

# DDAS Accident Report

## Accident details

<b>Report date:</b> 19/04/2006	<b>Accident number:</b> 90
<b>Accident time:</b> not recorded	<b>Accident Date:</b> 11/06/1997
<b>Where it occurred:</b> Chawni Village, Ali Khail District, Paktia Province	<b>Country:</b> Afghanistan
<b>Primary cause:</b> Unavoidable (?)	<b>Secondary cause:</b> Inadequate equipment (?)
<b>Class:</b> Excavation accident	<b>Date of main report:</b> [No date recorded]
<b>ID original source:</b> none	<b>Name of source:</b> MAPA/UNOCHA
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> PMN AP blast	<b>Ground condition:</b> bushes/scrub hard rocks/stones
<b>Date record created:</b> 24/01/2004	<b>Date last modified:</b> 24/01/2004
<b>No of victims:</b> 1	<b>No of documents:</b> 2

## Map details

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

## Accident Notes

inadequate metal-detector (?)  
inadequate investigation (?)  
handtool may have increased injury (?)  
request for long handtool (?)  
squatting/kneeling to excavate (?)

## 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 available. The following summarises its content.

The victim had been a deminer for four years. It was three months since he had last completed a revision course and 43 days since his last leave. The ground where the accident occurred was described as a hard and bushy hillside beside a river. A photograph showed small green "bushes" that were 60cm (2') high. The ground appeared to be largely shale and small stones.

The investigators determined that the victim was working in a bushy clearance lane with continuous detector readings. Because of the continuous reading, he was digging all of the area and prodded with excessive force and let off a PMN. They identified the device by "found fragments". The victim believing that he had touched a tripwire with his bayonet.

**The Team Leader** said that the deminer was working properly and the mine may have been tilted. He added that a modern detector that could differentiate close readings would reduce accidents.

**The Section Leader** said the victim was working properly and that the mine must have been on its side. He said greater caution, and greater control from the victim's partner, might reduce the number of accidents.

**The victim's partner** said he was working properly, but that the mines were up to 50cm deep and had changed position.

**The victim** said he was prodding and working properly. He was not wearing a fragmentation vest because the team did not have enough. He states that his bayonet pulled a tripwire and let off a booby trap. He recommended using a long Russian bayonet for prodding.

## Conclusion

The investigators concluded that either the deminer was squatting to prod and prodded at the wrong angle or the mine had been placed during floods and was at an angle in the ground.

## Recommendations

The investigators recommended that deminers must avoid applying excessive force; that greater care is needed where mines have been moved by floods because their orientation is uncertain; that the command group should ensure all safety procedures are adhered to; and that all deminers should wear fragmentation jackets when unable to probe prone.

## Victim Report

<b>Victim number:</b> 121	<b>Name:</b> [Name removed]
<b>Age:</b>	<b>Gender:</b> Male
<b>Status:</b> deminer	<b>Fit for work:</b> not known
<b>Compensation:</b> 300,000 Rs	<b>Time to hospital:</b> not recorded
<b>Protection issued:</b> Helmet Thin, short visor	<b>Protection used:</b> Helmet, Thin, short visor

## Summary of injuries:

### INJURIES

minor Body

minor Hand

minor Legs

minor Neck

minor Shoulders

severe Chest

### AMPUTATION/LOSS

Hand

### COMMENT

See medical report.

## Medical report

The victim's injuries were summarised as: amputation of right hand at the wrist, deep right chest injury (subclavicular 4-5cm), superficial wounds on left hand, both shoulders, his neck and his "thighs".

A sketch showed abrasions to his knees, body, left arm and hand and a fragment hole in his chest.

A photograph showed upper body injuries and right hand amputation.

The demining group reported that the victim suffered: amputation right forearm (which was "crushed"), fracture right clavicle and left hand 4<sup>th</sup> metacarpal, breathing difficulty and a chest penetration. They reported two months later that the stump had healed, but his left hand and right shoulder were stiff. His injuries were assessed as a 60% disability. Another document described his injuries as: traumatic amputation of right hand at wrist, deep chest injury (subclavicular to 5cm), lacerated wounds to left hand, both shoulders, neck and both legs.

Compensation of 300,000 Rs was forwarded on 6<sup>th</sup> November 1997.

## Analysis

The primary cause of this accident is listed as a "*Unavoidable*" because it seems likely that the victim was working appropriately (within his group's SOPs) when the accident occurred.

The failure of the demining group to provide appropriate detectors, protective equipment or excavating tools are significant management failings. Use of the short bayonet almost certainly resulted in more severe injuries than would have occurred with a long tool, and it seems likely that the chest penetration was caused by a part of the bayonet or its handle (see accident in Afghanistan on 30<sup>th</sup> December 1990). The secondary cause is listed as "*Inadequate equipment*".

The use of a squatting position to "excavate" without wearing a frag-jacket 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. Their failure to have provided more than two frag-jackets per team made adherence to their rules impossible.

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.

### **Related papers**

The picture below shows a Russian prod held in numbers at the training centre for Afghan deminers but not used. It is likely that this was the tool requested. The spectacle-case alongside illustrates the scale of the tool. The prod at the end can be reversed and stored inside the handle. The handle can be used at various lengths, including very short.

