HIGH-RISK MUNITIONS
IDENTIFICATION GUIDE

PREPARED BY
THE FOREIGN ORDNANCE SECTION, EOD DIVISION
US ARMY RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
PICATINNY ARSENAL, NEW JERSEY

FOR OFFICIAL USE ONLY
FOREWORD

All ammunition by its nature is dangerous. However some items are inherently more dangerous than others, either by intent or by design, and they require special caution when approaching and handling.

This publication, which is a compilation of "high-risk" munitions, is intended for Army EOD personnel to use as a training and reference guide. You can find more detailed information about the munitions listed in this handbook in various EOD publications.

To increase the usability of the publication, it has been divided into unclassified and classified sections. Use both sections to ensure a complete reference. Do not consider this handbook all inclusive, however, particularly in the area of landmines. Further information about "high-risk" munitions will be disseminated as it becomes available.

User comments are welcomed. Address them to:

Commander, ARDEC
ATTN: SMCAR-FSX (Bldg. 281)
Picutinny Arsenal, NJ 07806-5000
# TABLE OF CONTENTS

## SECTION A - DELAY ACTION FIRING DEVICES

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHEMICAL AND METAL FATIGUE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egyptian Igniter, Model Unknown</td>
<td></td>
<td>A-1</td>
</tr>
<tr>
<td>Spanish Firing Device, Model Unknown</td>
<td></td>
<td>A-2</td>
</tr>
<tr>
<td>U.K. Delay Firing Device, No. 9 Mk 1</td>
<td></td>
<td>A-3</td>
</tr>
<tr>
<td>U.K. Delay Firing Device, Mk 1</td>
<td></td>
<td>A-4</td>
</tr>
<tr>
<td>Former Yugoslav Firing Device, Model UDZK</td>
<td></td>
<td>A-6</td>
</tr>
<tr>
<td><strong>CLOCKWORK</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German Fuze, Tsch MW-60</td>
<td></td>
<td>A-7</td>
</tr>
<tr>
<td>U.S. Demolition firing Device, Mk 23 Mod 1</td>
<td></td>
<td>A-8</td>
</tr>
<tr>
<td>Former U.S.S.R. Fuzes, ChMV-10 &amp; ChMV-16</td>
<td></td>
<td>A-9</td>
</tr>
<tr>
<td>Former Yugoslav Firing Device, Model SU-10 M66/1</td>
<td></td>
<td>A-10</td>
</tr>
<tr>
<td>Former Yugoslav Firing Device, Model SU24Ch M70</td>
<td></td>
<td>A-11</td>
</tr>
<tr>
<td><strong>ELECTRONIC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Timer, Model EXDET</td>
<td></td>
<td>A-12</td>
</tr>
<tr>
<td>Belgian Firing Devices, NR 2121, NR2122 and NR2438</td>
<td></td>
<td>A-13</td>
</tr>
<tr>
<td>French Firing Device, Model ITS-110</td>
<td></td>
<td>A-14</td>
</tr>
<tr>
<td>French Fuze, Model TEMPO</td>
<td></td>
<td>A-15</td>
</tr>
<tr>
<td>Israeli Mortar Fuze, Model Coral</td>
<td></td>
<td>A-16</td>
</tr>
<tr>
<td>South African Timer, Model Unknown</td>
<td></td>
<td>A-17</td>
</tr>
<tr>
<td>U.S. Firing Device, Mk 48 Mod 0</td>
<td></td>
<td>A-18</td>
</tr>
<tr>
<td>Former Yugoslav Fuze, USE-T</td>
<td></td>
<td>A-19</td>
</tr>
<tr>
<td><strong>LEAD SHEAR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Former U.S.S.R. Mine Fuze, MUV-2</td>
<td></td>
<td>A-20</td>
</tr>
<tr>
<td>Former U.S.S.R. Mine Fuze, MUV-3</td>
<td></td>
<td>A-21</td>
</tr>
<tr>
<td>Former U.S.S.R. Mine Fuze, VZD-1M</td>
<td></td>
<td>A-22</td>
</tr>
<tr>
<td>Former U.S.S.R. Mine Fuze, VZD-3M</td>
<td></td>
<td>A-23</td>
</tr>
</tbody>
</table>

FOR OFFICIAL USE ONLY
SECTION B - ELECTRONIC ANTI DISTURBANCE FIRING DEVICES

- **ACOUSTIC**
  - Former Yugoslav Fuze, Model USA-T.......................... B-1

- **ANTIMINE SWEEPING**
  - South African Mine Fuze, Model Unknown....................... B-2

- **BREAKWIRE**
  - Belgian Firing Device, NR 2458..................................... B-3
  - French Firing Device, Model ITS-120............................... B-4
  - French Firing Device, Model ITS-110............................... B-5
  - French Firing Device, Model ITS-121............................... B-6
  - French Firing Device, Model PIAF................................. B-7
  - Former Yugoslav Fuze, UEPż......................................... B-8

- **MAGNETIC INFLUENCE**
  - South African Mine Fuze, Model Unknown....................... B-9
  - South African Mine Fuze, Model M8943A1.......................... B-10

- **MOVEMENT**
  - Chinese Apers Mine, Model Unknown............................. B-11
  - Italian Antilift Device, VS-AR4................................... B-12
  - South African Mine Fuze, Model M8926A1.......................... B-13
  - Country Unknown Apers Landmine, Model Unknown................. B-14
  - Former U.S.S.R. Mine Fuze, Model Unknown........................ B-15
  - Former Yugoslav Fuze, Model USI-T............................... B-16
  - Former Yugoslav Fuze, Model USV-T............................... B-17

- **PASSIVE IR**
  - Former U.S.S.R. Sensor, Model Unknown.......................... B-18

- **PHOTOELECTRIC**
  - South African Mine Fuze, Model Unknown....................... B-19
  - Former Yugoslav Fuze, Model USS-T............................... B-20

- **SEISMIC**
  - Former U.S.S.R. Mine Control Device, NVU-P..................... B-21
  - Former U.S.S.R. Seismic Sensor Control Dev, Mod Unk........ B-22

FOR OFFICIAL USE ONLY
SECTION C - MECHANICAL ANTILIFT FIRING DEVICES

Australian FIRING Devices, F1 and F1A1................................. C-1
Belgian Antilift Device, Model Unknown.............................. C-2
Former Czech FIRING Device, Model RO-3............................. C-3
Former Czech FIRING Device, Model RO-4............................. C-4
Former Czech FIRING Device, Model RO-7 III......................... C-5
French Landmine Fuze, Model 1952.................................... C-6
German Landmine Antilift Device, DM39A1......................... C-7
German Landmine Antilift Device, DM49.............................. C-8
Israeli FIRING Device, No. 9.......................................... C-9
Netherlands FIRING Device, No. 18C1\2C1............................ C-10
South African Mine Fuze, Model Unknown......................... C-11
Spanish FIRING Device, Model Unknown............................ C-12
Former Yugoslav FIRING Device, Model UMNOP-1.............. C-13
Former Yugoslav FIRING Device, Model UDOP-1.................... C-14
Former Yugoslav FIRING Device, Model UMOP-1.................... C-15

SECTION D - REMOTE CONTROL FIRING DEVICES

Chinese Radio Control System, Type 82............................. D-1
French Radio Control Device, Model ITS-15X....................... D-2
Italian Radio Control FIRING Device, Model VS-TE-R82........ D-3
South African Radio Control FIRING Device, Mod Unk.......... D-4
U.K. Radio Control Device, Type 68................................. D-5
U.K. Radio Control Device, Type 70................................. D-6

SECTION E - MINES

ANTIPERSONNEL
Chinese Landmine, Model Unknown................................. E-1
French Landmines, Models 61 and 63 "Picket"...................... E-2
Italian Landmines, Models VS-MK2 and VS-MK2 AR-AN...... E-3
Italian Landmine, Model VS-MK2-EL................................. E-4
Italian Landmines, VS 50 and VS 50 AR............................ E-5
SECTION F - SCATTERABLE ANTIPERSONNEL MUNITIONS

**FIXED OR RANDOM DELAY ACTION**
- Chilean Bomblet, PM-3 ........................................ F-1
- United Arab Emirates Bomb, B-1 ................................ F-2
- United Arab Emirates Bomb, B-1ET ........................... F-3
- U.S. Bomb Units, BLU-26/B, BLU-36/B and BLU-59/B .... F-4
- U.S. Bomb Units, BLU-63/B, -63A/B, -86/B, -86 A/B ....... F-5
- U.S. Grenades, M38 and M40 .................................. F-6
- Former U.S.S.R. Landmine, PFM-1 .............................. F-7

**FIXED OR RANDOM DELAY ACTION - ANTIDISTURBANCE**
- Chinese Landmine, Model Unknown ......................... F-8
- Chinese Landmine, Model Unknown ......................... F-9
SECTION G - SCATTERABLE ANTITANK MUNITIONS

Chinese Landmine, Type 84A.............................................. G-1
German Landmine, Model AT-II........................................ G-2
Italian Landmines, SB-81 and SB-81/AR-AN........................ G-3
U.S. Landmine, MOPMS.................................................. G-4
U.S. Landmine, M70 and M73........................................... G-5
U.S. Landmine Used in M56 Mine System........................... G-6
U.S. Landmine, BLU-91/B (Gator)..................................... G-7
U.S. Landmine, M75....................................................... G-8
U.S. Landmine Units, BLU-45/B....................................... G-9
U.S. Projectiles, RAAMS, M718, M718A1, M741................... G-10
Former Yugoslav Landmine, Model Unknown....................... G-11
Former U.S.S.R. Landmine, Model PTM-3............................ G-12

