11-11-1998

# DDASaccident015

HD-AID
*Humanitarian DeminingAccident and Incident Database*

# DDAS Accident Report

## Accident details

| | | | |
|---|---|---|---|
| **Report date:** | 22/01/2004 | **Accident number:** | 15 |
| **Accident time:** | 10:20 | **Accident Date:** | 11/11/1998 |
| **Where it occurred:** | Murrupula/Mucarre power lines | **Country:** | Mozambique |
| **Primary cause:** | Management/control inadequacy (?) | **Secondary cause:** | Inadequate training (?) |
| **Class:** | Missed-mine accident | **Date of main report:** | 20/11/1998 |
| **ID original source:** | NB (date nominal) | **Name of source:** | CND/IND/HT (field) |
| **Organisation:** | [Name removed] | | |
| **Mine/device:** | M969 AP blast | **Ground condition:** | electromagnetic |
| **Date record created:** | 12/01/2004 | **Date last modified:** | 12/01/2004 |
| **No of victims:** | 1 | **No of documents:** | 1 |

## Map details

| | | | |
|---|---|---|---|
| **Longitude:** | 38° 30' 18" E | **Latitude:** | 15° 30' 32" S |
| **Alt. coord. system:** | | **Coordinates fixed by:** | |
| **Map east:** | | **Map north:** | |
| **Map scale:** | | **Map series:** | |
| **Map edition:** | | **Map sheet:** | |
| **Map name:** | | | |

## Accident Notes

inadequate metal-detector (?)

inadequate training (?)

squatting/kneeling to excavate (?)

no independent investigation available (?)

use of pick (?)

visor not worn or worn raised (?)

## Accident report

The demining group issued frontal protection and their drills assumed the deminer would kneel or squat when excavating.

A copy of an accident report written by the demining group in the MAC's required format was supplied by the demining group's country office. The incomplete Country MAC form was accompanied by an internal report by the demining group's Country Manager. The following summarises the content of both.

The investigators visited the site on 17/18th November 1998. The accident occurred near the base of one of 34 pylons being cleared of defensive mines in a "Survey/UXO" task that started on 6th June 1998. Each tower was protected by "up to 45 mines". By the date of the accident the team had found and destroyed a total of 421 M969 mines around 17 of the pylons (8-10 around each "leg"). Work was under way at three pylons. The soil had "a high laterite" content so the clearance was being conducted by excavating using an enxada [a hoe like a pick-axe]. At 10:15 the Team Supervisor and his assistant were watching the work of a deminer. They instructed the deminer to stop work and go to collect more marker sticks so that he could correctly mark the area he had just cleared ("about 3m of ground"). The deminer left his lane and the Assistant Team Leader took his place and continued to excavate the ground. This is not usual practice but he later explained that he was trying to "neaten" the cleared area. At 10:20 he detonated an M969 mine with the hoe. When the Team Supervisor arrived he found the victim "staggering" around. It was noted that the victim was conscious and remained calm throughout.

The victim's visor was found "some 3m from the site of the blast" and the broken wooden shaft of his hoe was near the front of the cleared lane. The investigators thought it "likely" that his visor was worn raised because the supporting head-frame on the right side was damaged and there was "blast scarring inside the visor". No blast damage was in evidence on the outside of the visor.

### Conclusions

After conducting interviews the investigation concluded that the victim wore the visor incorrectly and that his injuries may "have been worsened by the funnelling effect" of wearing it raised. After seeing the site, the investigators had no doubt that the excavation was rushed (large lumps of soil were in evidence) and undertaken in a manner that breached SOPs. They expressed concern that this breach had not been corrected by the Team Supervisor and his Assistant when they were watching the deminer prior to the accident. The investigation concluded that the victim struck the mine "vigorously either on the pressure plate" or close to the detonator (horizontal on the M969). The Team Supervisor and the medic responded promptly and appropriately after the accident and were commended by the investigators.

### Recommendations

These were "actions" rather than recommendations because they had been implemented by the time of the report. All of the demining group's Mozambique teams "will completely retrain prior to recommencing demining work". The team involved in the accident had full retraining on the SOPs – with emphasis on the approved excavation technique. All Team Supervisors were "spoken to" about maintaining quality control in the mined area. Disciplinary action was taken against the Team Supervisor and the deminer who was sent away from his lane for failing to "adequately carry out quality control". The pylon where the accident occurred was re-cleared, and the completed pylons had "a thorough re-evaluation of clearance".

## Victim Report

| | | | |
|---|---|---|---|
| **Victim number:** | 27 | **Name:** | **[Name removed]** |
| **Age:** | 26 | **Gender:** | Male |
| **Status:** | supervisory | **Fit for work:** | not known |
| **Compensation:** | not made available | **Time to hospital:** | 2 hours 10 minutes |
| **Protection issued:** | Long visor<br>Short frontal vest | **Protection used:** | Short frontal vest |

**Summary of injuries:**

INJURIES

minor Arm

minor Face

minor Hand

minor Legs

severe Eye

AMPUTATION/LOSS

Eye

COMMENT

See medical report.

## Medical report

No formal medical report was made available: see Accident report.

At 10:23 the medic found the victim's "level of consciousness and breathing" to be normal. He treated "wounds to his right eye, face and temple", "superficial injuries to his right arm and thighs" and "a small wound to a finger of his right hand". The victim's right eye was "subsequently lost". The victim left for hospital at 10:35 and arrived at 12:30 (having received continued treatment en-route).

The Victim’s DOB was recorded as 30/04/72.

## Analysis

In this accident a field supervisor breached safety procedures and excavated in an unsafe manner for reasons of "neatness". The victim was a member of the management chain yet breached basic SOPs. This accident is classed as one caused by *"Management/control inadequacy"* because the victim was a supervisor and it seems that his training or selection was inadequate.

The use of a hoe for excavation is not unusual, although often restricted to the use of a hoe or pick-axe to start an excavation and get to the required depth.