive and stabilizer/fin assembly made of sheet steel.
- * Paint and markings: Painted OD with white stenciling on body.
- * Impact fuze consists of a striker held away from a detonator by a creep spring and a safety pin, and is assembled integrally with the stabilizer assembly. The safety pin projects through the fuze body and clamps around the stabilizer tube.
- * With pin withdrawn, a drop of two feet, nose-first, to a hard surface will cause the fuze to function.
- * M9 is an earlier model of this grenade. Uses same tail assembly but head is acorn-shaped and is equipped with a point fuze. The fuze is slightly less sensitive than the M9A1. The safety pin of the M9 is located in the base of the grenade body instead of in the stabilizer tube.

Function: The firing pin is removed, freeing striker. When grenade is fired, set-back holds the striker away from the detonator. On impact, the striker overcomes creep spring and impinges primer, functioning the fuze.

References: TM9-1904, OP-1664, data sheet

ANTI-TANK GRENADE, M9A1



APPENDIX A-5

PHOTOS OF OE CLEARANCE ACTIVITIES



Brush thinning operation.



Chipping brush waste for spreading on exposed ground surface.



Relocation of rattlesnake.



Establish search lanes for ordnance clearance.



Magnetometer sweeps to locate ordnance in areas of heavy brush. Note yellow ropes to mark sweep lanes.



Magnetometer sweeps.



Surface clearance operations.



Suspected UXO is flagged for detontion and removal.



UXO prepared for detonation.