MINE INFORMATION & TRAINING CENTRE

MITC UK

- Further advice is available from:
  UK MITC
  Battlefield Engineering Wing
  Gibraltar Barracks
  Blackwater
  CAMBERLEY
  Surrey
  GU17 9IP

Telephone: Civ 01252 863623
Mil 94261 3623 / 3229
Fax Civ/Mil / 3225

- There is a need constantly to update information on mines including:
  - Mines encountered in theatre, including pictures in any form.
  - Use, technical, habits, marking and recording systems.
  - Any technical data; eg pamphlets, drawings etc.
- All information sent to the UK landmine focal point, the UK MITC, will be put to good use.

CONTENTS

Page	Mine	Page	Mine	Page	Mine
1	C3 A1 Elsie	5	Mk 7	9	M1A1
2	M14	6	L3A1 – LNM	10	M15
3	PMD 6	7	M7A2	11	M19
4	M16A1/M16A2	8	M6A2	12	M52
				13	YAM-5

Battlefield Engineering Wing

MINE HANDBOOK
CYPRUS

MINE INFORMATION & TRAINING CENTRE

MITC UK

MAY 00

ANTI PERSONNEL MINE – BLAST

C3A1 ELSIE

DESCRIPTION

C3A1 is a pressure activated shaped charge AP mine. The body is in two parts the base being made of phenolic plastic and is carrot shaped for ease of pushing into the ground. The main charge is is inserted into a hole on top of the body and is mushroom shaped. A metal detector ring can be fitted or removed to the base of the mine. If the ring ahs been removed the mine is minimum metal and is extremely difficult to locate using a metal detector.

TECHNICAL DETAILS					
Length	(mm):	-	Effective range (m) :		-
Height	(mm):	76	Material	:	Plastic
Width	(mm):	-	Colour	:	Olive drab, beige
Diameter	(mm):	51	Operation	:	Pressure: 7.25-11.8kg
Gross weight	(g) :	9.45	Fuze	:	6 grain detonator
Explosive	(g) :	7.8	Markings	:	-
Alternative designators:		C3A2	Date introduced/recovered:		-
Manufacturing country :		Canada			

ANTI PERSONNEL MINE – BLAST

M14

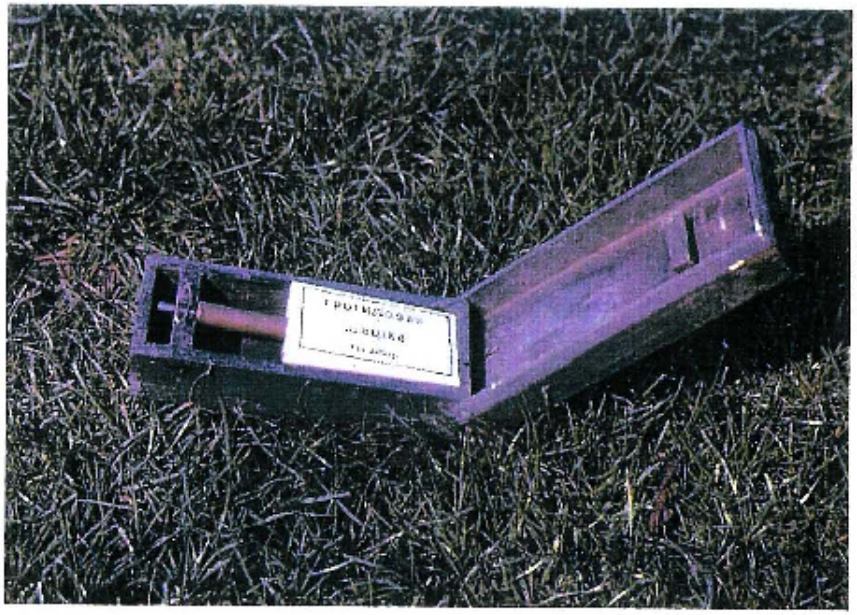
DESCRIPTION

M14 is a small plastic bodied AP blast mine. The mine is cylinderical with a pressure plate on top. The pressure plate is marked with a yellow arrow that rotates between the SAFE and ARMED positions. The bottom section contains the main charge and M46 detonator assembly

