

DDAS Accident Report

Accident details

Report date: 15/03/2004	Accident number: 315
Accident time: 10:45	Accident Date: 24/12/1999
Where it occurred: Tower 88, Moamba District, Maputo Province	Country: Mozambique
Primary cause: Victim inattention (?)	Secondary cause: Inadequate equipment (?)
Class: Vegetation removal accident	Date of main report: 29/12/1999
ID original source: MT/AR	Name of source: CND/IND/MT
Organisation: Name removed	
Mine/device: PMN AP blast	Ground condition: bushes/scrub grass/grazing area pylons and surrounds sparse trees wet
Date record created: 20/02/2004	Date last modified: 20/02/2004
No of victims: 1	No of documents: 1

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 communications (?)
inadequate medical provision (?)
inadequate investigation (?)
vegetation clearance problem (?)
pressure to work quickly (?)

inadequate equipment (?)

Accident report

An accident report on an IND form was made available by IND. Written in Portuguese, the investigator did not fill in all of the fields and did not sign or date the report. The report was translated and is transcribed here as accurately as possible. It is followed by a demining group internal report.

Accident report 1

The weather at the time of the accident was described as "hot and sunny".

Description of Accident

The accident occurred at 10:45 on December 24th 1999 during the manual demining of power lines between Maputo and Komatiport at the 88th tower about 8km from Moamba Town. The area being cleared was very muddy with lots of shrubs and grass around the pylon.

The deminer was injured in an area considered to be densely mined during an attempt to enlarge the cleared area from 20 square metres to 40 square metres. While trying to cut some shrubs he made a "false move" and activated a mine outside his lane with his left foot. The mine was outside the "ring" and below a tree.



A photograph of the accident site is shown above.

The accident happened on Christmas Eve and, according to the management, the group working on this assignment was a part of a number of volunteers who had agreed to forego their Christmas and New Year holiday.

As a result of the accident the injured deminer lost his life on the way to Zimbabwe after receiving treatment at Sommerchild Hospital.

Recommendations

The investigators recommended:

The demining group must put in place measures which guarantee the safety of deminers. In this regard they have to introduce the mandatory use of protective vests.

From now on, the demining group must acquire an ambulance and not use alternative vehicles, as was the case in this instance.

Conclusions

The accident was unavoidable due to the squatting posture of the victim when he was working, which did not give him much room for movement. The one movement he made to make more room for work resulted in the accident.

The most serious injuries caused by the mine were mainly due to the demining group not providing their deminers with protective vests.

Pressure put on the deminers to finish the lane in "record time" and "obliging" them to work as volunteers are one of the factors which contributed to the accident.

Four colour photographs were included in the file showing:

- Tower No. 88 where the accident occurred
- The deminer's lane
- The site of the accident
- The crater left by the explosion of the mine

[From the report above, several inferences have been drawn with reasonable confidence: The victim stood on a mine that detonated properly, so probably lost a foot. The victim's injuries would have been less if he had a protective vest, so he suffered chest or body injury. The mine involved was an AP blast mine.]

Accident report 2

A report dated 29th December written by the Field Manager at the site was also made available by IND in 2000. The following summarises its content.

The cover sheet recorded that the mine involved was a PMN. Other sources report that 3000 Gyata-64s had been found on the job. Given that the mines are similar in appearance, the GYATA-64 may have been mistaken for a PMN.

The victim's injuries were recorded as: "Left foot completely blown off. Right lower leg suffered severe lacerations and damage"

At about 11:20 the Field Manager returned from a routine recce and was informed of the accident that had occurred at 10:45. He drove to intercept the vehicle being used for medevac. He looked at the victim and decided that he would be more comfortable remaining where he was because a stretcher would not fit into his own vehicle. The two vehicles drove by a pre-planned route (avoiding bottlenecks) to Maputo arriving at the outskirts by 12:30. "During the journey" the Field Manager was told that a medevac aircraft would collect the casualty from Maputo airport at 14:30. The Field Manager contacted a special clinic in Maputo to arrange to be met on arrival by an ambulance. The ambulance met the evacuation vehicle and the casualty was transferred by 12:45.

The Field Manager sent the medic into the clinic with the victim while he telephoned the group's director. The medic was not allowed into the ward. The Field Manager entered by the emergency door and located the victim in the Intensive Care ward where he was being stabilized in preparation for the journey to the airport. His left-leg bandages were reinforced. "The right leg dressings had been removed and the lacerations were worse than I had hitherto realized and he had lost a lot of blood". The victim was in pain, especially when his legs were moved.

The wounds were being dressed by an orthopaedic surgeon. All efforts were directed to stabilizing the victim. However, the medical staff made it clear that they would prefer to operate. "I asked whether he could manage the journey and they told me that he could but there was a risk that he might not. On this basis we proceed with the transfer to the airport."

There was confusion at the airport but when that was overcome the medevac doctor said that the victim "was in a bad way but should make it to Harare". While waiting for the plane to refuel and the papers to be signed the medevac doctor reported to the Field Manager that the victim had "gone into shock and should not travel". The Field Manager informed the Director of Operations and the victim was taken back to the clinic in the ambulance at about 15:00.

The Field Manager returned to the clinic at 15:20 to find that the victim was gasping for breath and losing consciousness. The victim died at 15:50, still in the intensive care ward.

The Field Manager returned to the accident site on the following day where “it was evident that he had stepped on a PMN mine whilst clearing around a tree at the end of his lane”.

The victim had been previously trained but only started with the group three weeks before the accident. He had detected an M969 on his first day and a PMD-6 subsequently. A week before the accident he was “warned” when two metal fragments were found by his Team Leader in the area he was supposed to have cleared.

Victim Report

Victim number: 397	Name: Name removed
Age:	Gender: Male
Status: deminer	Fit for work: DECEASED
Compensation: not made available	Time to hospital: 5 hours
Protection issued: Not recorded	Protection used: not recorded

Summary of injuries:

INJURIES

severe Leg

AMPUTATION/LOSS

Leg Below knee

FATAL

COMMENT

No medical report was made available. Victim died 5 hours and 5 minutes after the accident.

Analysis

The primary cause of this accident is listed as “*Victim inattention*” because it seems that the victim stepped out of the cleared area inadvertently as he cut undergrowth. The secondary cause is listed as “*Inadequate equipment*” because the victim was not provided with protective equipment and died en-route to a hospital in a neighbouring country. His medevac began in a long trip in a vehicle that was not an ambulance and when he arrived in a trauma clinic capable of operating, it was decided to move him again by air to Harare instead. It is unclear why this was considered desirable.

It is management’s responsibility to provide adequate equipment and medevac facilities. There was no adequate ambulance, no adequate PPE and no adequate communications equipment.

The independent report on the accident was poorly detailed and failed to identify the mine or the PPE in use (if any).