SECTION H - BOMBS

French Bombs, Types 200B and 200D (Matra)...................... H-1
French Bombs, SAMP Types 25 FE, 25 CDI, BL 25 FE....... H-2
French Bomb, STRIM Type 21.......................................... H-3
French Bomb, BAP-100 65............................................. H-4
French Bomb, BAP-100 M2............................................. H-5
French Bomb, Durandal.................................................. H-6
French Bomb, Type 200................................................ H-7
Spanish Bomb, Models BRF-125, -250, -500 and -1000... H-8
Spanish Bomb, Models BRFF-125, -250, -500 and -1000... H-9
Spanish Bomb, Model BR-250........................................ H-10
SECTION I - BOMB FUZES

■ DELAY ACTION - ANTIDISTURBANCE
  Argentine Bomb Fuze, Model GRT........................................... I-1
  Argentine Bomb Fuze, Model ELEAS 08 RV................................ I-2
  South African Bomb Fuze, Model AB112................................... I-3
  Spanish Bomb Fuze, Model GRC/AR........................................ I-4
  Spanish Bomb Fuze, Model GRL/AR........................................ I-5
  U.S. Bomb Fuze, FMU-35/B.................................................. I-6
  U.S. Bomb Fuze, FMU-72/B.................................................. I-7

■ DELAY ACTION - ANTIWITHDRAWAL
  Spanish Bomb Fuze, Model INFA RR....................................... I-8
  U.S. Bomb Fuze, FMU-30/B.................................................. I-9
  Former U.S.S.R. Bomb Fuze, AVDM........................................ I-10
  U.S. Bomb Fuze, M123, M124 and M125.................................. I-11
  U.S. Bomb Fuze, M132, M133 and M134.................................. I-12
  U.S. Bomb Fuze, Mk 346, Mod 0......................................... I-13

FOR OFFICIAL USE ONLY
DELAY ACTION FIRING DEVICES
Egyptian Igniter, Chemical Delay, Model Unknown

16 MM
(0.63 IN)

12 MM
(0.48 IN)

15 MM
(0.60 IN)

112 MM
(4.40 IN)

A-1
FOR OFFICIAL USE ONLY
Spanish Firing Device, Chemical Delay,
Model Unknown

8 MM
(0.32 IN)

109 MM
(4.30 IN)

COMMON SCREW W/HEX NUT

OLIVE DRAB UPPER BODY

CENTER BREAK

OLIVE DRAB LOWER BODY

RED SAFETY TAB

HOLE (4)

NOTE: DELAY ON THIS DEVICE RANGES FROM 20 MINUTES TO 12 HOURS.

A-2
FOR OFFICIAL USE ONLY
U.K. Delay Firing Device, L. Delay Switch, No. 9 Mk 1

NOTE: THE DELAY SWITCH FUNCTIONS ON THE BASIS OF METAL FATIGUE.
U.K. Delay Firing Device, AC Delay Igniter, Mk 1

Limpet: Rigid, Land Use, Model Unknown

25 MM (1.00 IN)

114 MM (4.50 IN)

140 MM (5.50 IN)

THREADED SPINDLE

THREADED CAP

BODY

COTTON WADDING

SPRING

SEALING DISC

AMPOULE

CELLULOID DISC

STRIKER

DETONATOR

A-4

FOR OFFICIAL USE ONLY
Former U.S.S.R. Firing Device, Chemical Delay, My-8

8 MM (0.31 IN)
108 MM (4.25 IN)
16 MM (0.63 IN)
133 MM (5.25 IN)

FIRING DEVICE
CARRRYING CASE

A-5
FOR OFFICIAL USE ONLY
Former Yugoslav Firing Device, Chemical Delay, Model UDZK

A-6

FOR OFFICIAL USE ONLY
German Fuze, Clockwork Delay, Tsch MW-60

FOR OFFICIAL USE ONLY
U.S. Demolition Firing Device, Mk 23 Mod 1

Device:
Mk 114 Mod 0

S&A Device:
Mk 39 Mod 0

Limpets:
Mk 1 Mod 2
Mk 2 Mod 1
(Practice)

Limpet Assembly,
Modular, Mk 5 Mod 0
& Underwater
Demolition Charge
(UDC)

FOR OFFICIAL USE ONLY
Former U.S.S.R. Fuzes, Clockwork Delay, ChMV-10 & ChMV-16

53 MM (2.09 IN)  100 MM (3.94 IN)

OUTER HOUSING CAP REMOVED

A-9

FOR OFFICIAL USE ONLY
Former Yugoslav Firing Device, Clockwork Delay, Model SU-10 M66/1
Former Yugoslav Firing Device, Clockwork Delay, Model SU24Ch M70

FOR OFFICIAL USE ONLY
Australian Timer, Electronic, Model EXDET
Belgian Firing Devices, Electronic, NR 2121, NR 2122, and NR 2438

Landmine, Antitank
NR 141/NR 141A1
NR 201

Demolition Charge,
NR 416

102 MM (4.02 IN)

67 MM (2.64 IN)

FOR OFFICIAL USE ONLY
French Firing Device, Breakwire, Electronic Delay
Model ITS-110

The ITS-110 can be used as both an electronic delay timer and/or as a breakwire-initiated boobytrap device.
French Fuze, Electronic Time, Model TEMPO

1. 2 lithium batteries
2. Transmitting phototransistor
3. Receiving phototransistor
4. 1 thumb-wheel for time base
5. Allusive face
6. 2 thumb-wheel for setting units and tens (00 - 99)
7. Red lamp (output pulse)
8. Green lamp (safety time)
9. Transparent cover
10. Body
11. Switch head
12. U-shaped arming key
13. Connector - detonator
14. Connector thread M 10 x 1
15. Detonator

FOR OFFICIAL USE ONLY
Israeli Fuze, Mortar, Delayed Action, Model Coral

FOR OFFICIAL USE ONLY
South African Timer, Electronic, Model Unknown

[Diagram of a timer with labels: DETONATOR WIRES, CONTAINER, ON/OFF SWITCH, LED, CONTAINER, LED, RED LIGHT, DETONATOR WIRES]

A-17
FOR OFFICIAL USE ONLY
U.S. Firing Device, Mk 48 Mod 0

Adapter Firing Device:
Mk 114 Mod 0

S&A Device:
Mk 39 Mod 0

Limpets:
Mk1 Mod2
Mk 2 Mod 1
(Practice)

Limpet Assembly,
Modular, Mk5 Mod 0 &
Underwater
Demolition charge
(UDC) Mk 122 Mod 0

FOR OFFICIAL USE ONLY
Former Yugoslav Fuze, Time, Special, Electronic USE-T

Purpose

The fuze is intended for assembly in mines and explosive devices activated within certain time.

Technical Data

The fuze time setting ranges from 5 minutes to 9999 minutes at the rate of 1 minute.
The fuze time arming is 300 s.
The fuze is power supplied from a battery.
Maximum power consumption from the battery amounts to 1500 µAmps.
The fuze operates within the temperature range of 253°K to 323°K (-20°C to +50°C).
The fuze activates one electric detonating primer.
The fuze dimensions are 93 x 73 x 35 mm.
The fuze mass is maximum 250 g.
Former U.S.S.R. Mine Fuze, Pull, Delay-Armed/Fired, MUV-2
Former U.S.S.R. Mine Fuze, Pull, Delay-Armed, MUV-3

Mines:
- OZM-72
- POMZ-72
- OZM-3
- OZM-4
- SM(Signal)
- PMD-6M

This fuze can also be used with boobytraps.

This fuze has a silicone dashpot delay feature.
Former U.S.S.R. Mine Fuze, Pull, Delay-Armed, VZD-1M

This fuze is used to initiate demolition charges and limpet mines.

Delay elements used with this fuze include 15, 30 min., 1, 3, 6, 12, and 24 hours.
Former U.S.S.R. Mine Fuze, Delay, Model VZD-3M

A-23

FOR OFFICIAL USE ONLY
ELECTRONIC
ANTIDISTURBANCE
FIRING DEVICES
Former Yugoslav Fuze, Special, Acoustic, Superquick, Model USA-T

Purpose

The fuze is intended for assembly in mines and explosive devices activated at a definite sound level.

Technical Data

The fuze can select four sound levels as follows: 90 dB, 100 dB, 110 dB and 120 dB.
The fuze time arming ranges from 270 s to 330 s.
The fuze is power supplied from a battery. Maximum power consumption from the battery is 250 $\mu$Amps.
The fuze operates within the temperature range of 253°K to 323°K ($-20^\circ$C to $+50^\circ$C).
The fuse activates one electric detonating primer.
The fuze dimensions are 93 $\times$ 73 $\times$ 35 mm.
The fuze mass is maximum 350 g.
South African Fuze, Mine, Antimine Sweeping/Photoelectric, Model Unknown
Belgian Firing Device, Electronic, Breakwire, NR 2458

1. DESCRIPTION:

An electronic igniting and firing device for any electrically actuated mechanism: antipersonnel, antitank and other types of mines, demolition charges, and incendiary or illuminating devices. This firing device includes three connection sockets and two check indicator lights.

2. OPERATION:

The device is actuated by breaking one of the sensors connected to it (fine wires or any other electrical conductor).