TECHNICAL DETAILS					
Length	(mm):	-	Effective range (m)	:	-
Height	(mm):	40	Material	:	Plastic
Width	(mm):	-	Colour	:	Olive green
Diameter	(mm):	56	Operation	:	Pressure: 9-16kg
Gross weight	(g) :	100	Fuze	:	M46
Explosive	(g) :	29	Markings	:	Yellow arrow,A&S
Alternative designators:		AP MN M14,MN-79 MD-82B,M/56		Date introduced/recovered: -	
Manufacturing country :		USA, India, Turkey, Vietnam, Denmark			

ANTI PERSONNEL MINE – BLAST

PMD-6



DESCRIPTION

PMD-6 is "shoebox" type AP blast mine. It's origins date back to the Second World War. The mine consists of a wooden box with a hinged overlapping lid. The main charge is a block of cast TNT into which a MUV fuze, and MD-2 detonator is placed. The fuze and retaining pin protrude through the end of the mine opposite the hinge.

TECHNICAL DETAILS					
Length	(mm):	190	Effective range (m)	:	-
Height	(mm):	65	Material	:	Wooden
Width	(mm):	80	Colour	:	Green, black, plain wood
Diameter	(mm):	-	Operation	:	Pressure 1-10kg
Gross weight	(g) :	400	Fuze	:	MUV series
Explosive	(g) :	200	Markings	:	Nil
Alternative designators:		PMD-6, PMD-7,PP Mi-D Type 59, PMD-1		Date introduced/recovered: -	
Manufacturing country :		Russia, Czech, China, FRY.			

ANTI PERSONNEL MINE – BLAST

M16A1 & M16A2

DESCRIPTION

M16A1/2 are AP bounding fragmentation mines. Both mines are cylinderical in shape and almost identical in appearance. The main difference between them is that the M16A1 has two identical initiation trains eachconsists of a pyrotechnic delay element detonator assembly seated within a booster next to the main charge, whereas the M16A2 has a single initiation train that allows a larger main charge. Both mines accept the M605 combination fuze. When activated the mine jumps out of the ground to approximately 1m before the main charge explodes.

TECHNICAL DETAILS					
Length	(mm):	-	Effective range (m)	:	Lethal 10m radius
Height	(mm):	103	Material	:	Metal
Width	(mm):	-	Colour	:	Olive green/sand
Diameter	(mm):	203	Operation	:	Pressure;3.6-20kg,pull 1-5kg
Gross weight	(kg) :	3.75,2.83	Fuze	:	M605
Explosive	(g) :	575,601	Markings	:	Yellow stenciling
Alternative designators:		KM16A2	Date introduced/recovered: -		
Manufacturing country :USA, Greece, South Korea					

ANTI TANK MINE – BLAST

MK 7

DESCRIPTION

Mk 7 is a large pressure operated AT blast mine. The mine is round with a dome shaped top which has a threaded central fuze well sealed with a heavy steel cap that is incorporated into the pressure plate. A metal carrying handle is attached to the side of the mine. The fuze system used is the No5 double or single impulse fuze. The base of the fuze is sealed with a bras plug that protects a stab sensitive detonator.

TECHNICAL DETAILS					
Length	(mm):	-	Effective range (m)	:	N/A
Height	(mm):	130	Material	:	Metal
Width	(mm):	-	Colour	:	Brown
Diameter	(mm):	325	Operation	:	Pressure 150-275kg
Gross weight	(kg) :	13.6	Fuze	:	No 5
Explosive	(kg) :	8.89	Markings	:	Mk 7
Alternative designators:		Mk 7/7	Date introduced/recovered: -		
Manufacturing country :		Great Britain			

L3A1-LIGHT NON-METALIC

DESCRIPTION

L3A1 is a minimum metal pressure operated AT blast mine. The mine is round and has a large pressure plate on the top surface and a web carrying handle attached to the side of the mine. The fuze is integral. The mine is made of plastic and is fitted with a detachable detector ring.

