

DDAS Accident Report

Accident details

Report date: 19/05/2006	Accident number: 318
Accident time: 06:55	Accident Date: 03/04/2000
Where it occurred: Vila Franco do Save, Govuro District, Inhambane Province	Country: Mozambique
Primary cause: Field control inadequacy (?)	Secondary cause: Victim inattention (?)
Class: Excavation accident (Survey)	Date of main report: 05/04/2000
ID original source: IND 2143/ADP-13/DG	Name of source: ADP/IND
Organisation: Name removed	
Mine/device: PMN AP blast	Ground condition: hard rocks/stones
Date record created: 20/02/2004	Date last modified: 20/02/2004
No of victims: 1	No of documents: 2

Map details

Longitude: 34° 34' 09" E	Latitude: 21° 08' 52" S
Alt. coord. system: Lat: 21.08 52.38"S.	Coordinates fixed by:
Map east: Long: 034 34 09.18"E	Map north:
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

handtool may have increased injury (?)

inadequate investigation (?)

safety distances ignored (?)

Accident report

A report was prepared for the National Mine Action Authority and made available in November 2000. Completed in English, the following summarises its content.

The accident occurred while carrying out a Survey Level 2 at Save minefield and the first deminer was tasked to make a cut into the minefield to a visible anti-group mine. The survey

section continued the work of the previous week, preparing a safe base-lane for the deminer section. The ground at the site was hard and "mixed with stones", making it difficult to "prod and to use the shovel [trowel]".

The length of the lane was about 70 metres when the first deminer went in to start the cut at 06:30. At the place where he was working (15 metres from the beginning of the safe lane) the survey section had destroyed a PMN four days before. The mine had been visible and 60cm outside the minefield fence.

The victim worked for about 25 minutes. He removed a piece of metal, then checked again with his detector. Having got another reading, (heard by his Section Commander who was 10m away) he started to excavate with his "shovel". He hit another PMN which detonated. At the time he was kneeling on his right knee and was slightly sideways on to the detonation. [The use of the word "shovel" is misleading: the victim was using a gardening "trowel".]

The victim received first aid within three minutes and was in hospital being treated by an ex-pat doctor in Save after 30 minutes. 50 minutes later he had been air evacuated to Inhambane Provincial Hospital. His injuries were "mostly" on the right side of the right knee, hand, body and face. "Dust stones and mine fragments had to be removed from the wounds. No amputation was necessary."

It was later discovered that the entire metal head of the victim's trowel was inside his thigh. This was not discovered until he was in hospital. The distorted trowel head and separated handle is shown below.



Other information

The mine in this accident (also the one found four days before) was outside the fence on the "friendly" side of the minefield. The mine in the accident was 30cm outside the fence, the earlier one 60cm.

The local guide assisting the survey mentioned five mines laid outside this side of the fence and an unknown number on the other.

The demining Section had been working for a long time in other soil conditions and were not used to the hard stony ground at the site.

From the position of the shovel and the handle of the shovel [trowel] the investigators concluded that he had struck the mine on the left side.

The time between hearing the detector signal and the detonation was very short, meaning that the victim failed to use his prodder to "soften" the ground before using the trowel.

Conclusion

There is no guarantee that there are not mines on the friendly side of the minefield.

The action taken after getting a detector reading was not correct.

Recommendations

The use of handtools must be better “supervised and carried through by Section Commanders”.

The Field Commanders’ guide should be updated to avoid further accidents arising through the misuse of demining tools. Pinpointing detector readings and marking the centre clearly will support these efforts.

[The researcher photographed the trowel during a field visit when the Accident Investigators explained what had occurred.]

Victim Report

Victim number: 400	Name: Name removed
Age: 29	Gender: Male
Status: deminer	Fit for work: not known
Compensation: not made available	Time to hospital: 50 minutes (at least)
Protection issued: Not recorded	Protection used: not recorded

Summary of injuries:

INJURIES

minor Hearing

severe Body

severe Face

severe Hand

severe Leg

COMMENT

See medical report.

Medical report

A brief field medical report recorded the victim’s date of birth and the following:

Temperature: 36.8

Blood pressure: 130/90

Pulse: 60/75 pm

Respiration: 18/20 pm

The victim was evacuated by air which took “about” 50 minutes. He was taken from the Save River to Inhambane Provincial hospital.

A hearing problem was recorded on the demining group’s injury spreadsheet.

Analysis

The primary cause of this accident is listed as a "*Field control inadequacy*" because the victim was working incorrectly and his error was not corrected – despite the close proximity of a supervisor.

The Secondary cause" is listed as "*Victim inattention*" because it seems that the victim was accustomed to working in areas where the use of a prod was not essential to loosen ground prior to using a trowel, but did not think about the excessive force he was having to use.

Partly as a result of this accident, the demining group decided to use purpose designed, blast-resistant handtools in future.

The accident report was inadequate because no record was made of the protective equipment in use at the time.