In the case of a fine wire (invisible on the ground):
- 1 connection socket permits a 1,200-meter length of wire to be used
- 2 connection sockets permits two 600-meter lengths of wire to be used
- 3 connection sockets permits three 400-meter lengths of wire to be used

In the case of any other electrical conductor, such as barbed wire, no matter how many sockets are used, there is no length limitation.
ITS-120 firing device shown mounted to the French MIACAH F1 mine.
French Firing Device, Breakwire, Electronic Delay
Model ITS-110

The ITS-110 can be used as both an electronic delay timer and/or as a breakwire-initiated boobytrap device.

B-5
FOR OFFICIAL USE ONLY
French Firing Device, Breakwire, Model ITS-121

B-6

FOR OFFICIAL USE ONLY
French Firing Device, Breakwire, Model PIAF

DIMENSIONS:
Dia. 120 MM
Height 150 MM

The PIAF is noise activated, having a sensor that enables the system to discriminate targets. The breakwire is an optical fiber. In addition, the device can be programmed to self-neutralize after 3, 6, 12, 24, 48, 72, or 96 hours.

FOR OFFICIAL USE ONLY
Former Yugoslav Fuze, Electronic, Model UEPž

ELECTRONIC FUZE WITH TRIPWIRE

Applicable as anti-personnel mine or for remote object destroying. The wire of defined tearing-off strength is used as the sensor, and the fuze activation is initiated by its breakage. Wire length can be adjusted to the specific application. Arming is done 20 minutes after pulling the arming key out, and can be also 5 minutes at customer's request. After setting-up procedure functioning is tested by an indicator.

TECHNICAL DATA

- Time until arming: 1.220 s (nominal)
- Length of tripwire: 100 m (nominal)
- Wire interruption force: 3 daN
- Operating autonomy: 3 months

B-8
FOR OFFICIAL USE ONLY
South African Fuze, Mine, Electromagnetic, Model Unknown

FOR OFFICIAL USE ONLY
South African Fuze, Mine, Magnetic, Model M8943A1

FOR OFFICIAL USE ONLY
Chinese Mine, Apers, Electronic, Model Unknown

NOTE:

(1) THIS MINE MAY ALSO BE DEPLOYED AS A BOOBY TRAP.
(2) THE MINE IS BELIEVED TO BE OLIVE DRAB WITH A TAN BASE AND BLACK MARKINGS.
(3) THE MINE IS ANTIDISTURBANCE, SELF-DESTRUCT, AND CONTAINS AN ARMING DELAY FROM 3 TO 10 MINUTES.
Italian Antilift Device, VS-AR4

Landmines:
VS-2.2 AT
VS-50 Apers
Valmara Apers
VS-1.6 AT

FOR OFFICIAL USE ONLY
South African Fuze, Mine, Electronic, Antihandling, Model M8926A1

110 MM (4.30 IN)

50 MM (2.00 IN)

YELLOW BAND
Country Unknown Landmine, Apers, Antidisturbance, Model Unknown

NOTE: DIMENSIONS ARE APPROXIMATE

FOR OFFICIAL USE ONLY
Former U.S.S.R. Mine Fuze, Delay, Model Unknown
Former Yugoslav Fuze, Special, Inertia, Superquick, Model USI-T

Purpose

The fuze is intended for assembly in mines and explosive devices activated at certain inertia level.

Technical Data

The fuze is activated at the minimum acceleration ranging from 1 m/s² to 5 m/s².
Time arming of the fuze ranges from 270 to 330 s.
Maximum power consumption from the battery amounts to 10 μAmps.
The fuze operates within the temperature range of 253°K to 323°K (−20°C to −50°C).
The fuze activates one electric detonating primer.
The fuze dimensions are 93 × 73 × 35 mm. The fuze mass is maximum 250 g.
Former Yugoslav Fuze, Special, Vibrating, Superquick, Model USV-T

Fuze, Special, Vibrating, Superquick

Purpose

The fuze is intended for assembly in mines and explosive devices activated at vibrations of definite acceleration.

Technical Data

The fuze can select four acceleration levels appearing during vibrations as follows: 0.001 m/s²; 0.01 m/s²; 0.1 m/s² and 1 m/s².
The fuze time arming ranges from 270 s to 330 s.
The fuze is power supplied from a 7 V to 9.5 V battery.
Maximum power consumption from the battery is 250 µAmps.
The fuze operates within the temperature range of 253°K to 323°K (−20°C to +50°C).
The fuze activates one electric detonating primer.
The fuze dimensions are 93 x 73 x 35 mm.
The fuze mass is maximum 350 g.
Former U.S.S.R. Sensor, Passive IR, Model Unknown

Dimensions:
Max Dia. 95 MM
Length 240 MM

This sensor has a detection range of from 2 to 50 meters.

B-18

FOR OFFICIAL USE ONLY
South African Fuze, Mine, Antimine Sweeping/Photoelectric, Model Unknown

B-19

FOR OFFICIAL USE ONLY
Former Yugoslav Fuze, Instantaneous, Special, Light, Model USS-T

Purpose

The fuze is intended for assembly in mines and explosive devices activated when illuminated to certain level.

Technical Data

The fuze is activated when illuminated by 2Lx to 7Lx, min.
The fuze time arming ranges from 270 s to 330 s.
The fuze is power supplied from a battery.
Maximum power consumption from the battery amounts to 10 µAmps.
The fuze operates within the temperature range of 253°K to 323°K (−20°C to +50°C).
The fuze activates one electric detonating primer.
The fuze dimensions are 93 × 73 × 35 mm.
The fuze mass is maximum 250 g.

FOR OFFICIAL USE ONLY
Former U.S.S.R Mine Control Device, NVU-P

Dimensions:
Dia. 125 MM
Height 270 MM

This device is used for the successive detonation of 5 antipersonnel mines, such as the OZM-72 or type MON-50. It uses seismic sensors to detect targets.

B-21

FOR OFFICIAL USE ONLY
Former U.S.S.R Seismic Sensor Control Device, Model Unknown

This device has a maximum detection range of 200 meters long by 5 meters wide. The false alarm rate is reported to be not more than 1 per 500 hours of operation.

B-22

FOR OFFICIAL USE ONLY
Former Yugoslav Fuze, Instantaneous, Special, Thermal, Model UST-T

Purpose

The fuze is intended for assembly in mines and explosive devices activated at certain temperature.

Technical Data

The fuze is activated at the minimum temperature of 213°C to 343°C (−60°C to +70°C). The fuze time arming is 270 s to 330 s. The fuze is power supplied from a battery. Maximum power consumption from the battery is 30 μAmps. The fuze operates within the temperature range 213°C to 343°C (−60°C to +70°C). The fuze activates one electric detonating primer. The fuze dimensions are 93 x 73 x 35 mm. The fuze mass is maximum 250 g.
MECHANICAL
ANTILIFT
FIRING DEVICES
Australian Firing Devices, Combination, F1 & F1A1
Belgian Antilift Device, Model Unknown

Used With:
PRB III AT Mine

Detonator Holder
Tab
Primer Housing
Body
Spring Clip
Arming Cord
Inner Release Disk
Plunger
Hinge Lug (2)
Primer (2)
Projection (2)
Outer Release Disk
Fitting Pin (2)
Plunger Spring

C-2
FOR OFFICIAL USE ONLY
Former Czech Firing Device, Antilift, Model RO-3

Used With:
- PT-Mi-K
- AT Mine

C-3

FOR OFFICIAL USE ONLY
Former Czech Firing Device, Antilift, Model RO-4

C-4
FOR OFFICIAL USE ONLY
Former Czech Fuze, Antiremoval, Model RO-7 III

Used With:
PT-Mi-Ba
AT Mine

This fuze functions similar to the RO-7 and RO-7 II fuzes. The functioning of the antidisturbance feature is unknown.
French Landmine Fuze, Antidisturbance, Model 1952

58 MM
(2.30 IN)

23 MM
(0.90 IN)

C-6
FOR OFFICIAL USE ONLY
German Landmine Antilift Device, DM39A1
Israeli Firing Device, Demolition, Pressure Release, No. 9

18 MM
(4.65 IN)

20 MM (0.78 IN)

CLOSING COVER

SAFETY PIN

C-9

FOR OFFICIAL USE ONLY
Netherlands Firing Device, Pressure Release, No. 18C1/2C1
South African Fuze, Mine, Pressure Release, Model Unknown

C-11

FOR OFFICIAL USE ONLY
Spanish Firing Device, Pressure Release, Model Unknown

TOP VIEW

C-12
FOR OFFICIAL USE ONLY
Former Yugoslav Firing Device, Multipurpose, Model UMNOP-1

This firing device functions under the forces of pressure, pressure release, axial pull and radial pull.
Former Yugoslav Firing Device, Pressure Release, Pull, Model UDOP-1
Former Yugoslav Firing Device, Pressure Release, Pull, Model UMOP-1

3 to 15 Kg Restraining Weight

UMOP-1 Setup in the Pressure Release Mode

Explosive Charge

C-15

FOR OFFICIAL USE ONLY
REMOTE CONTROL
FIRING DEVICES
Chinese Radio Control System, Type 82

Remote Control Transmitter Type 82

1. Transmitting power: Pulse power more than 15 watts
2. Power supply: DC, 25 volts (storage battery can be recharged)
3. Antenna type: 2.7-meter whip antenna (at top)
4. Weight: 9 kg
5. Dimensions: 235 mm x 290 mm x 115 mm

