

DDAS Accident Report

Accident details

Report date: 11/03/2004	Accident number: 46
Accident time: 08:19	Accident Date: 21/10/1998
Where it occurred: Cap Agua (reservoir), Uige	Country: Angola
Primary cause: Field control inadequacy (?)	Secondary cause: Management/control inadequacy (?)
Class: Missed-mine accident	Date of main report: 06/11/1998
ID original source: JM/TH/MB/JFS	Name of source: INAROOE
Organisation: [Name removed]	
Mine/device: PPM-2 AP blast	Ground condition: metal scrap sandy bushes/scrub grass/grazing area
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 metal-detector (?)
no independent investigation available (?)
inconsistent statements (?)
victim squatting and stepped on mine (?)
visor not worn or worn raised (?)

Accident report

At the time of the accident the demining group usually operated a two-man drill in which one deminer was working while his "partner" watched his activity and corrected any errors.

An internal Board of Inquiry report (in Portuguese) dated 6th November 1998, was on file at the Country MAC. The following summarises its content.

The investigators visited the accident site on 4th November 1998. The accident occurred in a minefield of PPM-2 mines that had been laid by government forces in 1985. An accident had occurred in the same area on 8th July 1998 in which the same Section Chief and Platoon Commander were present. The platoon was clearing an area measuring 50x7 metres from right to left and all finds were marked with white stakes. Mines were laid two metres apart and in the form of a semi-circle.

The accident occurred 3.5m from the base line and a metre from an area designated "High Risk" [it was not explained what this meant]. The ground was flat with bushes and grass to a metre high. The soil was sandy and compact and the presence of metal made the use of a detector difficult.

On the day of the accident the deminers started work at 07:45. The victim was working without a partner [whose absence was unexplained]. After finding many pieces of metal, he ignored other detector signals, moved in front of his end-of-lane marker and knelt to remove the forks from a bicycle. He should have finished his "shift" at 08:15 but at 08:19 he was putting the scrap metal to one side when his heel activated a PPM-2 mine that was 40cm "behind" his end-of-lane marker. He suffered the "loss" of both lower limbs, received lacerations to both arms and was penetrated near the anus by fragments that ruptured the urethra and the main artery, causing his death at 11:40 in the local hospital.

No one else was injured. The victim was wearing a protective vest designed to fasten between the legs, but the fastening was undone when the accident occurred. It took 12 minutes to get the victim to hospital. [It was not recorded whether he was wearing a visor.]

During the investigation deminers recruited from forces opposed to the government alleged that the second commander of the platoon was working with the local police for their capture. This was in accordance with the political and military situation of the time. [The translator felt this implied that the victim was also recruited from opposition forces.]

Conclusion

The investigation concluded that the victim ignored SOPs and so caused the accident. The victim did not fasten the lower part of his protective vest. It identified weaknesses in command and control but decided that it was not necessary to modify training or training SOPs, or to modify equipment.

Recommendations

The investigators recommended that operations cease until the deminers had taken a refresher course. and that prodders should be used in areas with heavy metal contamination.

Victim Report

Victim number: 65	Name: [Name removed]
Age:	Gender: Male
Status: deminer	Fit for work: DECEASED
Compensation: not made available	Time to hospital: 22 minutes
Protection issued: Frag jacket	Protection used: Frag jacket

Long visor

Summary of injuries:

INJURIES

minor Arms

severe Body

severe Genitals

AMPUTATION/LOSS

Leg Below knee

Leg Below knee

FATAL

COMMENT

Victim died 3 hours and 21 minutes after the accident, in a local hospital. See medical report and Related papers.

Medical report

A very brief report by the paramedic said that the victim was treated and after first aid it took 12 minutes to get him to hospital – at 08:41. The victim died at 12:40 in the operating theatre. See also the Accident report (in which his death was recorded at 11:40) and Related papers.

Analysis

The primary cause of this accident is listed as a "*Field control inadequacy*" because the victim was working in breach of SOPs and went uncorrected. The fact that the mine had been "missed" and there was no monitoring or QA system in place that might have noted the error is a significant "*Management/control inadequacy*".

The position of the deminer immediately before the detonation is described as "kneeling". His position at the time of detonation can be inferred from the injuries. The deminer was on one knee or crouching when he set off the mine with his heel, so having his buttocks inside the fragmentation cone from the blast. He may have been defecating, so excusing his having unfastened the crotch-piece of his armour.

Related papers

A field report written by the Chief of the Brigade on 21st October 1998 stated that the accident occurred when the victim went back along the lane to be "relieved". He was injured on both legs, losing one and fracturing the other which was amputated at the hospital. He also suffered fragment wounds to the anus and injuries to the right arm. The victim was taken to Uige Central Hospital where he died during a blood transfusion at 11:30 [timing clashes with the paramedic's report]. This report included a request for assistance to buy a coffin, meet the funeral expenses and bring the victim's wife from Luanda.