

# DDAS Accident Report

## Accident details

<b>Report date:</b> 11/03/2004	<b>Accident number:</b> 36
<b>Accident time:</b> 09:25	<b>Accident Date:</b> 04/08/1995
<b>Where it occurred:</b> Sabie, Maputo Province	<b>Country:</b> Mozambique
<b>Primary cause:</b> Field control inadequacy (?)	<b>Secondary cause:</b> Inadequate equipment (?)
<b>Class:</b> Excavation accident	<b>Date of main report:</b> [No date recorded]
<b>ID original source:</b> ADP-5, not dated	<b>Name of source:</b> ADP/CND/IND
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> PMN AP blast	<b>Ground condition:</b> sparse trees grass/grazing area
<b>Date record created:</b> 22/01/2004	<b>Date last modified:</b> 22/01/2004
<b>No of victims:</b> 1	<b>No of documents:</b> 2

## Map details

<b>Longitude:</b>	<b>Latitude:</b>
<b>Alt. coord. system:</b>	<b>Coordinates fixed by:</b>
<b>Map east:</b>	<b>Map north:</b>
<b>Map scale:</b> not recorded	<b>Map series:</b>
<b>Map edition:</b>	<b>Map sheet:</b>
<b>Map name:</b>	

## Accident Notes

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

## Accident report

An internal investigation was carried out by three UN Technical Advisors between 4<sup>th</sup> and 8<sup>th</sup> August 1995. Their report was made available and the following summarises its content.

Since October 1994 the platoon had cleared 467 mines and 30,000 m<sup>2</sup> of a ring minefield 80 km long and 5-10 metres wide (fenced for much of its length). The accident occurred in an area that was mostly flat with small trees and grass, much of which had been burnt off. PMN mines had been laid in a zig-zag pattern parallel to the inner fence. No mines had been found between the pattern and the outer fence.

At 09:25 the victim was clearing a lane using a combination of detector and excavation (with a "digging trowel"). While in a kneeling position he reached out to dig at the edge of the lane and initiated a PMN. He suffered traumatic amputation of his right arm "at the elbow" and lacerations to his face, right leg, and left arm. He walked to a safe lane where paramedics gave first aid. He was then driven to Sabie and taken by air to Maputo Central Hospital, leaving at 10:17 and arriving at 11:02.

The investigators found that the victim's detector worked normally. Trowel markings along the edge of the victim's lane (and that of his working partner) showed evidence of vertical digging.

## Conclusion

The investigation concluded that the accident was caused by the victim failing to cover all the ground with the detector and by his "vertical digging". The wearing of safety glasses "almost certainly" saved the victim's sight, although the lenses were blown out of the frames and one of the lenses broke. The investigators added "ultimately safety is an individual responsibility".

The victim's safety glasses were photographed by the researcher in 1995.



## Recommendations

The investigators saw no need to modify existing techniques. However, where detectors and excavation are used in combination, they recommended that each must be used thoroughly. Further, where detectors could not be used reliably, only excavation should be used so avoiding a lack of alarms being supposed to indicate an absence of mines. Other recommendations included that all deminers be warned about vertical digging and fined if caught, and that the wearing of safety glasses should be enforced (and more durable ones found).

## Victim Report

<b>Victim number:</b> 52	<b>Name:</b> [Name removed]
<b>Age:</b>	<b>Gender:</b> Male
<b>Status:</b> deminer	<b>Fit for work:</b> yes
<b>Compensation:</b> US\$1,881	<b>Time to hospital:</b> 1 hour 37 minutes
<b>Protection issued:</b> Safety spectacles	<b>Protection used:</b> Safety spectacles

## **Summary of injuries:**

### **INJURIES**

minor Arm

minor Body

minor Face

minor Legs

### **AMPUTATION/LOSS**

Arm Above elbow

### **COMMENT**

See medical report.

## **Medical report**

The victim's right arm was surgically amputated just below the shoulder. The medical officer's report stated that the victim would remain 50% disabled and have permanent "fisiological" damage of 75% with scarring to the face, abdomen and legs. It describes his wounds as constituting an "aesthetic deformity".

The Compensation Board recommended 60% of 30x monthly salary -USD \$110 = USD\$1980 (30<sup>th</sup> April 1996). [The accident investigators did the same calculation and got \$1881 as the answer.]

In November 2000 the victim was working as a photocopier operator for the demining group.

## **Analysis**

The primary cause of this accident is listed as "*Field control inadequacy*" because the victim was working in an unsafe manner (and had been for some time) and was not corrected by the field supervisors.

The provision of unsafe tools and inadequate safety equipment were management failings leading to the secondary cause being listed as "*Inadequate equipment*". The investigators recognised that the safety spectacles may not have been strong enough by recommending that "more durable" ones be found. The victim (see Related papers) reported that his arm injury had been caused by his trowel.

## **Related papers**

No Country MAC report or other documents were made available.

The victim was interviewed on 12<sup>th</sup> November 1998 at the demining group's office in Maputo. He was then employed as a photocopier operator and with responsibility for external messages. He had received some Admin training and some from Rank Xerox. He spent eight weeks in hospital after the accident and returned to work after six months (with outpatient treatment in between). He suffered no lung injury. He had a 3cm scar on his forehead. His right arm was amputated just below the shoulder and he had an unrealistic prosthetic. He expressed concern about his future and said he would like further training. He said that his trowel had caused the injury to his arm.