Remote Control Receiver, Type 82

1. Sensitivity: not worse than 50 μV/M (S/N ≥ 3)
2. Medium frequency resistant ratio: not less than 80 dB
3. Image frequency resistant ratio: not less than 80 dB
4. Power: DC, 6 volts (model LR20 high energy battery)
5. Power supply type: intermittence
6. Weight: 2.5 kg
7. Dimensions: 230 mm x 95 mm x 100 mm

- With power in the unit, it is possible to operate normally for 10 days.
- Connected with 100 meters of engineer wire, it is possible to explode the #8 electric detonator, 20 in series or 2 in parallel at the same time.
French Radio Control Device, Model ITS-15X
Italian Firing Device, Radio Control, Model
VS-TE-R82

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference code:</td>
<td>VS-TE-R82</td>
</tr>
<tr>
<td>Carrier Frequency:</td>
<td>factory-selectable between 65 and 88 MHz.</td>
</tr>
<tr>
<td>Modulation:</td>
<td>Tone-code FM modulation</td>
</tr>
<tr>
<td>Possible Code Combinations:</td>
<td>$10^4$</td>
</tr>
<tr>
<td>Power Supply:</td>
<td>Lithium or rechargeable Ni-Cd power pack.</td>
</tr>
<tr>
<td>Operational life: (with lithium batteries)</td>
<td>transmitter - 3600 firings receiver - 3600 firings or, alternatively, one firing after 15 days of permanent switching “ON”.</td>
</tr>
<tr>
<td>Arming Delay:</td>
<td>The receiver is provided with a mechanical safety device which powers the firing circuits 10 minutes after committing to arm</td>
</tr>
<tr>
<td>Fire Voltage:</td>
<td>12 VDC</td>
</tr>
<tr>
<td>Max Fire Current:</td>
<td>3.5 A</td>
</tr>
<tr>
<td>Dimensions (each unit):</td>
<td>245 x 135 x 75 mm.</td>
</tr>
<tr>
<td>Weight (with lithium power pack):</td>
<td>Each unit: 3.3 kg</td>
</tr>
<tr>
<td>Temperature limits:</td>
<td>for firing: $-32^\circ$ to $+60^\circ$ C for storage: $-40^\circ$ to $+70^\circ$ C</td>
</tr>
</tbody>
</table>

FOR OFFICIAL USE ONLY
South African Firing Device, Radio Control, Model Unknown

Transmitter

Receiver

D-4
FOR OFFICIAL USE ONLY
U.K. Radio Control Device, Type 68

TX68-12 12 channel transmitter
TX68-16 16 channel transmitter
RX68-1 Single output receiver
RX68-10 10 output receiver

FOR OFFICIAL USE ONLY
U.K. Radio Control Device, Type 70

TX70 Transmitter

RX70 Receiver

FOR OFFICIAL USE ONLY
MINES
Chinese Landmine, Apers, Boobytrap, Model Unknown
(Copy of German PPM-2)
French Landmines, Apers, Models 61 and 63 "Picket"

270 MM (10.63 IN)

35 MM (1.38 IN)

SHIPPING CAP

MODEL 61

MODEL 63

FOR OFFICIAL USE ONLY
Italian Landmines, Apers, Models VS-MK2 and VS-MK2 AR-AN

33 MM (1.29 IN)

90 MM (3.54 IN)
Italian Landmine, Apers, Model VS-MK2-EL
Italian Landmines, Apers, VS 50 and VS 50 AR

VS-50 AND VS-50AR

VS-50 W/ANTILIFT DEVICE

SAFETY PIN

VS 50AR

VS50
Austrian Landmine, AT, PM 83

750 MM
(29.53 IN)

140 MM
(5.51 IN)

280 MM (11.02 IN)

TILT ROD MAY BE FOUND AT ANY OF FOUR PIEZOELECTRIC SENSOR POSITIONS.

FOR OFFICIAL USE ONLY
French Landmine, AT, APILAS-Mine

1.0 M
(39.37 IN)

E-7
FOR OFFICIAL USE ONLY
French Landmine, AT, HPD-F1

UNCLASSIFIED

FOR OFFICIAL USE ONLY
French Landmine, AT, HPD-F2

NOTE: THE MINE IS SELF-NEUTRALIZING AND ANTIDISTURBANCE.
French Landmine, AT, HPD-1A

NOTES:  (1) THE MINE IS SELF-NEUTRALIZING AND ANTI-DISTURBANCE.
(2) THE MINE HAS A MAGNETIC SENSOR.

FOR OFFICIAL USE ONLY

E-10
French Landmine, AT, HPD-3

NOTES:  
(1) THERE ARE TWO MODELS OF THIS MINE. ONE CONTAINS 2.4 KILOGRAMS (5.3 POUNDS) OF UNKNOWN EXPLOSIVE, AND THE OTHER CONTAINS 1.4 KILOGRAMS (3.1 POUNDS) OF UNKNOWN EXPLOSIVE.  
(2) THE MINES ARE SELF-NEUTRALIZING AND ANTI-DISTURBANCE. BOTH MINES HAVE SEISMIC AND MAGNETIC SENSORS.

E-11
FOR OFFICIAL USE ONLY
French Landmine, AT, Off-Route, IRMAH Type F1

INFRARED BARRIER SENSOR

FOR OFFICIAL USE ONLY
This mine becomes active upon receiving a seismic signature. It is magnetic-influence fired.
German Landmine, AT, Off-Route, PARM 1

128 MM
(5.04 IN)

LENGTH UNKNOWN
Italian Landmines, AT, Models FD and SH-55

FD MINE WITH VS-N FUZE

FD MINE WITH FD-64 OR SH-160 FUZE

FOR OFFICIAL USE ONLY
Italian Landmines, AT, SB-MV and SB-MV/AR

236 MM (9.29 IN)

101 MM (3.98 IN)

ARMING LEVER

E-16
FOR OFFICIAL USE ONLY
Italian Landmine, AT, TCE-6

179 MM (7.05 IN)
273 MM (10.75 IN)

FOR OFFICIAL USE ONLY
Italian Landmine, AT, VS-HCT

Wait 192 days to approach; do not approach with ferrous metal; do not disturb.

E-18
FOR OFFICIAL USE ONLY
Italian Landmine, AT, VS-HCT2

128 MM (5.04 IN)

260 MM (10.24 IN)

VS-HCT2

MOD 1

MOD 2

E-19

FOR OFFICIAL USE ONLY
South African Landmine, AT, Off-Route, Model Unknown

NOTE: LANDMINE MAY CONTAIN AN ANTIDISTURBANCE MECHANISM.

FOR OFFICIAL USE ONLY
Swedish Landmines, AT, FFV 028, FFV 028 RU, and FFV 028 SD

Wait 45 days to approach; do not approach with ferrous metal; do not disturb.

E-21

FOR OFFICIAL USE ONLY
Swedish Landmine, AT, FFV 028 SN

Wait 225 days to approach; do not approach with ferrous metal; do not disturb.

E-22

FOR OFFICIAL USE ONLY
U.S. Landmine, AT/AV, Selectable, Lightweight, Model XM2
Former U.S.S.R. Landmine, AT, Magnetic-influence, TM-72

DIMENSIONS:
Dia. 250 MM
Height 128 MM

FOR OFFICIAL USE ONLY
Former U.S.S.R. Landmine, AT, Off-Route, Model TM-83

IR Sensors

Concave forward end of the mine

Stand

E-25
FOR OFFICIAL USE ONLY
<table>
<thead>
<tr>
<th>Designation</th>
<th>&quot;MBP-62M&quot;</th>
<th>&quot;MBЧ-62&quot;</th>
<th>&quot;MBH-80&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Mechanical, pressure-action, with time-delay element (pneumatic)</td>
<td>Mechanical, pressure-action, with time-delay mechanism (clockwork)</td>
<td>Electronic, proximity-contact fuze with time-delay element (hydraulic)</td>
</tr>
<tr>
<td>Weight, kg</td>
<td>0.45</td>
<td>0.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Dimensions, mm:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- diameter</td>
<td>125</td>
<td>145</td>
<td>125</td>
</tr>
<tr>
<td>- height</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Fuze Seat Thread</td>
<td>KP 125 x 5</td>
<td>KP 125 x 5</td>
<td>KP 125 x 5</td>
</tr>
<tr>
<td>Pressure/Throw-away Force on the Actuation Button, N</td>
<td>Pressure Action, 30 to 200</td>
<td>Pressure Action, 30 to 150</td>
<td>Pressure Action, 1100</td>
</tr>
<tr>
<td>Actuating Force, N</td>
<td>1500 to 6000</td>
<td>1500 to 5500</td>
<td>It responds to Tank Magnetic Signature</td>
</tr>
<tr>
<td>Operational Temperature Range, °C</td>
<td>-50 to +50</td>
<td>-50 to +50</td>
<td>-30 to +50</td>
</tr>
<tr>
<td>Off-the-Shelf Item</td>
<td>Each packing contains 24 fuzes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelf Life, years</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Features</td>
<td>It is not detected by induction mine detector</td>
<td>It is fully resistant to both mine clearing line charge explosion and the detonation of a neighbouring mine</td>
<td>It allows remote target detection, and besides it can be switched over to the &quot;safe&quot; position using a control device. The fuze is resistant to both mine clearing line charge explosion and the detonation of a neighbouring mine. The explosive trains of the fuze is interrupted in the transporting position. The fuze can be used with either buried or surface-laid AT mines which are laid manually or mechanically. The fuze can be switched over from the &quot;live&quot; position to the transporting position without removing it from the mine, to be reused later on.</td>
</tr>
</tbody>
</table>
Netherlands Landmine, River, Influence, MIRJAM

FOR OFFICIAL USE ONLY
SCATTERABLE
ANTIPERSONNEL
MUNITIONS
Chilean Bomblet, Area Denial, Frag, Incendiary, PM-3

NOTES:

(1) THE BOMBLET CONTAINS AN INTERNAL DELAYED ACTION FUZE THAT IS FACTORY SET TO DETONATE FROM 30 SECONDS TO 72 HOURS. THE FUZE IS ELECTRONIC, CONTAINS A BATTERY, AND IS ACTIVATED UPON RELEASE FROM THE CLUSTER.

