

DDAS Accident Report

Accident details

Report date: 22/01/2004	Accident number: 10
Accident time: 11:00	Accident Date: 30/04/1999
Where it occurred: Kapfudze Village, Mukumbura	Country: Zimbabwe
Primary cause: Unavoidable (?)	Secondary cause: Field control inadequacy (?)
Class: Excavation accident	Date of main report: 30/04/1999
ID original source: AVS	Name of source: AVS
Organisation: [Name removed]	
Mine/device: R2M2 AP blast	Ground condition: soft
Date record created: 11/01/2004	Date last modified: 11/01/2004
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

long handtool may have reduced injury (?)
no independent investigation available (?)
inadequate investigation (?)
squatting/kneeling to excavate (?)

Accident report

At the time of this accident the demining company operated in two-man teams using a one-man drill. One deminer looked for tripwires, cut undergrowth, used the detector and excavated finds while the other watched from a safe distance and "controlled" him. The group issued frontal protection and their drills assumed that the deminer would kneel or squat while excavating.

The researcher was on site when this accident occurred. The site was the border minefield between Zimbabwe and Mozambique known as the Cordon Sanitaire. Laid during the 1970s, the extensive minefield was last maintained in the early 1980s. The detector used was a Vallon with an extendable handle.

The victim had been investigating a detector reading (at around 11:00) with his prodder when a mine [identified as an R2M2 by inference] detonated. He had bruised (sprained) his thumb. He had no other injury.

Notification of the accident to the rest of the site was slow and it was 30 minutes later that the researcher reached the victim. His armour and prodder were examined. A single fragment had struck the armour on the shoulder, penetrating the first of 16 layers of aramid. The prodder was bent into a curve but intact. The visor had been torn off [as is frequently the case with full-face visors] and was lying in the uncleared area ahead of the accident site.

A site investigation along with the QA representatives took place. They expressed the opinion that the victim had been prodding too steeply because the mine had gone off. The researcher pointed out the lack of injury and they agreed that there was no conclusive evidence at the site to show how the victim had been prodding. The crater in fibrous black soil was unusually square and about 20cm deep. No one measured it or searched for mine fragments.

The visor was visible through the grass ahead of the cleared lane, and was blast scarred. The front part of the head-frame had broken away, implying that it was struck with considerable force. It seems that the visor protected the victim from serious facial injury.

Victim Report

Victim number: 20	Name: [Name removed]
Age:	Gender: Male
Status: deminer	Fit for work: yes
Compensation: Not made available	Time to hospital: N/A
Protection issued: Frontal apron Long visor	Protection used: Frontal apron, Long visor

Summary of injuries:

INJURIES

minor Hand

COMMENT

No medical report was made available.

Analysis

The primary cause of this accident is listed as "*Unavoidable*" because the victim's injuries are inconsistent with the notion that he was prodding at a steep angle and there was no evidence that he was. The process of locating small mines by excavation when the mines are more than 20 years old (and may be in poor condition) is bound to lead to some unavoidable accidents.

The victim's 18" (15cm) prodder (made locally) was bent by the accident but remained in one piece.

Several other excavating accidents occurred in this mined area within weeks of this. The area being cleared was the densest minefield yet tackled in the history of humanitarian demining with more than 3000 AP mines per kilometre and as many as 200 mines being found each working day. The number of excavating accidents that occurred over a given period of time was likely to be higher than in areas where there were few mines.

No record of this accident appears to have been made by the demining company involved.

In correspondence with the demining group in December 1999 the researcher was asked to stress the exceptional density of mines and the difficult conditions in which they are found – including hard ground and land heavily contaminated with metal. While the ground seen in site visits was not exceptionally hard, the density of mines in the area being cleared was certainly exceptional and the accidents are frequently assessed as "unavoidable".

Related papers

No other documents were made available.



The victim was photographed thirty minutes after the accident. He was excited, drinking tea and eating bread. The site doctor had already attended him and left the scene satisfied that there was no significant injury. He had "strapped" the victim's thumb with a bandage.