DDAS Accident Report

Accident details

Report date:	18/05/2006	**Accident number:**	199
Accident time:	14:05	**Accident Date:**	20/10/1993
Where it occurred:	Sneng (Snoeng, Snung Vatrung), Battambang Province	**Country:**	Cambodia
Primary cause:	Field control inadequacy (?)	**Secondary cause:**	Inadequate equipment (?)
Class:	Missed-mine accident	**Date of main report:**	20/10/1993
ID original source:	GJ	**Name of source:**	CMAC
Organisation:	Name removed		
Mine/device:	Type 72 AP blast	**Ground condition:**	grass/grazing area metal fragments
Date record created:	14/02/2004	**Date last modified:**	14/02/2004
No of victims:	2	**No of documents:**	1

Map details

Longitude:		**Latitude:**	
Alt. coord. system:	MF: M1233	**Coordinates fixed by:**	
Map east:		**Map north:**	
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

inadequate equipment (?)

no independent investigation available (?)

inadequate metal-detector (?)

inadequate medical provision (?)

safety distances ignored (?)

Accident report

An internal accident report was prepared by an expatriate advisor on 20th October 1993 and found on file at the country MAC in January 1999. The following summarises its content.

The deminers were operating a three-man team with a two-man drill. The detectors in use had been checked that morning and declared functional. The resting deminer reported that the accident occurred in an area that had just been declared clear by the team. He said they had found 40 metal pieces and two tripwires since the morning. They were working very slowly and had only cleared 15m^2 by 14:00. He had checked the area ahead of the lane for tripwires, then cut the grass. The third deminer then went to rest and Victim No.2 checked the area with the detector and marked three places. Victim No.1 then went forward to prod the marked places. He prodded on one but could find nothing so called Victim No.2 forward to show him exactly where the detector had signalled. Victim No.2 did so and as he walked back he stepped on the mine at 14:05. Victim No.2's "left leg was bleeding" and his foot blown off. Victim No.1 suffered "blast bruises on his face". The extent of damage to his eyes was unclear.

The investigator found three mine markers in the lane, one of which had been partly excavated. The detonation occurred about two feet (60cm) from the nearest marker. The working area showed signs of soil deposits and the crater created by the blast was 7" (18cm) deep which the investigator took to indicate that the mine was deeply buried and may have been beyond the reach of the detectors (Schiebel AN/19). The bottom of the crater was a "little more" than the diameter of a T72 mine.

No parts were found, but the team had cleared a T72a in that lane on the previous day [also a Type 69 or a tripwire in different statements].

The medic treated the victims on site and was believed to have been responsible for saving the life of victim No. 2. Road evacuation involved fording deep rivers because of broken bridges so the ambulance was accompanied by a truck in case it got stuck (it did not).

By 14:45 the two victims arrived at Rattanuk Civil Hospital having been evacuated by road.

A helicopter arrived at 15.50 to continue the evacuation. Victim No 2 appears to have been moved to the Mongkul Borey Hospital later.

The Site Manager made a statement from which some of the details in the above are drawn.

The Platoon Supervisor made a statement from which some of the above details are drawn.

The Platoon Commander said that the accident occurred at 14:05. He said he had visited that section at 13:45, also that the team had found a T72a mine and a tripwire the day before.

The third deminer in the team said that they had found a T72a mine and an M69 mine in the lane on the day before. Much of the detail of the accident above was drawn from his statement.

Conclusion

The investigator concluded that there was an urgent need to evaluate the capability of Schiebel detectors to detect T72a mines. It was possible that Victim No.2 had ignored a weak detector signal, so all detector-men must be warned to investigate every signal in a T72a area. They noted that the two victims should not have been together in the lane, so the second injury should not have happened.

Recommendations

The investigators recommended that the victims be compensation according to their contracts, that a trial be conducted "to confirm the capability of Schiebel Mine detector to detect deep buried T72 mines", and that the medical staff on site should be commended. They added that deminers should be instructed not to be together in the working lane, and Medevac from that site by air should be arranged during the wet season until the road was repaired.

Victim Report

Victim number: 253 **Name: Name removed**

Age:	30	**Gender:**	Male
Status:	deminer	**Fit for work:**	not known
Compensation:	US$720	**Time to hospital:**	2 hours 15 minutes
Protection issued:	Safety spectacles	**Protection used:**	not recorded

Summary of injuries:

INJURIES

minor Face

severe Eye

AMPUTATION/LOSS

Eye

COMMENT

See medical report.

Medical report

No formal medical report was made available.

A compensation claim included an opthalmologist's (undated) report that on 21/01/94 the damage to the Victim's left eye had been certified as "irreversible". He suffered a "post trauma glaucoma which will continue to deteriorate". As a result he was unable to continue working as a deminer.

Victim Report

Victim number:	254	**Name:**	**Name removed**
Age:	40	**Gender:**	Male
Status:	deminer	**Fit for work:**	not known
Compensation:	US$1080	**Time to hospital:**	2 hours 15 minutes
Protection issued:	Safety spectacles	**Protection used:**	not recorded

Summary of injuries:

AMPUTATION/LOSS

Leg Below knee

COMMENT

See medical report.

Medical report

In a report dated 26th October 1998, a medical doctor stated that Victim No.2 arrived at the hospital with his left ankle bandaged and his entire left leg appearing "swollen". No other injury was noted and the patient was conscious.

The Accident report included a photograph of Victim No.2 being treated in which his leg was in place, showing that it was not traumatically amputated.

He was airlifted at 15:50 and arrived at Mongkul Borey hospital at about 16:15.

Victim No 2 signed a receipt for $1,080 on 10th December 1993. His salary was US$160.

The Accident file also contained a [confusing] compensation document showing that Victim No.2 had received US$720 in compensation.

Analysis

The primary cause of this accident is listed as a *"Field control inadequacy"* because a mine was missed and SOPs were not followed (safety distances were ignored and it is likely that safety spectacles were not worn).

There was also a significant management failing because the detector supplied was incapable of doing the work required of it. This was later recognised and the detector replaced - but it appears to illustrate management carelessness or incompetence that it took eight years for the detector's known inadequacy to lead to action. The secondary cause is listed as *"Inadequate equipment"*.