

DDAS Accident Report

Accident details

Report date: 19/05/2006	Accident number: 316
Accident time: 11:45	Accident Date: 18/11/1999
Where it occurred: Murrumbene, Inhambane	Country: Mozambique
Primary cause: Unavoidable (?)	Secondary cause: Field control inadequacy (?)
Class: Excavation accident	Date of main report: 25/11/1999
ID original source: ADP-12	Name of source: CND/IND/ADP
Organisation: Name removed	
Mine/device: GYATA-64 AP blast	Ground condition: agricultural (abandoned) grass/grazing area trees wet
Date record created: 20/02/2004	Date last modified: 20/02/2004
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

inconsistent statements (?)
inadequate investigation (?)
squatting/kneeling to excavate (?)
partner's failure to "control" (?)

Accident report

A report on the accident prepared for the National authority was made available in November 2000. Made available in Portuguese, it was translated and the following summarises its content.

The accident occurred in a defensive ring of mines laid during 1987. The ring formed part of the protection to Marrumbene Villa. The base camp was four kilometres to the East. The vegetation in the area was Coco trees, sugar-cane plants and a mixture of grass and reeds. The ground was wet, being close to a swampy area. It was also on an incline that led to mine movement during the wet season, sometimes increasing the depth of the mines.

The victim's partner had marked a signal from his metal detector. The victim went forward and started to probe the ground. The mine was at an angle in the ground. At 11:45 he probed onto and detonated a mine.

The detonation left a crater 30cm wide and 15cm deep. The photograph below shows a deminer recreating the victim's working position at the time of the accident [the protective equipment shown may not have been in use].



The victim was injured in the face, left eye, left shoulder and right leg. His injuries "were not serious because of the protective clothing he was wearing". He received first-aid in the area and was transported by ambulance to Chicuque Hospital, arriving within 35 minutes of the accident. He was later transferred to Inhambane Provincial Hospital. [Later also to Maputo Central Hospital with severe injuries – see Medical report.]

Conclusions

The investigators concluded:

The accident occurred because the mine was at a great depth and because the deminer did not pay attention to the correct prodding angle as indicated in the SOPs.

Recommendations

The investigators recommended:

Revision must be made to the procedures relating to substituting personnel when a metal detector reading is marked.

The supervisor must be close to the work place so that he can assist the deminers.

The prodder should be used to identify the size of the object, starting a minimum of 10cm behind the signal point.

A photograph in the file showed fragments of a Gyata-64 mine recovered from the site.

From the statements of the deminers (see Statements) it is clear that the group were working in a three-man-team, apparently with a three-man-drill.

Victim Report

Victim number: 398	Name: Name removed
Age: 26	Gender: Male
Status: deminer	Fit for work: yes
Compensation: not made available	Time to hospital: 35 minutes
Protection issued: Not recorded	Protection used: not recorded

Summary of injuries:

INJURIES

severe Eyes

severe Face

severe Shoulder

AMPUTATION/LOSS

Eye

COMMENT

See medical report.

Medical report

A medical report from the Legal and Medical services of the Health Ministry dated 9th February 2000 was made available in November 2000. The following summarises its translated content.

The victim was 26 years old and married at the time of examination.

The employer had reported that the patient was the victim of an accident at work.

Victim information

It was noted that on 28th November 1999 while doing his normal functions as a deminer in Morrumbene/Inhambane he activated a landmine. He immediately lost consciousness. From there he was taken to Inhambane Provincial Hospital where he was detained for two weeks, then transferred to Maputo Central Hospital where he was detained for two weeks due to front, head and eye injuries. He suffers from ear-ache (right side) with deteriorating hearing. He has lost his right eye. He has anxiety and insomnia and at times hallucinations. No other complaints.

Objective examination

The victim was mentally stable and his general condition was good. There were "multiple hipocromicas scars" on his head, predominantly on his right "hemiface" "nasoneana and masseteniana" and right "enoflalmia".

Hospital information

Diagnosis: traumatic "oftalmopatia" of the right eye with infection of the cornea; right eye totally blind. Was operated on the right eye under general anaesthetic. Surgical cleaning of the head injuries and limb. Besides this treatment, antibiotic, "analgescicos corileos", serum.

Conclusions

The victim's injuries are stable.
The time required for the injuries to heal is 60 days.
The time off work will be for the next 90 days.
Physiological incapacity for work is 40%.
Loss of his right eye constitutes "privacao" of an organ.
The head scars have produced visible deformity.
The "Pretium Doloris" is serious.
Loss of aesthetics.
There is blindness in the right eye and limited movement in the right shoulder.
The victim can no longer work as a deminer.

In November 2000 the victim was working as a guard at the demining group's training centre.

Analysis

The primary cause of this accident is listed as "*Unavoidable*" because it seems that the victim may have been working properly in accordance with his widely approved SOPs when the accident occurred. If the mine was on its side, he need not have prodded at the wrong angle to detonate it.

The secondary cause is listed as a "*Field control inadequacy*" because the investigation implies that the field supervisors were not close enough, so not on hand to correct any errors the victim and his partners may have made.

The report was inadequate because it was poorly detailed and wrongly identified the victim's injuries as minor. The inclusion of a photograph showing a deminer wearing PPE that had not been purchased and issued at the time of the accident could have been misleading.

This accident may illustrate the dangers of using a demining drill in which the man investigating a detector reading is not the man who used the detector. This is thought by many to increase the potential for starting an excavation in the wrong place.

Statements

The following are close to literal translations, edited for anonymity.

Statement – victim's partner

As the victim was replacing me in the lane I asked him to first check, before proceeding with demining operations, a sound which had been detected in front of the two sticks as per the safety regulations. I left the place and after a short time I heard an explosion behind me resulting from the use of the prodder.

Statement – deminer witness

I would like to inform that from the first hour until the time that the accident occurred, there had been three of us working in the same lane as a means of reinforcement and it was left to [the victim] to complete the work. The third partner had informed him that in front of the two sticks at one meter he had detected a sound. Consequently, while he was in the act of investigating the sound, the accident happened.

Statement – Paramedic

It was at exactly 11:45 on 18/11/99 that the victim activated an anti-personnel mine. He suffered injuries (bruises) on the right cheek, on the head, right leg, right thumb and on the muscle of the right deltoid. Administering First Aid and up to the time the ambulance met us was 20 minutes.

The assistant medic of the program was already waiting for the victim at hospital where he was examined, an x-ray was taken and blood was taken for analysis. Due to the shortage of medicine at Chicique, the victim was transferred to Pibane Provincial Hospital where he was still detained when the statement was taken.

Dated: 25/11/99