TECHNICAL DETAILS					
Length	(mm):	-	Effective range (m)	:	-
Height	(mm):	145	Material	:	Plastic
Width	(mm):	-	Colour	:	Black
Diameter	(mm):	226	Operation	:	Pressure120-200 kg
Gross weight	(kg) :	7.7	Fuze	:	Integral
Explosive	(kg) :	6.0	Markings	:	-
Alternative designators:		Nil	Date introduced/recovered: -		
Manufacturing country :Great Britain					

M7 A2

DESCRIPTION

M7A2 is a small metal cased pressure operated AT mine. The casing has a central fuze well and an auxiliary fuze well at one end for a booby trap device. A steel cover is attached to the mine by two studs this cover acts as a pressure plate and protecs the fuze. Early models were fitted with a M601 chemical fuze however, later models were replaced with the m603 mechanical fuze. The detonator assembly is housed within the fuze body directly above the booster charge.

TECHNICAL DETAILS					
Length	(mm):	178	Effective range (m)	:	-
Height	(mm):	64	Material	:	Steel
Width	(mm):	114	Colour	:	Olive green
Diameter	(mm):	-	Operation	:	Pressure; 60-110kg
Gross weight	(kg) :	2.2	Fuze	:	M601, M603
Explosive	(kg) :	1.62	Markings	:	-
Alternative designators:		Nil	Date introduced/recovered: -		
Manufacturing country :		USA			

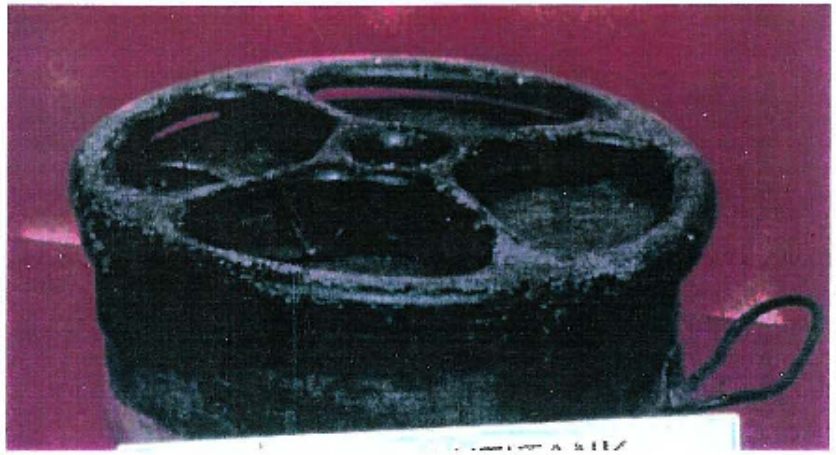
M6A2

DESCRIPTION

M6A2 is a heavy, pressure operated AT blast mine that was developed from the earlier M6. The steel case has a large central pressure plate with a threaded fuze well with additional auxiliary wells on the side and base of the mine for use with anti-handling devices. The Arming plug has three position marked around the ring, ARMED, SAFE and DANGER. Early versions incorporated the M601 chemical fuze and later models were fitted with the M603 mechanical fuze.

TECHNICAL DETAILS					
Length	(mm):	-	Effective range (m)	:	-
Height	(mm):	83	Material	:	Steel
Width	(mm):	-	Colour	:	Green
Diameter	(mm):	333	Operation	:	Pressure;160-340 kg
Gross weight	(kg) :	9.1	Fuze	:	M601
Explosive	(kg) :	4.5	Markings	:	Nil
Alternative designators:		Nil	Date introduced/recovered: -		
Manufacturing country : USA					

M1 A1



DESCRIPTION

M1A1 is a large steel pressure operated AT mine, developed from the M1. The main body has a central fuze well and filler cap on top. The mine is fitted with a M1A1 fuze and a separate booster charge. When armed the mine has a steel pressed spider attached which bears onto the fuze assembley it is retained in position by small claws that fit under the top rim of the mine.

