DDAS Accident Report

Accident details

Report date: 19/04/2006

Accident number: 61

Accident time: 11:30

Accident Date: 28/11/1996

Where it occurred: Libongo, Caxito, Bengo Province

Country: Angola

Primary cause: Field control inadequacy (?)

Secondary cause: Management/control inadequacy (?)

Class: Missed-mine accident

Date of main report: 12/12/1996

ID original source: NO/PH/JJ/TF

Name of source: Other/UCAM

Organisation: [Name removed]

Mine/device: MAI-75 AP blast

Ground condition: bushes/scrub
grass/grazing area
hard
rocks/stones
route/path

Date record created: 23/01/2004

Date last modified: 23/01/2004

No of victims: 2

No of documents: 2

Map details

Longitude:

Latitude:

Alt. coord. system:

Coordinates fixed by:

Map east:

Map north:

Map scale: Barro Do Dande

Map series:

Map edition: Map SC33/B1

Map sheet: 71

Map name: 1:100 000

Accident Notes

inadequate equipment (?)

safety distances ignored (?)

pressure to work quickly (?)

protective equipment not worn (?)

inadequate area marking (?)

Accident report

The demining group worked in three-man teams with one deminer detecting, one cutting undergrowth and excavating, and one resting at any one time.

No copy of the Board of Inquiry report was found on file at the country MAC. A copy was obtained by other means and the following summarises its content.

The investigators were unable to approach the accident site when they visited on 2nd December 1996. They returned on 5th December when the area had been re-cleared. Their report stated that the demining group were working on two sites, with 18 men at one site and seven men working at the other. Both came under an expatriate supervisor who was at the larger site 18k away). The track being cleared ran along the side of "an old railway embankment". It was described as "distinct" but "overgrown with sparse vegetation". [A photograph showed stubs of coarse grass in the path and long grass and light bush around it.] The ground was quite hard and "stony" with "a lot of metal fragments".

The Section worked as two teams of three deminers and a "commander". The section had been on site for two days and had "cleared approximately 60 meters", finding three MAI-75s. Each team cleared a metre wide lane along the track, with one team ahead of the other. The accident occurred at about 11:30 after the order for personnel in the teams to change around was given. The two deminers who had been resting moved forward to take over. As they walked "down the track one of the men…stood on a mine in a cleared area". The victim had a traumatic amputation of a foot and his colleague received light fragmentation injuries. Neither victim was wearing safety equipment because they had yet to take it from their working colleagues.

The investigators found that the cleared lane varied in width (averaging 3m). About two metres from the blast crater was another MAI-75 mine that had been located at a depth of one or two centimetres. The EOD specialist present advised that the mine involved in the accident may have been buried deeper – possibly up to 7-8cm – but this "could not be accepted conclusively without conducting trails with other mines". Fragments of a MAI-75 were found.

The board found that the Schiebel detector was not affected by the type of soil present and that a MAI-75 could "be detected at a distance of 10cm from the underside of the Schiebel…to the top of the mine". Finally the board made a random search of the cleared area and found that although there was evidence of investigation around all metallic readings, the metal fragments had not been removed. The deminers interviewed all believed that the mine had been deeply buried, which was why it was missed.

Conclusion

The investigators concluded that the mine had not been buried very deeply. The team was clearing at an average rate of "at least 6 square metres per hour" per three man team, from which the investigation inferred that either the teams was working too quickly or it was missing out "drills". They believed that the failure to use "base sticks" "may have been a contributing factor to this accident". The "level and experience" of the Angolan team Commanders was questioned and the demining group's failure to use any means of marking cleared areas as they worked "could quite easily lead to unchecked areas". Concern about working distances, lane widths and the practice of leaving metal in the ground were expressed. The investigators decided that medical procedures were good.

Recommendations

The investigators recommended that the demining platoon should stop working until they had undergone an "extended period of retraining". They also recommended that the group change to a one-man drill. They said that the demining group should review the practice of placing "Angolan staff in control of a job" before they were sufficiently trained and experienced.

Victim Report

Victim number: 83 **Name:** [Name removed]

Age: **Gender:** Male

Status: deminer **Fit for work:** not known

Compensation: not made available **Time to hospital:** not recorded

Protection issued: None **Protection used:** none

Summary of injuries:

AMPUTATION/LOSS

Leg Below knee

COMMENT

No medical report was made available.

Victim Report

Victim number: 84 **Name:** [Name removed]

Age: **Gender:** Male

Status: deminer **Fit for work:** presumed

Compensation: not made available **Time to hospital:** not recorded

Protection issued: None **Protection used:** none

Summary of injuries:

INJURIES

minor Body

minor Foot

minor Hand

minor Leg

COMMENT

No medical report was made available.

Analysis

The primary cause of this accident is listed as a *"Field control inadequacy"* because the demining field operation was carried out in a way that led to mines being missed.

There were also management failings because the systems they had devised allowed the exchange of shared protective equipment to take place inside the working area, mined area marking to be inadequate and for supervisors to lack appropriate experience or training. The secondary cause is listed as a *“Management/control inadequacy”*.

The development NGO demining group involved in this accident is no longer working in humanitarian demining in Angola – their withdrawal was reported to be as a direct consequence of its two accidents in late 1996.

Related papers

A document (in Portuguese) and signed by a senior UN Technical Advisor was at file at the UN MAC. It stated that there were three casualties in this accident but gave no additional detail.