DDAS Accident Report

Accident details

Report date:	15/05/2006	**Accident number:**	116
Accident time:	11:15	**Accident Date:**	17/11/1997
Where it occurred:	Gullany Haji Faraj, Darbandikhan District	**Country:**	Iraq
Primary cause:	Unavoidable (?)	**Secondary cause:**	Inadequate equipment (?)
Class:	Excavation accident	**Date of main report:**	19/11/1997
ID original source:	AS	**Name of source:**	MAG
Organisation:	Name removed		
Mine/device:	PMN AP blast	**Ground condition:**	dry/dusty rocks/stones
Date record created:	12/02/2004	**Date last modified:**	12/02/2004
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

no independent investigation available (?)

handtool may have increased injury (?)

partner's failure to "control" (?)

squatting/kneeling to excavate (?)

Accident report

The demining group was operating a three-man team with a two-man drill at the time of the accident. One man used the detector, marked any readings, and another man came forward to excavate the reading, feel for tripwires and cut any undergrowth. A third man at any one time was resting. The demining group issued full body protection and their drills assumed the deminer would lie prone while excavating.

An internal report, dated 17th November 1997, was prepared by the demining group and made available. The following summarises its content.

The accident occurred at 11:15 in an area that was undulating and steep with dry earth and rock. The victim was investigating a detector reading with a prodder when the mine exploded. He suffered minor blast injuries to his chin and small fragment injuries to his right hand, his right thigh and knee joint. His helmet and visor took most of the blast. The victim was blown back and rolled several metres down a slope. He was evacuated, with two deminers of the same blood group, to the "Emergency" Hospital.

The victim's partner stated that he had detected a mine and informed his partner. The victim started prodding at an angle of 20° 15cm from the reading and then removed some mud from the mine before continuing. The prodder slipped and the mine went off.

The victim stated that the ground was rocky with dry mud. He had "removed some mud/earth from the side of the PMN mine and I slipped with the prodder causing the mine to detonate".

The investigator found that the mine had been buried to a depth of 5cm and all that remained of the prodder was the hand guard and the handle.

Conclusion

The investigator concluded that the victim was following SOPs but that he used excessive force whilst prodding.

Recommendations

The investigator recommended that water he used to soften hard ground, that deminers should be briefed about the need for caution when dealing with PMNs and that the group should consider increasing the length of prodders and/or increasing the strength and size of the hand guard for use in PMN minefields. He added that they should also consider using a protective jacket with a higher collar offering protection to the neck and chin.

Victim Report

Victim number:	150	**Name:**	**Name removed**
Age:		**Gender:**	Male
Status:	deminer	**Fit for work:**	presumed
Compensation:	not made available	**Time to hospital:**	not recorded
Protection issued:	Frag jacket Helmet Short visor	**Protection used:**	Frag jacket, Helmet, Short visor

Summary of injuries:

INJURIES

minor Face

minor Hand

minor Leg

COMMENT

See medical report.

Medical report

The following medical report was in the demining group's accident file. It has been edited for anonymity.

I was at Emergency hospital when the patient arrived approximately at 1240 hours. At arrival the patient was conscious, circulatory stable and in good condition.

He had suffered a soft tissue injury of 2-3 cm to the left side of the jaw. He could talk normally and swallow, and it was not bleeding.

He had superficial skin injuries to the dorsal side of the right hand from the fingertips to above the wrist. It did not look like any fragments were deposited in the skin, only carbon. The third and first fingers were slightly bruised at the fingernails.

The right thigh had superficial skin injuries at the front of the knee joint in an area approximately l0x15 cm size. There seemed to be some small bruises of the skin with possible deposits of dirt. He was able to do normal movements of the knee joint.

He had some bruising of the skin on the left frontal shoulder area, but this was not caused by the mine. It may have been a result of falling down the slope. He had no signs of internal injuries to abdomen or chest or other places of the body.

He was shivering a little during examination in the hospital, but this stopped when he received analgesics IV. From the admittance department the patient was brought to the x-ray department for further examination of the jaw injury.

The patient had received 1000 cc of Ringer Lactate in a 1.2 mm ID IV cannula of the right forearm before arrival in the hospital. The medic had dressed the wounds on the accident site, and had given Ampicillin 500 mg IV. The medic had filled the injury chart and delivered to hospital on arrival.

The patient was injured at 11:20 by a PMN-mine while hand prodding, and rolled several metres down the slope of the minefield after the explosion. The patient was carried out of the minefield to the medic.

Signed. 17/11/97

Analysis

The primary cause of this accident is listed as *"Unavoidable"* because the victim may have been working as directed (in accordance with widely established SOPs) when the accident occurred.

The victim's leg injuries imply that he was squatting to excavate which was in breach of the demining group's widely published SOPs but it seems that those SOPs are varied for Iraq. It is not clear why that should be.

The short visor (attached to a helmet) issued by this demining group may have allowed the victim to sustain chin/throat injuries. The gap between a collar and the visor can be wide, especially when the helmet is tipped back on the head and the visor standing well away from the face. Alternatively, it is possible that the visor was raised at the time. The secondary cause is listed as *"Inadequate equipment"* because the PPE was not appropriate for use when excavating in a squatting position.