TECHNICAL DETAILS					
Length	(mm):	-	Effective range (m)	:	-
Height	(mm):	75	Material	:	Steel
Width	(mm):	-	Colour	:	Green, yellow
Diameter	(mm):	203	Operation	:	Pressure; 120-250kg
Gross weight	(kg) :	5.3	Fuze	:	M1A1
Explosive	(kg) :	2.75	Markings	:	M1A1 yellow/black stencil
Alternative designators:		M4 (Argentina, China)	Date introduced/recovered: -		
Manufacturing country :		USA, Argentina, China			

ANTI TANK MINE – BLAST

M15

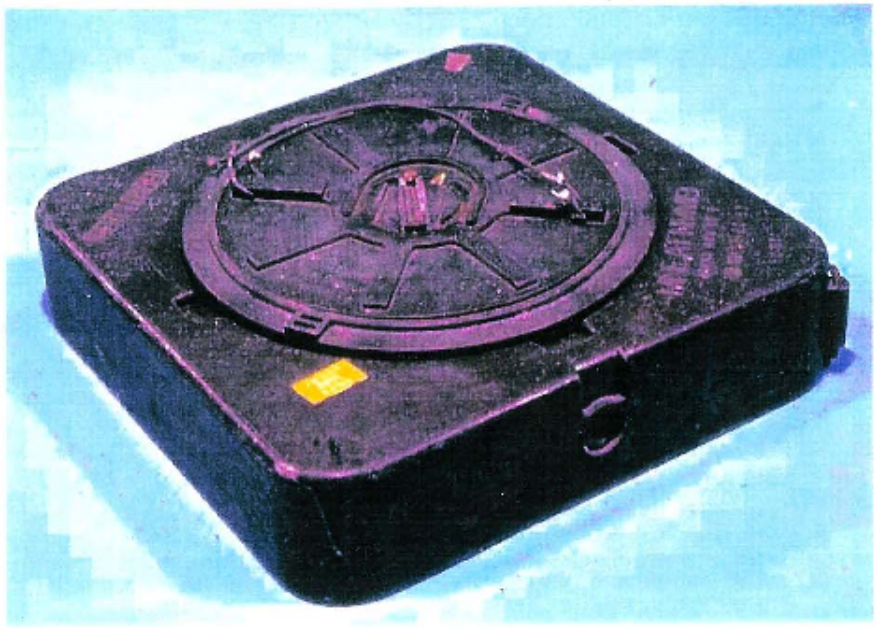
DESCRIPTION

M15 is a heavy steel, pressure operated AT blast mine. There is a large pressure plate on the top of the mine with a threaded fuze well to accept the M4 arming plug. Auxiliary fuze wells are provided on the side and base for use with anti-handling devices. The arming plug has a central lever and has three position marked around the ring ARMED, SAFE and DANGER.
The mine is fitted with a M603 mechanical fuze and M45 detonator that sits on top of a M120 booster.

TECHNICAL DETAILS					
Length	(mm):	-	Effective range (m)	:	-
Height	(mm):	150	Material	:	Steel
Width	(mm):	-	Colour	:	Green
Diameter	(mm):	333	Operation	:	Pressure;160-340 kg
Gross weight	(kg) :	14.3	Fuze	:	M603
Explosive	(kg) :	10.3	Markings	:	M15 yellow,black stenci
Alternative designators:		Nil	Date introduced/recovered: -		
Manufacturing country :USA					

ANTI TANK MINE – BLAST

M19



DESCRIPTION

M19 is a large pressure operated minimum-metal AT blast mine. The mine is square in shape and has a large central pressure pad on top of the mine which accepts the fuze assembly, a rope carrying handle is attached to one side of the mine. Auxiliary fuze wells are provided on the side and underneath for use with anti-handling devices. The main charge is housed in the body of the mine and this incorporates a booster charge. The M606 fuze assembly and M50 detonator are used with the mine. A central lever on the top of the mine moves between SAFE & ARMED.

TECHNICAL DETAILS					
Length	(mm):	332	Effective range (m)	:	-
Height	(mm):	94	Material	:	Plastic
Width	(mm):	332	Colour	:	Olive green
Diameter	(mm):	-	Operation	:	Pressure; 160-230 kg
Gross weight	(kg) :	12.56	Fuze	:	M606
Explosive	(kg) :	9.53	Markings	:	Yellow stenciling A & S
Alternative designators:		MKEK	Date introduced/recovered: -		
Manufacturing country :		USA, Chile, South Korea, Turkey.			