(2) THE TOTAL WEIGHT OF THE BOMBLET IS 2.2 KILOGRAMS (4.9 LBS). IT CONTAINS 588 GRAMS (1.3 LBS) OF RDX OF WHICH 144 GRAMS (5.1 OZ) IS AN INCENDIARY COMPOUND.

(3) THE COLOR OF THE BOMBLET IS UNKNOWN.

(4) THERE ARE 970 BALL BEARINGS IN EACH BOMBLET. ANY BOMBLET FOUND OUTSIDE OF A DISPENSER SHOULD BE CONSIDERED ARMED AND FUNCTIONING. A CB-770 DISPENSER CONTAINS 121 BOMBLETS.

FOR OFFICIAL USE ONLY
United Arab Emirates Bomb, Frag, B-1

Dispenser:
B-1

343 MM
(13.50 IN)

53 MM
(2.10 IN)

57 MM
(2.25 IN)

ELECTRICAL PROGRAMING CABLE ACCESS HOLE (2)

YELLOW COLOR BAND

F-2
FOR OFFICIAL USE ONLY
United Arab Emirates Bomb, Frag, B-1ET

Dispenser:
B-1 (Modified)

53 MM  
(2.10 IN)

58 MM  
(2.30 IN)

320 MM  
(12.60 IN)

YELLOW COLOR  
BAND

ELECTRICAL PROGRAMING  
CABLE ACCESS HOLE (2)

F-3

FOR OFFICIAL USE ONLY
U.S. Bomb Units, Frag, BLU-26/B, BLU-36/B, BLU-59/B

Dispensers:
SUU-24/A
SUU-30/B, 30A/B,
30B/B, 30C/B
SUU-30E/B
(BLU 26/B only)

64 MM
(2.50 IN)

F-4
FOR OFFICIAL USE ONLY
U.S. Bomb Units, BLU-63/B, BLU-63A/B, BLU-86/B, BLU-86A/B

Dispensers:
SUU-30H/B
SUU-54A/B
SUU-51B/B
(BLU-63/B Only)

Missile:
MGM-52C

Guided Bomb System:
GBU-2A/B

76 MM (3.00 IN)
U.S. Grenades, Frag, M38 and M40

Dispensers:
SUU-24/A
(M40 only)
SUU-30C/B
Mk5 Mod 0

Rocket:
762-MM
(Honest John)

Adapter Unit:
ADU-256A
(M40 only)

FOR OFFICIAL USE ONLY
Former U.S.S.R. Landmine, Apers, PFM-1

Dispenser: RBK-Series
Chinese Landmine, APERS, Scatterable, Electronic, Model Unknown

**NOTES:**

(1) THE MINE CAN BE EMIPLACED MANUALLY OR BY ROCKET.
(2) THE ARMING DELAY TIME VARIES FROM 2.5 TO 3.0 MIN.
(3) THE SELF-DESTRUCT TIMES ARE 1-3, 4-6, 7-9, 10-12, OR 13-15 DAYS.
(4) THE MINE IS GREEN OR GRAY.
(5) THE MINE MAY CONTAIN AN ANTIDISTURBANCE FEATURE.

FOR OFFICIAL USE ONLY
Chinese Landmine, APERS, Scatterable, Electronic, Model Unknown

NOTES:

(1) THE MINE IS GREEN.
(2) PRESSURE REQUIRED TO FUNCTION THE MINE IS 5.00 TO 20.00 KILOGRAMS (11.02 TO 44.09 LBS).
(3) THE MINE IS ANTIDISTURBANCE AND SELF-DESTRUCT.
(4) THE SELF-DESTRUCT TIMES ARE:
   2 DAYS, 18 HOURS TO 2 DAYS, 21 HOURS
   4 DAYS, 14 HOURS TO 4 DAYS, 19 HOURS
   7 DAYS, 8 HOURS TO 7 DAYS, 16 HOURS
   14 DAYS, 17 HOURS TO 15 DAYS, 7 HOURS.
(5) THE MINE weighs 206 GRAMS (7.3 OUNCES).

FOR OFFICIAL USE ONLY
Spanish Bomblet, Area Denial, Model SNA

NOTES:

(1) THE BOMBLET WEIGHS 820 GRAMS (28.9 OUNCES). IT HAS AN HE CHARGE WITH INCENDIARY FEATURES.
(2) THE BOMBLET IS USED IN INTERDICTION (AREA DENIAL) OPERATIONS. THE FRAGMENTARY SHELL IS EFFICIENT AGAINST LIGHT VEHICLES, LIGHT ARMORED VEHICLES, AND AIRCRAFT ON RUNWAYS.
(3) WHEN THE BOMBLET IS EJECTED FROM THE DISPENSER THE PARACHUTE DEPLOYS, AFTER 0.6 SECOND DELAY FUZE IS ARMED, AND ON IMPACT THE PREPROGRAMMED DELAY BEGINS. ANY ATTEMPT TO MOVE THE BOMBLET WILL RESULT IN A DETONATION. OTHERWISE IT WILL DETONATE AT THE END OF A PRESET DELAY THAT MAY BE PROGRAMMED RANDOMLY FROM 1 MINUTE TO 24 HOURS.

FOR OFFICIAL USE ONLY
U.K. Landmine, Area Denial, HB876

Diameter: 100 MM

Length: 150 MM
U.S. Bomb, Frag, 4-lb, M83 (Butterfly) (Obsolete)

Cluster Bombs:
M15, 15A1, 15A2,
M16, 16A1, 16A2

FOR OFFICIAL USE ONLY
U.S. Landmine, Apers, Area Denial Artillery Munition (ADAM)

Projectiles:
155-MM, HE, M692
155-MM, HE, M731

FOR OFFICIAL USE ONLY
U.S. Landmine, Apers, BLU-92/B (Gator)

Dispensers:
SUU-58/B
SUU-64/B

FOR OFFICIAL USE ONLY
U.S. Landmine, Apers, For M131 Modular Pack Mine System (MOPMS)

Dispensers:
M131 Modular Pack Mine System (MOPMS)

MINE WITH SPRING FINGER ASSEMBLY

121 MM (4.75 IN)

66 MM (2.60 IN)

MINE WITH SPRING FINGER AND BORERIDER TIMER ASSEMBLIES REMOVED

SPRING FINGER (8)

MINE WITH SPRING FINGER ASSEMBLY (EARLY MODEL)

SPRING FINGER (8)

MINE WITH SPRING FINGER ASSEMBLY (LATE MODEL)

FOR OFFICIAL USE ONLY
U.S. Landmine, Apers, For M139 Multiple Mine Delivery System (Volcano)

Dispenser:
M139 Multiple Delivery Mine system (Volcano)

Mine Canister:
M87 (Tactical)
M88 (Practice)

MINE WITH SPRING FINGER ASSEMBLY

MINE WITH SPRING FINGER ASSEMBLY (EARLY MODEL)

MINE WITH SPRING FINGER ASSEMBLY (LATE MODEL)

FOR OFFICIAL USE ONLY
U.S. Landmine, Apers, M74

FOR OFFICIAL USE ONLY
U.S. Mine Units, Apers, BLU-42/B, BLU-42A/B and BLU-54/B (Obsolete)

Cluster Bombs:
SUU-38/A

F-18
FOR OFFICIAL USE ONLY
U.S. Projectiles, 155-MM, HE, Howitzer, ADAM, M692 and M731

Fuzes:
- M577, MTSQ
- M577A1, MTSQ

Mine:
- M67, AP (M692)
- M72, AP (M731)

FOR OFFICIAL USE ONLY
Former U.S.S.R. Mine, Apers, Scatterable, Model POM-1S

F-20

FOR OFFICIAL USE ONLY
SCATTERABLE
ANTITANK
MUNITIONS
Chinese Landmine, AT, Type 84A
German Landmine, AT, Model AT-II

Rocketet:
110-MM LARS

FOR OFFICIAL USE ONLY
Italian Landmines, AT, (Scatterable), SB-81 and SB-81/AR-AN

NOTES. (1) THE COLOR OF THE LANDMINE VARIES ACCORDING TO USER COUNTRY.
(2) THE LANDMINE CONTAINS 20 KILOGRAMS (44 POUNDS) OF TNT/RDX/HMX MIX. THE BOOSTER CONTAINS 137 GRAMS (4.8 OUNCES) OF A RDX/WAX/HMX MIX.
(3) THE MODEL SB-81 PRESSURE FUZE REQUIRES 150 TO 310 KILOGRAMS (331 TO 683 POUNDS) TO FIRE. THE SB-81/AR-AN CAN HAVE A PRESSURE, ANTI-REMOVAL, SELF-NEUTRALIZING TYPE FUZE, OR A PRESSURE, ANTI-REMOVAL SELF-DESTROYING FUZE.

