DDAS Accident Report

Accident details

Report date:	11/03/2004	**Accident number:**	49
Accident time:	not recorded	**Accident Date:**	28/07/1998
Where it occurred:	Lobito, Banguela	**Country:**	Angola
Primary cause:	Inadequate training (?)	**Secondary cause:**	Management/control inadequacy (?)
Class:	Handling accident	**Date of main report:**	21/08/1998
ID original source:	HB	**Name of source:**	NPA (field)
Organisation:	[Name removed]		
Mine/device:	TM57 AT blast	**Ground condition:**	not applicable
Date record created:	22/01/2004	**Date last modified:**	22/01/2004
No of victims:	1	**No of documents:**	2

Map details

Longitude:		**Latitude:**	
Alt. coord. system:		**Coordinates fixed by:**	
Map east:		**Map north:**	
Map scale:	not recorded	**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

inadequate training (?)

no independent investigation available (?)

inadequate investigation (?)

Accident report

No accident report was on file at the Angolan MAC. An internal report was made available on 3rd December 1998 by the demining group's Programme Manager, Angola.

The report recorded that the victim "accidentally detonated an anti-tank mine while preparing for the testing of the newly purchased Hydrema mine clearance machines". The victim was "deploying and arming" mines in a marked test ground and wore a "ballistic jacket and visor". He worked alone arming the mines at a distance of 300 metres from the nearest person (a medic). It is not recorded whether this mine was the first to be armed. He stood and looked

down at the mine for 20 seconds, then knelt beside it for a second time. 25-30 seconds later the mine detonated. "It is likely that he was trying to arm the fuse or insert the fuse into the fuse well before or after arming it" when the accident occurred. "It is not likely that he applied much pressure to the top of the fuse".

The report adds later that the victim was "observed using a metal bar, presumably in the fuse well prior to the test" which is interpreted as indicating that he was "trying to raise the depressed plate on a partially compressed mine".

The victim was thrown 40 metres and landed outside the test site. The medic "quickly concluded that he died instantly from extensive blast wounds including serious head and torso injuries".

Finds on the ground including "shrapnel from the fuse" confirmed "that it was a TM-57 mine with an MVZ-57 fuse that detonated". "It is believed that an old TM-57 mine that was damaged in some way (possibly having a partially compressed pressure plate) was deployed". It was considered "likely that the fuse was armed before it was inserted into the mine, since the arming mechanism (clockwork) on this type of fuse can have a tendency to halt before the detonator is correctly lined up in the fuse".

The investigation could not determine the cause but suggested that the fuse may have been faulty, the victim may have applied too much pressure on the top of the fuse and caused the "failure of the shearing pin and the initiation of the detonator by means of the released spring-loaded striker", or there could have been "compound complications created by inserting an armed fuse into a damaged mine".

It was the demining group's policy to only use "mines and fuses that are in good condition for testing purposes". Mines were sourced from the Angolan armed forces for the tests. "The decision to use an old and partly damaged anti-tank mine on the day of the accident" was not in accordance with their policy.

Conclusion

The investigators found it "impossible to be absolutely sure of the cause" but thought it likely that the accident was caused by "the insertion of an armed MVZ-57 fuse into a TM-57 mine where the pressure plate had already been partially depressed.

Victim Report

Victim number:	68	**Name:**	**[Name removed]**
Age:	27	**Gender:**	Male
Status:	supervisory	**Fit for work:**	DECEASED
Compensation:	not made available	**Time to hospital:**	N/A
Protection issued:	Long visor Frontal apron	**Protection used:**	Frontal apron, Long visor

Summary of injuries:

INJURIES

severe Body

severe Chest

severe Head

FATAL

COMMENT

No medical report was made available. The victim died immediately: injuries not detailed.

Analysis

The primary cause of this accident is listed as *"Inadequate training"* because the victim appears to have made several errors of judgement leading up to the accident.

The victim's use of a damaged mine was unexplained and his attempts to repair the damage inexplicable. The organisation's SOPs also required a second person to be assisting him, but none was present. As he was a senior member of management and apparently breached SOPs, this was also a failing of senior management.

Related papers

No other documents were made available.

The victim's replacement Technical Advisor reported finding a large part of the victim's visor intact (in July 1999).