ANTI TANK MINE – BLAST

M52

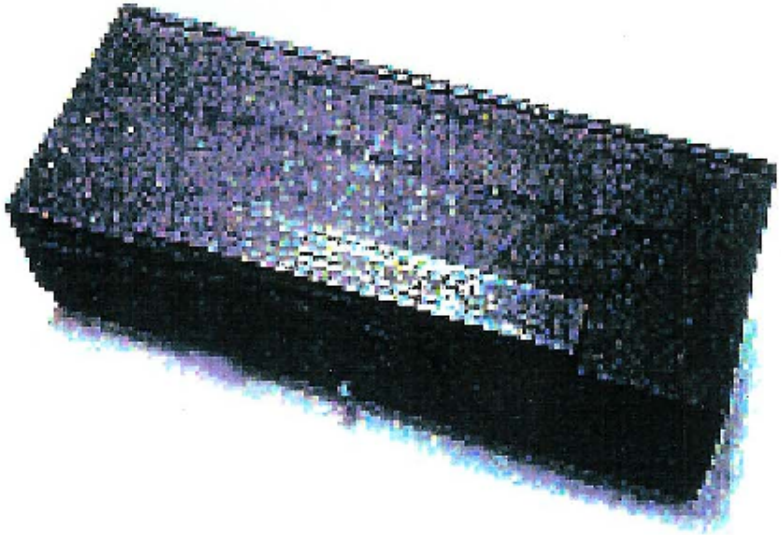
DESCRIPTION

M52 is a TNT resin covered AT mine. The mine is round in shape and has three main sections consisting of the main charge pressure plate and fuze. A rope carrying handle is attached to the side of the mine. Additional fuze wells are provided for use with anti-handling devices. Three fuzes are available the M61 presure-friction fuze, Tentacle spider lateral pressure fuze and Tilt rod fuze.

TECHNICAL DETAILS					
Length	(mm):	-	Effective range (m)	:	-
Height	(mm):	95	Material	:	Cast TNT resin
Width	(mm):	-	Colour	:	Green/sand
Diameter	(mm):	300	Operation	:	Pressure; 300 kg
Gross weight	(kg) :	9	Fuze	:	M61
Explosive	(g) :	6.486	Markings	:	Nil
Alternative designators:		Nil	Date introduced/recovered: -		
Manufacturing country :France					

