

DDAS Accident Report

Accident details

Report date: 19/04/2006	Accident number: 84
Accident time: not recorded	Accident Date: 16/07/1997
Where it occurred: Masak Kariz Village, Sayed Karam district, Paktia Province	Country: Afghanistan
Primary cause: Field control inadequacy (?)	Secondary cause: Inadequate equipment (?)
Class: Excavation accident	Date of main report: [No date recorded]
ID original source: none	Name of source: MAPA/UNOCHA
Organisation: [Name removed]	
Mine/device: PMN AP blast	Ground condition: agricultural (abandoned) grass/grazing area hard
Date record created: 24/01/2004	Date last modified: 24/01/2004
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

handtool may have increased injury (?)
partner's failure to "control" (?)
inadequate investigation (?)
request for better PPE (?)
request for clearance with explosive charge (?)
squatting/kneeling to excavate (?)
visor not worn or worn raised (?)

Accident report

At the time of the accident the UN MAC in Afghanistan favoured the use of two-man teams (usually operating a one-man drill). The two would take it in turns for one to work on vegetation cutting, detecting and excavation, while the other both rested and supposedly "controlled" his partner.

An investigation on behalf of the UN MAC was carried out and its report made briefly available. The following summarises its content.

The victim had been a deminer for two years. It was two months since the victim's last revision course and eight days since his last leave. The investigators determined that the mine was a PMN (from "found fragments"). The accident occurred on ground described as hard agricultural land. A photograph showed baked (cracked) ground with patchy grass cover.

The investigators determined that the victim was clearing the side of a small stream when he got a detector signal and marked it, then prodded but could not find anything. He checked the reading but did not "remark" it and started to prod again. The mine detonated. The victim's visor shattered into many shards in the blast (as shown in a photograph). His bayonet had a bent blade and the handle had broken up.

The Team Leader said the deminer was working properly. He thought the mine had been deposited in its position by water, so may have been at any angle in the ground. He recommended that visors and frag-jackets be issued in future.

The Assistant Team Leader said the victim was working properly. He recommended that bushy and hard areas should be cleared by explosives.

The Section Leader said the victim was working properly. He recommended that the use of picks in a squatting position (on hard ground) would prevent such accidents in future.

Conclusion

The investigators concluded that the deminer was not using the correct marking procedures, so might have mistaken the central point of the reading. They took the depth of the mine to mean that the deminer was prodding at the wrong angle and thought that the victim's failure to find anything at his first investigation may have led to him to believe the signal was not a mine, and so be careless.

Recommendations

The investigators recommended that no one should squat to prod when the ground was suitable for lying prone, and that disciplinary action should be taken against the Section Leader for poor command and control.

Victim Report

Victim number: 115	Name: [Name removed]
Age:	Gender: Male
Status: deminer	Fit for work: DECEASED
Compensation: 500,000 Rs (100%)	Time to hospital: not recorded
Protection issued: Helmet Thin, short visor	Protection used: Helmet; Thin, short visor

Summary of injuries:

INJURIES

severe Chest

severe Hand

severe Leg

severe Neck

severe Shoulder

FATAL

COMMENT

The victim died "in ten minutes of cardio-respiratory arrest due to open chest injuries". See medical report.

Medical report

The victim's injuries were summarised as: "injuries on right hand and severe injuries on chest, which led to his death." He died in the field Medical Unit before being transported off site.

A photograph showed severe injuries to left thigh and ankle and lower right leg, also upper and lower right arm injuries and throat damage. The victim's face was in shadow so could not be seen. A sketch showed damage to his right chest, shoulder and upper arm only.

The demining group reported that the victim had suffered a deep chest wound and fracture of his right arm and died "on the spot". He had suffered a huge lacerated wound to the right side of his chest and his right arm, with massive loss of soft tissue. He died in ten minutes of cardio-respiratory arrest due to open chest injuries.

The UN MAC commented that the medical report did not mention any wounds to the victim's legs yet the photos clearly showed that the deminer suffered injuries to both legs – from which they concluded that he was squatting.

No other documents were made available.

A compensation payment of 500,000 Rs (100%) was made.

Analysis

The primary cause of this accident is listed as a "*Field control inadequacy*" because the victim appears to have been working improperly and his error went uncorrected.

The visor failure may be indicative of UV hardening of the thin polycarbonate: facial damage is not mentioned but may have been concealed (in the same way as the victim's colleagues tried to conceal the fact that he was squatting). The throat and/or chest injury could have been caused by the handle of the bayonet (as has occurred in other accidents). The secondary cause is listed as "*Inadequate equipment*".

From the injuries one can infer that the victim's chest and throat were within the inverted cone of blast and fragmentation from the mine, implying that his victim's body was directly over the blast.

The use of a squatting position to "excavate" was in breach of UN requirements, but not in breach of the demining group's unauthorised variations to those requirements. The failure of the UN MAC to either listen to field feedback and adapt the SOP for local conditions, or enforce their own standards may be seen as a management failing.

The agency that was used to make investigations for the UN MAC (based in Pakistan) at this time was frequently constrained by lack of funds, staff and transport. At times their movement

was constrained by safety concerns. As a result, investigations were frequently delayed by weeks, meaning that an assessment of the site at the time of the accident was impossible.