DDAS Accident Report

Accident details

Report date:	18/05/2006	**Accident number:**	190
Accident time:	13:45	**Accident Date:**	30/01/1995
Where it occurred:	Phum Trach Pok, Sortnikum District, Siem Riep Province	**Country:**	Cambodia
Primary cause:	Management/control inadequacy (?)	**Secondary cause:**	Inadequate training (?)
Class:	Excavation accident	**Date of main report:**	16/02/1995
ID original source:	RMJ	**Name of source:**	CMAC
Organisation:	Name removed		
Mine/device:	IED	**Ground condition:**	not recorded
Date record created:	14/02/2004	**Date last modified:**	14/02/2004
No of victims:	2	**No of documents:**	2

Map details

Longitude:		**Latitude:**	
Alt. coord. system:		**Coordinates fixed by:**	
Map east:		**Map north:**	
Map scale:	not recorded	**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

inadequate training (?)

inadequate medical provision (?)

safety distances ignored (?)

squatting/kneeling to excavate (?)

Accident report

At the time of the accident the demining group are believed to have operated in two-man teams with a one-man drill. In this one deminer used the detector and all the tools while his partner watched and "controlled" him. The demining group issued frontal protection and their drills assumed the deminer would kneel or squat while excavating.

A country MAC accident report dated 16th February 1995 was found on file at the MAC offices in January 1999. The following summarises its content.

The mined area was laid by the District Police and Militia to protect a dyke from attack. The reconnaissance team warned of booby trapped 60mm mortars and B40 RPGs. At 13:45 on the day of the accident Victim No.1 located a device similar to one that had been found two hours before. He called his Section Commander to identify it. The Section Commander, Victim No.2, arrived and stood to his right behind him. The Section Commander removed his safety spectacles to wipe sweat from his eyes and get a better view. Victim No.1 began to probe again and Victim No.2 told him to stop. As he put the tool down, the device exploded. Both victims fell back into a cleared area.

Victim No.1 "received the main force of the blast including fragmentation to the face and head as well as flash burns and peppering." He also received fragment wounds to the arms, suffered a broken arm and was bleeding heavily. Victim No.2 received a small number of fragment wounds, flash burns and peppering to his arms, upper body and face. His eyes were also damaged. After first-aid the victims left by ambulance at 13:55 and arrived at the Sotr Nikum District Hospital at 14:30. They were stabilised and then moved to Siem Reap Provincial Hospital and the following morning flown by a French military helicopter to Calmette Hospital in Phnom Penh.

Conclusion

The investigators concluded that the main device was a B40 RPG (inferred from fragments at the site and from the victims' report). Two other devices were found nearby which were B40 rockets with the propellant removed. The head had been placed in the ground with an adjusted mortar fuse covered by plastic. Both were highly sensitive and placed to detonate in an anti-personnel role.

Victim No.1 caused the accident by careless excavation, and by placing a tool on or close to the device. Both acts were a direct breach of the group's SOPs.

The investigator believed that Victim No.1's eyes were saved by his safety spectacles because he was within a meter of the point of detonation yet they were intact. Victim No.2 was standing a meter behind the deminer and was not wearing his spectacles; he sustained injuries that "will most likely result in permanently impaired vision". The investigators argued that the "thick" full cotton uniform saved both men from severe flash and peppering injuries to their limbs and main body. The demining group announced that they intended to introduce full face visors and body armour during 1995. The investigators stated that a full face visor would have prevented many of the injuries in this accident.

Recommendations

The investigators found that no modification of SOPs was required but retraining of all deminers on relevant procedures was recommended. This accident was taken to demonstrate that the use of excessive disturbance around highly sensitive booby traps is unnecessarily dangerous. Where such devices are found the field officer should place two charges to detonate it as an alternative to further manual probing.

Each of the group's deminers carried a field dressing. In this instance six dressings were used before the first aid box arrived. It was recommended that each deminer be equipped with two or three field dressings. The ambulance had one stretcher. It was recommended that it be modified to allow for two stretchers.

Victim Report

Victim number:	240	**Name:**	**Name removed**
Age:		**Gender:**	Male
Status:	deminer	**Fit for work:**	yes
Compensation:	not made available	**Time to hospital:**	45 minutes
Protection issued:	Safety spectacles	**Protection used:**	Safety spectacles

Summary of injuries:

INJURIES

minor Arm

minor Face

minor Head

severe Arm

COMMENT

See medical report.

Medical report

No formal medical report was made available.

The accident report stated that Victim No.1 "received the main force of the blast including fragmentation to the face and head as well as flash burns and peppering." He also received fragment wounds to the arms, suffered a broken arm and was bleeding heavily.

The victim returned to work with the demining group on 14th June 1995.

Victim Report

Victim number:	241	**Name:**	**Name removed**
Age:		**Gender:**	Male
Status:	supervisory	**Fit for work:**	not known
Compensation:	not made available	**Time to hospital:**	45 minutes
Protection issued:	Safety spectacles	**Protection used:**	none

Summary of injuries:

INJURIES

minor Arms

minor Chest

minor Face

severe Eyes

COMMENT

See medical report.

Medical report

No formal medical report was made available.

The accident report stated that Victim No.2 received a small number of fragment wounds, flash burns and peppering to his arms, upper body and face. His eyes were also damaged.

Analysis

The primary cause of the accident is listed as a *"Management/control inadequacy"* because a field controller was involved and (despite the investigator's opinion) was in breach of SOPs by removing his eye protection - and possibly also by allowing the deminer to work while he was too close.

Management must take responsibility for ensuring that field supervisors are appropriately trained and obey their SOPs. The secondary cause is listed as *"Inadequate training"*.

The failure to provide adequate eye protection was corrected soon after by this demining NGO.

Related papers

A sketch of the B40 improvised mine was available [it appears to be a P-40 Vietnamese mine, made using BLU-24/B submunitions.]

One source indicated that both victims may have returned to work with the demining group on 14th June 1995. It is not clear in what capacity Victim No.2 was re-employed, if he was.