FOR OFFICIAL USE ONLY
U.S. Landmine, AT, For M131 Modular Pack Mine System (MOPMS)

Dispenser: M131 Modular Pack Mine System (MOPMS)

MINE WITH SPRING FINGER ASSEMBLY

MINE WITH SPRING FINGER ASSEMBLY REMOVED

MINE WITH SPRING FINGER ASSEMBLY (EARLY MODEL)

MINE WITH SPRING FINGER ASSEMBLY (LATE MODEL)

FOR OFFICIAL USE ONLY
U.S. Landmine, AT, M70 and M73

Projectiles:
155-MM, M718 (RAAMS)
155-MM, M741 (RAAMS)

FOR OFFICIAL USE ONLY
U.S. Landmine, AT/AV, and Ejection Tube Assembly
Used in the M56 Mine Dispersing Subsystem

Dispenser:
SUU-13D/A

YELLOW BAND
LANDMINE

EJECTION TUBE ASSEMBLY

FOR OFFICIAL USE ONLY
U.S. Landmine, AT/AV, BLU-91/B (Gator)

Dispenser:
SUU-58
SUU-64/B

FOR OFFICIAL USE ONLY
U.S. Landmine AT/AV, M75

66 MM (2.60 IN)

121 MM (4.75 IN)

G-8
FOR OFFICIAL USE ONLY
U.S. Landmine Units, AV, BLU-45/B

Dispenser:
SUU-36/A

FOR OFFICIAL USE ONLY
U.S. Projectiles, 155-MM, AT, M718, M718A1, and M741, and M741A1 (RAAMS)

Fuze:
M577, MTSQ

Landmine:
M70, AT
M73, AT

155 MM
(6.10 IN)

803 MM (31.63 IN)

899 MM (35.39 IN)

FOR OFFICIAL USE ONLY
Former Yugoslav Landmine, AT, Scatterable, Influence-fuzed, Model Unknown
Former U.S.S.R. Landmine, AT, Scatterable, Model PTM-3

Type: Anti-Tank, Shaped-Charge, Dispenser-Scattarable-Type

- Weight, kg
  - 5.0

Explosive Charge Weight, kg
- 1.85

Mine Size, mm
- Length
  - 330
- Width
  - 84

Mine Body Material
- Steel

Fuze Type
- Influence, Magnetic

Power Supply
- single battery, type "PL53V" (replaceable)

Safe-arming Delay Mechanism Type
- two-stage: pyrotechnic and electronic

Remote Arming Time, sec
- 60

Self-Destruction Device Type
- Electronic

Self-Destruct Time, hours
- from 16 to 24

G-12
FOR OFFICIAL USE ONLY
BOMBS
French Bomb Combined Systems, Types 200B and 200D (Matra)

Bombs:
- SAMP 250 Kg Type 25FE
- STA 400 Kg Type 200
- 500 Lb AN-M64C1 (US)

Fuzes:
- Nose:
  - Matra 19
  - Matra 19 SR

H-1
FOR OFFICIAL USE ONLY
French Bombs, GP, HE/Frag, 250-KG, SAMP, Types 25 FE, 25 CDI, BL 25 FE and BL 25 GE

Fuzes:
Nose:
M904E2
19 CR
Tail:
M905
M906
200F Assembly w/ Type 20B/E
200F Assembly w/ Type 21

<table>
<thead>
<tr>
<th>TYPES</th>
<th>DIMENSIONS</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A (M)</td>
<td>B (MM)</td>
<td>C (M)</td>
<td>D (MM)</td>
<td>E (MM)</td>
</tr>
<tr>
<td>25 FE</td>
<td>2.10 (6.8 FT)</td>
<td>324 (12.76)</td>
<td>1.20 (46.77)</td>
<td>978 (38.50)</td>
<td>456 (17.95)</td>
</tr>
<tr>
<td>BL 25 FE</td>
<td>1.90 (6.2 FT)</td>
<td>350 (13.78)</td>
<td>UNKNOWN</td>
<td>UNKNOWN</td>
<td>400 (15.75)</td>
</tr>
<tr>
<td>25 CDI</td>
<td>2.08 (6.8 FT)</td>
<td>305 (12.00)</td>
<td>UNKNOWN</td>
<td>UNKNOWN</td>
<td>UNKNOWN</td>
</tr>
<tr>
<td>BL 25 GE</td>
<td>1.96 (6.2 FT)</td>
<td>350 (13.78)</td>
<td>UNKNOWN</td>
<td>UNKNOWN</td>
<td>400 (15.75)</td>
</tr>
</tbody>
</table>

FOR OFFICIAL USE ONLY
French Bomb, GP, 400-KG, STRIM Type 21

Fuzes:
Nose:
STA Type 11A
MATRA Type 19
M904E2
Tail:
EB Type 28
EM Type 30
MATRA Type 20
MATRA Type 200 Assembly

H-3
FOR OFFICIAL USE ONLY
French Bomb, Runway Penetrator, BAP-100 65

96 MM (3.78 IN)  
502 MM (19.75 IN)

1.8 M (70.87 IN)

MARKINGS

COLOR BAND (2)

MARKINGS

MARKINGS

H-4

FOR OFFICIAL USE ONLY
French Bomb, Runway Penetrator, BAP-100 M2

100 MM (3.94 IN)  502 MM (19.75 IN)

820 MM (32.28 IN)  1.8 M (70.87 IN)

COLOR BAND(2)

MARKINGS

H-5
FOR OFFICIAL USE ONLY
French Bomb, Target Penetration, 220-KG, Durandal

![Diagram of bomb with dimensions and color bands]

END VIEW

H-6

FOR OFFICIAL USE ONLY
French Bomb, 400-KG, STA, Type 200

Fuzes:
Nose:
STA Type 11A
MATRA Type 19
M904E2
Tail:
EB Type 28
EM Type 30
MATRA Type 20
MATRA Type 200 Assembly

STA TYPE 20A SHOWN
WITH SAMP TYPE 200
TAIL FIN ASSEMBLY
Spanish Bomb, Frag, Models BRF-125, BRF-250, BRF-500, BRF-1000

Fuzes:
MU-05, Nose
MU-08, Tail
MU-09, Nose
EPB 1A, VT
GRL, Transverse
GRC, Tail

NOTE:
(1) THIS IS A LOW-Drag FREE-FALL FRAGMENTATION BOMB. THE BOMB IS COMPOSED OF A FORGED NOSE WELDED TO THE ROLLED BODY. THE TAIL IS BOLTED TO THE BODY. THE FRAGMENTARY ELEMENT IS 18,000 STEEL BALLS PLACED BETWEEN THE BODY AND THE EXPLOSIVE CHARGE.
(2) NUMERALS IN NOMENCLATURE INDICATE BOMB WEIGHT
(3) DETAILS AND DIMENSIONS FOR THE BRF-250, 500, AND 1,000 ARE UNKNOWN.

FOR OFFICIAL USE ONLY
Spanish Bombs, Frag, Models BRFF-125, BRFF-250, BRFF-500, BRFF-1000

Fuzes:
MU-05, Nose
MU-09, Nose
EPB 1A. VT
GRL, Transverse
MU-08, Tail
GRC, Tail
MU-16, VT

NOTE:
(1) THIS IS A LOW-DRAG PARACHUTE RETARDED FRAGMENTATION BOMB. THE BOMB IS COMPOSED OF A FORGED NOSE WELDED TO THE ROLLED BODY. THE TAIL IS BOLTED TO THE BODY. THE FRAGMENTARY ELEMENT IS 18,000 STEEL BALLS PLACED BETWEEN THE BODY AND THE EXPLOSIVE CHARGE.
(2) NUMERALS IN NOMENCLATURE INDICATE BOMB WEIGHT.
(3) DETAILS AND DIMENSIONS FOR THE BRFF-250, 500, AND 1,000 ARE UNKNOWN.

FOR OFFICIAL USE ONLY
Spanish Bomb, GP, Model BR-250

Fuzes:
MU-05, Nose
MU-09, Nose
VTB-1A, Nose
VT, Nose
MU-08, Tail
GRC Series, Tail

NOTE: (1) THIS LOW DRAG, FREE FALL, GENERAL PURPOSE
BOMB IS INTENDED FOR RELEASE FROM MODERN
GROUND ATTACK AIRCRAFT. IT IS HIGHLY
VERSATILE AND CAN ACCOMMODATE MANY
FUZES FOR DIFFERENT PURPOSES.

(2) THIS BOMB IS SIMILAR TO THE US MK 80 SERIES.
THE TAIL UNIT CAN BE REPLACED BY A
PARACHUTE TAIL UNIT. THE BOMB
CONTAINS A TRANSVERSE FUZE WELL
THAT IS NOT USED IN THE FREE FALL
MODE. THE SUSPENSION LUGS ARE BOTH
WARSAW PACT AND NATO STANDARD.

(3) THE BOMB IS OLIVE DRAB WITH YELLOW
MARKINGS AND A YELLOW COLOR BAND. THE
PRACTICE BOMB IS BLUE WITH WHITE MARKINGS
AND A WHITE COLOR BAND IS FILLED WITH
AN INERT FILLER.

FOR OFFICIAL USE ONLY
Spanish Bomb, GP, Parachute Retarded, BRP-250

290 MM (11.42 IN)

Fuzes:
KAPPA-III, Nose EP-516, VE, Nose GRL, Transverse

2.1 M (6.9 FT)

NOTE: (1) THE BOMB WEIGHS 113 KILOGRAMS (250.0 POUNDS) AND CONTAINS TNT, OR AN INERT CHARGE FOR TRAINING.