ANTI TANK MINE – BLAST

YAM - 5

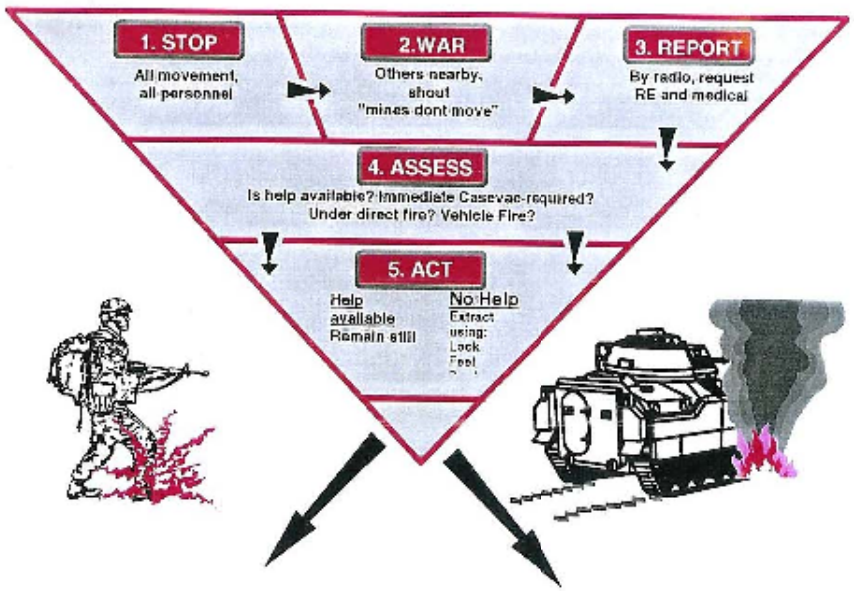


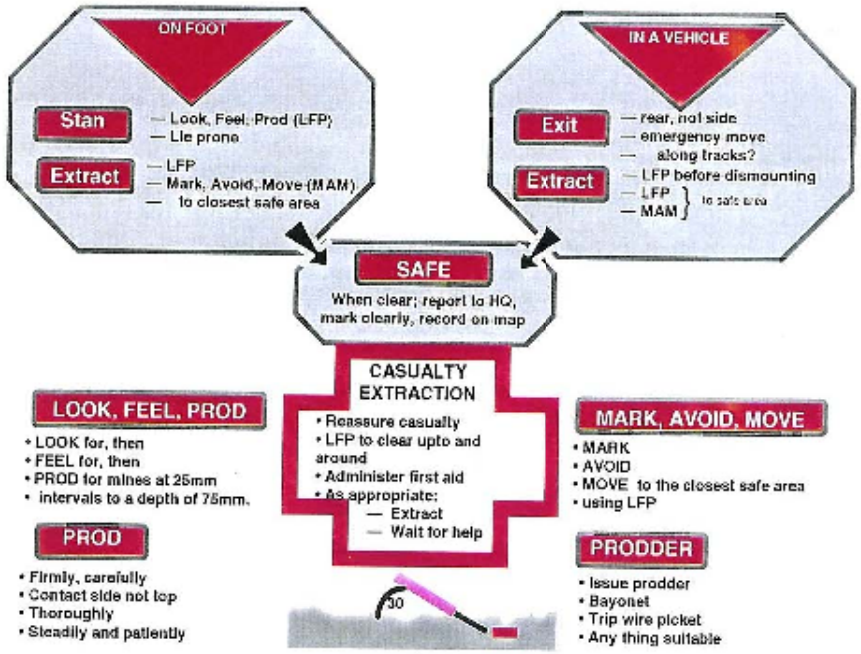
DESCRIPTION

Yam-5 is a large rectangular "shoebox" pressure operated Anti-Tank blast mine. The mine consists of a wooden box with a hinged lid that runs along the longest side. The main and booster charges are contained within and the system uses a MUV fuze.

TECHNICAL DETAILS					
Length	(mm):	600	Effective range (m)	:	-
Height	(mm):	160	Material	:	Wooden
Width	(mm):	157	Colour	:	Green/white
Diameter	(mm):	-	Operation	:	Pressure; pull
Gross weight	(g) :	7.3	Fuze	:	MUV
Explosive	(g) :	6.98	Markings	:	Nil
Alternative designators:		YAM – 5K	Date introduced/recovered: -		
Manufacturing country :		Russia, CIS			

MINE ENCOUNTER - IMMEDIATE ACTION





MINE DATA

FROM: TO: DTG:	LOCATION: MAP DETAILS: GRID REF:

TYPE	COLOUR	SHAPE	MARKING	QUANTITY	REMARKS
APERS					
ATANK					
UXO					
UNKNOWN					
ACTION TAKEN					
NOTE	Minefield incident report at TAM page 9-1-7				

MINE INFORMATION & TRAINING CENTRE

MINE AWARENESS

MINES - WHERE?

- Confrontation lines
- Routes, gravel roads
- Military establishments
- Road blocks /checkpoints
- Strategic areas
- Abandoned equipment
- Abandoned buildings
- Defensive positions
- Field fortifications

INDICATORS

- Mine signs
- Blast signatures
- Mine casualties
- Mines debris
- Mine packaging
- Untended fields
- Disturbed ground
- Trip wires and cables
- Mined areas may not be marked

PRECAUTIONS

- Attend mine awareness training
- Obtain mine information
- Use local knowledge
- Stick to approved routes
- Stay on known safe areas
- Stay on tarmac/concrete
- Avoid verges
- Plan routes
- Think mines

ASSISTANCE

- Mine data
- Advise
- Training

} UK MITC

UK MITC

Telephone

Civilian UK 01252 863523

Military UK ATN 94261 3523

Facsimile Civ/Mil Nos 3255

E-Mail

MITC@gimet.gov.uk

Web: http:www.army.mod.uk/mitc

DON'T TOUCH MINES/UXO