

DDAS Accident Report

Accident details

Report date: 17/05/2006	Accident number: 167
Accident time: 11:00	Accident Date: 05/09/1997
Where it occurred: Cham Kachek MF, Kompong Speu	Country: Cambodia
Primary cause: Field control inadequacy (?)	Secondary cause: Inadequate equipment (?)
Class: Victim inattention	Date of main report: 10/09/1997
ID original source: none	Name of source: CMAC
Organisation: Name removed	
Mine/device: MD82B AP blast	Ground condition: bushes/scrub woodland (light)
Date record created: 14/02/2004	Date last modified: 14/02/2004
No of victims: 1	No of documents: 1

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

victim ill (?)
inadequate equipment (?)
inadequate metal-detector (?)
vegetation clearance problem (?)
no independent investigation available (?)
inadequate investigation (?)
inadequate area marking (?)
disciplinary action against victim (?)

Accident report

At the time of the accident the demining group operated in a two-man drill whereby one deminer used the detector and marked any signals while the other looked for tripwires, cut undergrowth and excavated any detector readings. A third deminer may have been resting [it is not known whether the group had changed from three-man to two-man teams at this time].

A brief internal accident report was located at the country MAC and translated from the original Khmer. The following summarises its content.

The working area was covered with dense vegetation and the clearance work involved the removal of thick bushes and small trees. The victim had been working as the vegetation cutter and prodder man on the morning of the accident and had completed the clearance of his lane just before the lunch break. As he was returning he noticed that one of the stakes holding the marking tape was not straight so he attempted to put it right by pulling the tape. In trying to do so he walked along a fallen log near the edge of the lane but his left foot slipped off and he trod on the uncleared side of the lane marker and onto a mine.

The accident occurred at 11:00 and the victim suffered traumatic amputation of the left foot. A tourniquet was applied and he was put into the ambulance at 11:15, arriving at Kompong Speu District Hospital at 11:50.

An inspection of the accident site revealed that the explosion occurred about 25cm from the edge of lane marker, which meant the mine should have been detected during the normal course of lane clearance (which included an area beyond the marker). The bushes and trees had been cut about 20cm above the ground and the stubble was keeping the fallen logs raised above ground, making them unstable to stand on.

Statements were taken on 8th September 1997.

The victim stated that he had felt ill that morning but chose to work. He fell off the log because he had a dizzy spell, possibly because he took some medicine. When asked why he had not straightened the lane markings as he worked he pointed out that in wooded areas such as this he had to work his way around obstacles and not in a straight line. The markings could only be straightened after clearance.

The victim's partner was asked why the mine had been missed during the course of sweeping to the side of the clearance lane. He explained that the detector was old and was performing poorly. Also the batteries that they used lasted about two weeks, but in the second week they were losing power over the course of the day. He also said that in areas with dense vegetation the detector was too long to be used easily and he was often obliged to hold the shaft rather than the handle.

Conclusion

The investigators concluded that SOPs required clearing the area immediately to each side of a lane to the width of a detector head. The detector man did this but the detector failed to locate the mine because the detector was too old and the battery was wearing down. They decided that the accident was caused by careless marking. If the marking had been done properly the need to straighten the markers would not have arisen.

Recommendations

The investigators recommended that deminers should be reminded that all detectors must be checked thoroughly before starting work. Also, that other sorts of battery, such as alkaline batteries, should be investigated to see if they have a longer working life and a more sensitive alternative to the Schiebel "Mk 2" detector should be considered. They noted that the SOPs did not specify how close to the ground a bush or tree should be cut, but thought that for safety purposes they should be cut as close as possible, so the SOPs should be revised.

A sketch of the accident site and a photograph of the victim after treatment were included in the file. Also, a memo asking for support documents to be forwarded to the country MAC Director to allow a decision over "disciplinary action" against the victim to be made.

Victim Report

Victim number: 212	Name: Name removed
Age:	Gender: Male
Status: deminer	Fit for work: not known
Compensation: not made available	Time to hospital: 50 minutes
Protection issued: Safety spectacles	Protection used: not recorded

Summary of injuries:

AMPUTATION/LOSS

Leg Below knee

COMMENT

No medical report was made available.

Analysis

The primary cause of this accident is listed as a "*Field control inadequacy*" because the supervisors allowed the victim to behave in an unsafe manner while straightening lane markers. Also, they either allowed the use of detectors that were in a condition that rendered the job impossible, or they failed to ensure that detector sweeps overlapped into uncleared areas. The secondary cause is listed as "*inadequate equipment*".

The "punishment" of the victim for the failings of his supervisors occurs in other accidents involving this demining group.