(2) THIS BOMB WAS DEVELOPED TO BE RELEASED AT A LOW ALTITUDE. IT IS HIGHLY VERSATILE AND CAN BE FITTED WITH A WIDE RANGE OF FUZES DESIGNED FOR DIFFERENT PURPOSES. THE NOSE CAN BE SUPPLIED WITH AN ADAPTER THAT ALLOWS FUZES PROVIDED WITH 2- AND 3.5-INCH THREADS TO BE FITTED. THE TAIL UNIT CAN BE REPLACED BY A NON-RETARDED ONE AND THE RESPECTIVE FUZES REPLACED BY THOSE USED IN THE BR SERIES.

(3) IF THE PARACHUTE DOES NOT DEPLOY PROPERLY, THE FUZES MAY NOT FUNCTION. THE BOMB CONTAINS A TRANSVERSE FUZE WELL. THE SUSPENSION LUGS ARE BOTH WARSAW PACT AND NATO STANDARD.

H-11

FOR OFFICIAL USE ONLY
Spanish Bomb, Parachute Retarded, Model BRIP-400

Fuzes:
KAPPA-III, Nose VT, EP-516 GRL Series

NOTE:
(1) THE BOMB IS OLIVE DRAB WITH YELLOW MARKINGS AND A YELLOW COLOR BAND AND WEIGHTS 400 KILOGRAMS (882 POUNDS). IT CONTAINS AN UNKNOWN QUANTITY OF TNT OR TRITONAL. THE PRACTICE BOMB IS BLUE WITH WHITE MARKINGS AND WHITE BAND WITH AN INERT TRAINING CHARGE.
(2) DIFFERENT FUZES CAN BE USED ACCORDING TO THE TYPE OF TARGET. THE BOMB WAS DEVELOPED TO BE RELEASED AT LOW ALTITUDES BUT, IT IS HIGHLY VERSATILE AND CAN BE TRANSFORMED INTO A FREE-FALL BOMB AND CAN BE FITTED WITH MANY DIFFERENT FUZES DESIGNED FOR DIFFERENT PURPOSES. THE NOSE CAN BE SUPPLIED WITH AN ADAPTER THAT ALLOWS FUZES PROVIDED WITH 2- AND 3.5-INCH THREADS TO BE FITTED. IF THE PARACHUTE DOES NOT DEPLOY PROPERLY, THE FUZE WILL NOT FUNCTION AND THE BOMB WILL NOT EXPLODE. TRANSVERSE FUZING IS USED WITH THIS BOMB.
(3) SUSPENSION LUGS ARE BOTH WARSAW PACT AND NATO STANDARD.

FOR OFFICIAL USE ONLY
Spanish Bomb, Parachute Retarded, Model BRPS-250

Fuzes:
EP-516, VT, Nose
EROS, Nose
ERCUS, Tail
GRL, Tail
KEMA, Time

NOTE: (1) THE BOMB WEIGHS 113 KILOGRAMS (250 POUNDS) AND CONTAINS TNT, TRITONAL, OR AN INERT FILLER FOR TRAINING.
(2) THIS BOMB WAS DEVELOPED FOR RELEASE AT A VERY LOW ALTITUDE TO AVOID RADAR DETECTION AND AIR DEFENSE FIRE. THE NOSE CAN BE SUPPLIED WITH AN ADAPTER THAT ALLOWS FUZES PROVIDED WITH 2- AND 3.5-INCH THREADS TO BE FITTED. IF THE PARACHUTE DOES NOT DEPLOY PROPERLY, THE FUZES MAY NOT FUNCTION.
(3) THE BOMB CONTAINS A TRANSVERSE FUZE WELl. THE SUSPENSION LUGS ARE BOTH WARSAW PACT AND NATO STANDARD.

H-13
FOR OFFICIAL USE ONLY
Spanish Bomb, GP, 400-KG, Model BRI-400

Fuzes:
MU-05, Nose
MU-09, Nose
VTB-1A, Nose
MU-08, Tail
GRC Series, Tail

NOTE:
(1) THE BOMB IS OLIVE DRAB IN COLOR WITH YELLOW MARKINGS AND A YELLOW BAND. IT WEIGHS 400 KG (882 POUNDS) AND CONTAINS AN UNKNOWN QUANTITY OF TNT OR TRITONAL. THE PRACTICE BOMB IS BLUE WITH WHITE MARKINGS AND A WHITE BAND WITH AN INERT CHARGE.

(2) THIS IS A LOW-DRAF PRIME FALL GENERAL PURPOSE BOMB INTENDED FOR RELEASE FROM MODERN GROUND ATTACK AIRCRAFT. IT IS HIGHLY VERSATILE AND CAN BE TRANSFORMED INTO A RETARDED BOMB AND CAN ACCOMMODATE MANY FUZES FOR DIFFERENT PURPOSES. THE NOSE CAN BE SUPPLIED WITH AN ADAPTER THAT ALLOWS FUZES WITH 2- AND 3.5-INCH THREADS TO BE FITTED. THE TAIL UNIT CAN BE REPLACED BY A PARACHUTE TAIL UNIT TO TRANSFORM THE BOMB INTO A RETARDED ONE. THE BOMB CONTAINS A TRANSVERSE FUZE WELL THAT IS NOT USED IN THE FREE FALL MODE.

(3) THE SUSPENSION LUGS ARE BOTH WARSAW PACT AND NATO STANDARD.

FOR OFFICIAL USE ONLY
U.S. Bomb, Demolition, BLU-31/B (Obsolete)

Fuzes:
- FMU-26/B, 26A/B
- FMU-30/B
- FMU-35/B, 72/B
- FMU-54/B
- FMU-81/B

112 mm
(4.40 in)

2.30 m
(7.6 ft)

2.43 m
(8.0 ft)

718 mm
(28.25 in)

286 mm
(11.25 in)

1.33 m
(52.35 in)

612 mm
(24.10 in)

384 mm
(15.10 in)

YELLOW BAND

H-15

FOR OFFICIAL USE ONLY
U.S. Bomb, GP (Low Drag), 500-lb, Mk 82

Fuzes:
FMU-26/B, 26A/B, 26B/B
FMU-35/B, 72/B
FMU-54/B
FMU-54A/B
FMU-81/B
FMU-112/B
FMU-113/B
FMU-139/B
FMU-139A/B
AN-M103A1,
AN-M139A1,
AN-M140A1, M140,
M163, M164, M165
AN-M166, AN-M166E1,
AN-M168, M188,
M914 Series
M904E1, E2, E3, E4
M905

M906
M990 Series
Mk 243 Mod 0
Mk 244 Mods 0 & 1
Mk 347 Mod 0
Mk 344 Mods 0 & 1
Mk 376 Mod 0
Mk 346

Sensing Elements:
M20A1, M66

Target Detecting Device:
Mk 43 Mod 0

Fuze Extender:
M1 Series

(U) Destructor:
Mk 36

Timer Actuator:
DTU-31/B

H-16

FOR OFFICIAL USE ONLY
U.S. Bomb, GP (Low Drag), 1,000-lb, Mk 83

Fuzes:
FMU-26/B, 26A/B, 26B/B
FMU-35/B, 72/B
FMU-54/B
FMU-54A/B
FMU-81/B
FMU-112/B
FMU-113/B
FMU-139/B
FMU-139A/B
AN-M103A1, AN-M139A1, AN-M140A1
M163, M164, M165
AN-M166, AN-M166E1, AN-M168, M188, M914 Series
M904E1, E2, E3, E4
M905
M906
M990 Series
Mk 243 Mod 0
Mk 244 Mods 0, 1
Mk 344 Mods 0, 1
Mk 347 Mod 0
Mk 376 Mod 0
Mk 346

Sensing Elements:
M20A1, M66
Target Detecting Device:
Mk 43 Mod 0

Fuze Extender:
M1 Series
Destructor:
Mk 40

H-17
U.S. Bomb, GP (Low Drag), 2,000-lb, Mk 84

Fuzes:
FMU-26A/B, 26/B, 26B/B
FMU-35/B, 72/B
FMU-54/B
FMU-54A/B
FMU-81/B
FMU-112/B
FMU-113/B
FMU-139/B
FMU-139A/B
AN-M103A1, AN-M139A1, AN-M140A1, M163, M164, M165
AN-M166, AN-M166E1, AN-M168, M188
M914 Series
M904E1, E2, E3, E4
M905
M906
M990 Series
Mk 243 Mod 0
Mk 244 Mods 0, 1
Mk 344 Mods 0, 1
Mk 347 Mod 0
Mk 376 Mod 0
Mk 346
Sensing Element:
M20A1, M66
Target Detecting Device:
Mk 43 Mod 0
Fuze Extender:
M1 Series
Destructor:
Mk 41
U.S. Bomb, Terrain-Implantation, HE, XM145 and Sensor Intrusion Detector (ADSID)
U.S. Bomb, Terrain-Implantation, HE, XM146 and Sensor Intrusion Detector (HELOSID)

