

# DDAS Accident Report

## Accident details

<b>Report date:</b> 11/03/2004	<b>Accident number:</b> 38
<b>Accident time:</b> 13:30	<b>Accident Date:</b> 19/05/1995
<b>Where it occurred:</b> Inhassoro Bridge, Inhambane Province	<b>Country:</b> Mozambique
<b>Primary cause:</b> Management/control inadequacy (?)	<b>Secondary cause:</b> Inadequate training (?)
<b>Class:</b> Missed-mine accident	<b>Date of main report:</b> [No date recorded]
<b>ID original source:</b> ADP-3 (undated)	<b>Name of source:</b> ADP
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> GYATA-64 AP blast	<b>Ground condition:</b> route (verge) bushes/scrub 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> 1

## 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

inadequate metal-detector (?)  
inadequate medical provision (?)  
pressure to work quickly (?)  
protective equipment not worn (?)  
mine/device found in "cleared" area (?)  
safety distances ignored (?)  
inadequate area marking (?)

no independent investigation available (?)

inadequate equipment (?)

## **Accident report**

An internal investigation was conducted by a UN Technical Advisor. The report was made available and the following summarises its content.

The team were clearing ground around a bridge in preparation for a gas pipeline to be laid. The bridge was about 40m long with a two-way asphalt road over it. It was on a steep embankment with grass (50cm tall) and small trees. Gyata-64 and POMZ-2 mines were in the area. The team were clearing a 4m wide strip for 50m on both sides of the bridge abutments.

Work began on 18<sup>th</sup> May 1995 and one side was cleared that day, with a POMZ-2 located and destroyed. On 19<sup>th</sup> May 1995 the section started clearing the other side. At about 10:00 a mine exploded in a cleared lane about two minutes after a deminer walked there. No injuries occurred. Work continued and a further three mines were found using detectors. On completion the victim went to destroy the mines.

At 13:30 he placed a charge next to one of the mines and then stepped back a pace and his right foot initiated a mine "close to the edge of the cleared area". No tape or markings were used so it is "not possible to specify whether he was inside the cleared area or not". He suffered a traumatic amputation of the right foot and open fracture of the right femur. After first aid, he left by vehicle at 13:37 and arrived at Vilanculos Hospital at 14:10. After problems contacting SabinAir by telephone, operations staff drove to the airport and alerted SabinAir directly. At 16:15 the victim was taken to Maputo Central Hospital by plane and arrived at 18:13. His right leg was amputated below the knee. The investigator reported that "Casevac and communications procedures worked according to prearranged plans".

## **Conclusion**

The investigators concluded that the mines were at a maximum depth of 10cms and could be located with a detector. There had been no soil movement in the area. The clearance SOPs was not adhered to. There was no safe lane at the bottom of the embankment and the "uphill" clearance method was not used. Normal marking methods were not used – the deminers were using boot marks instead. The section were anxious to finish for the weekend, so worked quickly and ignored the standard 20 minutes work/20 minutes rest system.

After the investigation the area was rechecked (see accident in Mozambique on 19<sup>th</sup> May 1995) and the investigators concluded that the missed mines were the result of poor supervision and incorrect drills. This probably occurred because the section was in a hurry to complete before the weekend and their detectors may not have been tuned properly. Other SOPs were ignored, including safety distances, deminers continuing to clear beyond located mines, not wearing safety glasses and the supervisor clearing ground himself. They concluded that "the communication, evacuation and medical aspects of the accident were handled in a professional and timely manner".

## **Recommendations**

The investigators recommended compensation to be paid for the loss of the deminer's right leg below the knee - 36%x 30x monthly Salary (US\$140) = \$1512. Also, that all detector alarms must be investigated, minefield marking tapes must be used and that there should be no pressure for deminers to work quickly.

## Victim Report

<b>Victim number:</b> 55	<b>Name:</b> [Name removed]
<b>Age:</b> 24	<b>Gender:</b> Male
<b>Status:</b> deminer	<b>Fit for work:</b> yes
<b>Compensation:</b> US\$1,512	<b>Time to hospital:</b> 4 hours 17 minutes
<b>Protection issued:</b> Safety spectacles	<b>Protection used:</b> none

### Summary of injuries:

AMPUTATION/LOSS

Leg Below knee

COMMENT

See medical report.

### Medical report

A medical report dated 29th May 1995 was on file at the demining group's HQ. It stated that the victim "stepped backwards on a landmine with his right leg and the force of blast catapulted him up that he got the femur fracture and fibula fracture too. He didn't get some soft tissue injuries". The victim's injuries were recorded as: "traumatically amputated right foot; femur fracture, open III. °,R". His treatment was a "below knee amputation" and "skeleton traction of femur fracture R." The amputation wound was left open "because the leg was involved with extensive infection".

A subsequent medical report stated that the patient was discharged on 23<sup>rd</sup> June 1995 and had started physiotherapy to prepare for prosthesis. There had been no complications with the femur fracture. The author of the medical report requested expedited settlement so that the deminer could buy a house to be near physiotherapy and also marry his pregnant girlfriend.

In November 2000 the victim was working as a store-man for the demining group.

The Victim's DOB was 04/04/71.

### Analysis

The primary cause of this accident is listed as a "*Management/control inadequacy*" because the field supervisors failed to ensure that the deminers were working properly, and appear to have encouraged bad working practices. Responsibility for the training and control of field supervisors lies with management. The secondary cause is listed as "*Inadequate training*".

The accident investigator's praise for the MEDEVAC is strange, given that it took more than four hours for the victim to reach a hospital. (The site was not remote.)

The "inadequate equipment (?)" noted refers to the issue of industrial safety spectacles as PPE.