DDAS Accident Report

Accident details

Report date:	19/04/2006	**Accident number:**	68
Accident time:	10:32	**Accident Date:**	26/04/1996
Where it occurred:	Calomanda Village, Huambo Province	**Country:**	Angola
Primary cause:	Field control inadequacy (?)	**Secondary cause:**	Management/control inadequacy (?)
Class:	Excavation accident	**Date of main report:**	30/04/1996
ID original source:	IC/JH/NN - internal	**Name of source:**	INAROEE
Organisation:	[Name removed]		
Mine/device:	PPM-2 AP blast	**Ground condition:**	bushes/scrub grass/grazing area
Date record created:	23/01/2004	**Date last modified:**	21/03/2006
No of victims:	1	**No of documents:**	3

Map details

Longitude:	15° 43' 42" E	**Latitude:**	01° 12' 46" S
Alt. coord. system:		**Coordinates fixed by:**	
Map east:		**Map north:**	
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

inadequate medical provision (?)

inadequate investigation (?)

no independent investigation available (?)

partner's failure to "control" (?)

squatting/kneeling to excavate (?)

visor not worn or worn raised (?)

Accident report

At the time of the accident the demining group were running two-man teams and a one-man drill. In this, the same deminer cuts undergrowth, uses the detector and excavates any finds. The demining group issued frontal protection and their drills assumed the deminer would kneel or squat while excavating.

No report of this accident was found at the Angola MAC. However, an accident report was prepared by the UN for another accident that occurred on 27th June 1996 and in which this accident was mentioned. The document stated "about one month ago the same platoon have had a first accident when a deminer activated a mine with his prodder, without severe consequences".

The demining group's country manager made an internal "preliminary" report available. The document was dated 29th April 1996 and the following summarises its content.

The reports started by stating that the accident occurred at 10:02 at an "old military health post" [the time conflicts with other records]. The investigation began an hour after the accident. The victim was unable to give full details of his actions at that time. The demining team had worked at the site for three months and had cleared 2,700m^2 and destroyed 405 PPM-2 blast mines. The vegetation in the area was "extremely thick" and three strands of barbed wire that had been part of the old fence had been cut back to prevent interference with detectors.

At 10:05 the victim located a PPM-2 at the head of his lane. He called the Team Leader who marked the mine to be destroyed it at the end of the day. The victim and his partner then moved to another lane. When they changed roles (resting/demining) just before 10:30, the victim went back to the lane where he had found the mine. His partner saw that he had taken off his visor and shouted a warning to him. The victim ignored him and started probing a metre from the uncovered mine in the belief that a second mine had been laid there (as was normal for that mined area). He prodded onto a second mine and it detonated. He was blown back into the safe lane, got up and moved towards his partner. His injuries were all to his face.

The Supervisor and the medic treated him within one minute of the accident, then took him to the Brazilian (UN) hospital, arriving there six minutes after the accident. The hospital said the victim had sustained "minor secondary blast damage to his face and eyes caused by fine particles of dust". They recommended he be taken to an eye surgeon in Luanda.

Although "all agencies operating aircraft" offered to take the victim by air, the victim was driven to the Clinica Sagrada Espianca in Luanda, arriving "by" 17:50 and was seen by a specialist "within" an hour.

The investigators found that the blast crater was 35cm wide and 30cm deep, and a metre outside the cleared area, following the expected pattern. They found fragments of a PPM-2 [the other mine had been detonated by this time so finding parts may not have been relevant] and the victim's detector was working normally. His protective apron was undamaged but splattered with blood. His visor was undamaged. His probe had not been found when the report was written.

Conclusion

The investigators decided that the deminer acted against the group's SOPs by returning to prod for the mine. The accident was probably "caused by bad drills…. He may have been probing at too steep an angle". It was recognised "that the mine may have been laid at an angle (this had been the case for about 20% of the mines found)" at the site. The investigators believed that the victim would have been unhurt if he had been wearing his visor. They said that the Team Leader was not at fault because he was 200m from the accident site [this appears to contradict his arrival at the accident within a minute] so was unable to see the deminer without his visor. Deminers had been told to report any infringements to the Team Leader but the victim's partner did not do this quickly enough. The investigation concluded that the medical and evacuation procedures went well but noted the fact that the UN field hospital was incapable of dealing with all types of injury.

Recommendations

The investigators recommended that deminers should be warned about not using protective equipment, and given regular retraining on the use of demining tools. Also, they recommended that a new system for evacuating casualties needing eye surgery be established.

Victim Report

Victim number:	97	**Name:**	**[Name removed]**
Age:		**Gender:**	Male
Status:	deminer	**Fit for work:**	presumed
Compensation:	not made available	**Time to hospital:**	not recorded
Protection issued:	Long visor Short frontal vest	**Protection used:**	Short frontal vest

Summary of injuries:

INJURIES

minor Eyes

minor Face

COMMENT

No medical report was made available.

Analysis

The primary cause of this accident is listed as a *"Field control inadequacy"* because the victim was working improperly (including removing his visor) and his partner lacked the authority to correct him. The demining NGO involved claimed that all their field staff wore visors and vests at all times when in a mined area.

The victim is presumed to have been squatting because the demining group approved squatting to prod and or excavate at the time.

The demining group's failure to accept an offer of air CASEVAC and apparent ignorance of the facilities available locally raises questions about their competency and appears to a failure of senior management. The secondary cause is listed as a *“Management/control inadequacy”*.

Related papers

Additional information from an internal demining group document written on 30th April 1996 stated that the victim's injuries had been confirmed as lacerations to both corneas. No other injuries were sustained. The eye specialist was confident that the victim would not lose his sight and would be able to return to Huambo on 1st May 1996. Daily washing and dressings of the eyes could be given by the UN field hospital.