813 MM (32.00 IN)

1.65 M (65.00 IN)

76 MM (3.00 IN)

127 MM (5.00 IN)

76 MM (3.00 IN)

762 MM (30.00 IN)

H-20
FOR OFFICIAL USE ONLY
U.S. Destructors, Mk 36 Mods 0 thru 7 and 15

Bomb:
Mk 82
Fins:
Mk 15
Mk 16
BSU-86/B
MAU-93/B

FOR OFFICIAL USE ONLY
U.S. Destructors, Mk 41 Mods 3 thru 7 and 9

Bomb:
Mk 84

Fins:
Mk 11
Mk 84 Conical

FOR OFFICIAL USE ONLY
U.S. Destructor, M117/D

Bombs:
M117 Demolition

Fin:
MAU-91

409 MM
(16.10 IN)

1.21 M
(47.67 IN)

2.19 M
(7.2 FT)

978 MM
(38.50 IN)

CABLE-WELL PLUG

YELLOW BAND
(1 OR 2)

MK 32 MOD 1
ARMING DEVICE

MK 42 FIRING MECHANISM
(GOLD ANODIZED)

H-24

FOR OFFICIAL USE ONLY
U.S. Naval Mine, Mk 62 Mod 0 (Quickstrike)

WHITE IDENTIFICATION PAINT (4)

WHITE IDENTIFICATION PAINT

POP-OUT PIN

SAFETY PIN

WARNING TAG

POP-OUT PIN ASSEMBLY

274 MM (10.80 IN)

1.56 M (61.50 IN)

806 MM (31.75 IN)

2.26 M (7.4 FT)

361 MM (15.00 IN)

H-25

FOR OFFICIAL USE ONLY

Declassified and Approved For Release 2014/03/04 : CIA-RDP09-01333R000100020001-1
U.S. Naval Mine, Mk 63 Mod 0 (Quickstrike)

NOTE: TDD UNDER ADAPTER

TARGET DETECTING DEVICE (TDD)

FOR OFFICIAL USE ONLY
U.S. Naval Mine, Mk 64 Mod 0 (Quickstrike)

FOR OFFICIAL USE ONLY
Former U.S.S.R. Bomb, GP, FAB-250 M54

**Fuzes:**
- APUV, APUV-1
- AV-1, AV-1 d/u
- AV-139-E
- AVDM
- AVU-E
- VDV, VDV-1
- VDV-2

**Notes:**
1. The steel bomb is painted gray with a blue nose band.
2. The bomb weighs 234.0 kilograms (516.0 pounds).
3. The bomb contains 96.4 kilograms (212.5 pounds) of TNT.

H-28

FOR OFFICIAL USE ONLY
BOMB FUZES
Argentine Bomb Fuze, Long Delay, Model GRT

Bombs:
BRP: 50 KG,
125 KG, 250 KG,
375 KG, 500 KG,
1000 KG

NOTES:

(2) THE FUZE HAS SHIPMENT, HANDLING AND INERTIAL SAFETY FEATURES. DECELERATION IS REQUIRED FOR ARMING WHEN USED IN BRAKED BOMBS, THIS DECELERATION IS PRODUCED WHEN THE PARACHUTE IS DEPLOYED. IT HAS IN-FLIGHT SAFETY BECAUSE OF THE ARMING WIRE THAT PREVENTS THE MICROSWITCH FROM MOVING THE FIRING TRAIN OUT-OF-LINE UNTIL THE SET TIME HAS ELAPSED.

FOR OFFICIAL USE ONLY
Argentine Bomb Fuze, Transverse, Electromechanical, Delayed Action, Model ELEAS 08 RV

Bombs:
- BRP: 50 KG, 125 KG, 250 KG, 500 KG
- BRPS: 125 KG, 250 KG, 500 KG
- FAS: 250 KG

NOTES:
1. The fuze is armed electronically 0.8 seconds after parachute deployment. The delay portion of the fuze will cause initiation in times ranging from 1.76 seconds to 6 hours. Not enough information exists on the fuze to tell if it has an antiwithdrawal or antidisturbance feature. Therefore, these features must be considered when working on the bomb.
2. The delay times of the fuze: 1.76, 7.12 seconds, 15, 30, 45 minutes, and 1, 3, 6 hours.
3. The fuze is held in the bomb by two screws.
4. The markings are black.
5. The total weight of the fuze is 680 grams (1.5 pounds).

FOR OFFICIAL USE ONLY
South African Bomb Fuze, Nose & Tail, Electronic, Multi-option, Model AB112

Fuze Options:
- Impact
- Delay
- Antidisturbance

Fuze detonates on battery run down.

FOR OFFICIAL USE ONLY
Spanish Bomb Fuze, Tail, Long Delay, Model GRC/AR

Bombs:
BR-50, 125, 250, 375, 500, 1000

BRF-125, 250, 500, 1000

NOTES:
(1) THIS IS AN ELECTRONIC/MECHANICAL FUZE WHICH WILL FUNCTION UNDER EXTREME ATMOSPHERIC CONDITIONS.
(2) THE PYROTECHNIC TRAIN ALIGNS ON IMPACT.
(3) THE DETONATION TIME CAN BE PROGRAMMED BETWEEN 1 AND 9,999 MINUTES. AN EXTERNAL PROGRAMMING DEVICE IS USED TO PREPARE THE FUZE FOR USE.
(4) MECHANICAL PARTIAL ALIGNMENT IN 2 TO 14 SECONDS.

FOR OFFICIAL USE ONLY
Spanish Bomb Fuze, Transverse, Long Delay, Model GRL/AR

Bombs:
BR-50, 125, 250, 375, 500, 1000
BRF-125, 250, 500, 1000

NOTE:
(1) THIS IS AN ELECTRONIC/MECHANICAL FUZE WHICH WILL FUNCTION UNDER EXTREME ATMOSPHERIC CONDITIONS.
(2) THE PYROTECHNIC TRAIN ALIGNS ON IMPACT.
(3) IF THE PARACHUTE FAILS TO OPEN OR ONLY OPENS PARTIALLY, OR BREAKS FOLLOWING OPENING, THE FUZE WILL NOT ARM
(4) THE DETONATION TIME CAN BE PROGRAMMED BETWEEN 1 AND 9,999 MINUTES. AN EXTERNAL PROGRAMMING DEVICE IS USED TO PREPARE THE FUZE FOR USE.
(5) ELECTRONIC COUNTDOWN DOES NOT BEGIN UNTIL IMPACT.
(6) THE FUZE WEIGHS APPROXIMATELY 950 GRAMS (2.1 POUNDS).

FOR OFFICIAL USE ONLY
U.S. Bomb Fuze, Nose & Tail, Electronic, Long Delay, Antidisturbance, FMU-35/B (Obsolete)

Bombs:
BLU-31/B
M117 Series
M118
Mks 81, 82, 83, 84

FOR OFFICIAL USE ONLY
U.S. Bomb Fuze, Nose and Tail, Electronic, Long Delay, Antidisturbance, FMU-72/B

Bombs:
BLU-31/B
M117 Series
M118
Mks 81, 82, 83, 84
GBU-10

(U) Do not use fuze accessories (lanyard locks or adjusters, conical closure plugs, closure rings, streamlined and/or hexagonal plugs) as positive identification features for the FMU-35/B and FMU-72/B fuzes. These accessories are used with other internal electronic short-delay, electronic long-delay, antidisturbance and influence FMU series fuzes.

FOR OFFICIAL USE ONLY
DELAY ACTION - WITHDRAWAL
Spanish Bomb Fuze, Tail, Delayed Action,
Model INFA RR

Bombs:
Retarded, HE
125-500 KG

NOTES:

(1) THE FUZE HAS A PROGRAMMABLE DELAY FROM 30 SECONDS TO 36 HOURS. IT IS INTENDED FOR USE WITH RETARDED BOMBS DURING LOW-LEVEL ATTACKS. NOT ENOUGH INFORMATION EXISTS ON THE FUZE TO DETERMINE IF IT HAS AN ANTI-WITHDRAWAL OR ANTIDISTURBANCE FEATURE. THEREFORE, THESE FEATURES MUST BE CONSIDERED WHEN WORKING ON THE BOMB.

(2) THE FUZE REQUIRES DECELERATION TO ARM.

(3) THE TOTAL WEIGHT OF THE FUZE IS 1.4 KILOGRAMS (3.1 LBS.).
U.S. Bomb Fuze, Nose, FMU-30/B (Obsolete)

Bombs:
BLU-31/B

125 MM (4.90 IN)
74 MM (2.90 IN)
112 MM (4.40 IN)
309 MM (12.15 IN)

FOR OFFICIAL USE ONLY
Former U.S.S.R. Bomb Fuze, Tail, AVDM

Bombs:
FAB-250 M46
FAB-250 M54
FAB-500 M46
FAB-500 M54

NOTE: THIS IS A LONG-DELAY FUZE.
M OR AN-M123A1, 124A1, AND-125A1 FUZES

These are chemical, long-delay/antiwithdrawal fuzes.

M OR AN-M123, 124, AND 125 FUZES

FOR OFFICIAL USE ONLY
U.S. Bomb Fuze, Tail, M132, M133, and M134

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>FUZE M132</th>
<th>FUZE M133</th>
<th>FUZE M134</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>244 MM (9.60 IN)</td>
<td>320 MM (12.60 IN)</td>
<td>422 MM (16.60 IN)</td>
</tr>
<tr>
<td>B</td>
<td>81 MM (3.20 IN)</td>
<td>157 MM (6.20 IN)</td>
<td>259 MM (10.20 IN)</td>
</tr>
</tbody>
</table>
U.S. Bomb Fuze, Tail, Mk 346 Mod 0

Bombs:
M117 Series
M118
Mks 81, 82, 83, 84

13 MM (0.50 IN)
41 MM (1.60 IN)
51 MM (2.00 IN)
155 MM (6.10 IN)