

# DDAS Accident Report

## Accident details

<b>Report date:</b> 12/02/2004	<b>Accident number:</b> 113
<b>Accident time:</b> not recorded	<b>Accident Date:</b> 05/01/1997
<b>Where it occurred:</b> Sarpoza, Ward 6, Kandahar City	<b>Country:</b> Afghanistan
<b>Primary cause:</b> Field control inadequacy (?)	<b>Secondary cause:</b> Inadequate training (?)
<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> building rubble
<b>Date record created:</b> 12/02/2004	<b>Date last modified:</b> 12/02/2004
<b>No of victims:</b> 2	<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 investigation (?)  
long handtool may have reduced injury (?)  
partner's failure to "control" (?)  
safety distances ignored (?)  
squatting/kneeling to excavate (?)  
use of pick (?)  
mechanical follow-up (?)

## 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.

Victim No.1 had been a deminer for six years, and Victim No.2 for five years. Both victims had attended a revision course four months before, and been on leave 24 days before the accident. The ground in the area was described as residential, inside a ruined building. A photograph showed an excavation (to perhaps 2m depth) with loose soil inside.

The investigators determined that the room being worked in had been cleared by the back-hoe but it had not gone deep enough to uncover the mine. Victim No.1 was using the detector and got a signal but he thought it was a fragment because the back-hoe had cleared the area, so he investigated it by using the pick directly onto the reading. The mine was identified as a PMN [presumably by inference]. The victim's pick was "destroyed" and his visor damaged.

No victim statement was taken from Victim No.1 because he had been discharged from hospital before the investigation took place [he was still employed as a deminer].

**The Team Leader** said the back-hoe had removed three metres of soil but the back-hoe had changed the position of the mine and this is why the deminer hit it. He thought that the victim had been working properly.

**The Section Leader** said the deminer was working properly but the back-hoe had shifted the position of the mine.

**Victim No.2** was three metres from Victim No.1 when he started to use the pick. He said it was Victim No.1's fault he made a mistake with the pick.

## Conclusion

The investigators concluded that Victim No.1 had used his pick vertically on a reading. Victim No.2 was not maintaining the correct safety distance and so was close enough for his ears to be injured. They observed that this was the third time within one month that the demining team had detonated a mine by striking it with a pick.

## Recommendations

The investigators recommended that all deminers should be told to treat every reading as a mine; that the Team Leader should check that the back-hoe has removed the soil to the former ground level; and that the Team Commander and related Section Leaders should be told in writing to ensure that deminers work to the "demining principles" when investigating reading points.

## Victim Report

<b>Victim number:</b> 146	<b>Name:</b> Name removed
<b>Age:</b>	<b>Gender:</b> Male
<b>Status:</b> deminer	<b>Fit for work:</b> yes
<b>Compensation:</b> not on record	<b>Time to hospital:</b> not recorded
<b>Protection issued:</b> Helmet	<b>Protection used:</b> not recorded

Thin, short visor

**Summary of injuries:**

**INJURIES**

minor Arms

minor Chest

minor Hands

minor Hearing

minor Neck

**COMMENT**

See medical report.

**Medical report**

Victim No.1's injuries were summarised as: superficial injury to chest, both hands and ear drums.

A medic's sketch (reproduced below) showed abrasions and fragment damage to both arms and throat and indicated that both ear drums were perforated.



The demining group presented a claim for the victim describing his injuries as: to both ears and "soft tissue wounds to left arm and shoulder"; superficial wounds to both hands and chest. Partial deafness led to his being excluded from return to work on 26<sup>th</sup> February 1997. They reported that his hearing had improved, his eardrums were intact and a complete recovery was anticipated. He was passed fit for duty on 26<sup>th</sup> March 1997.

No record of compensation being paid was found.

**Victim Report**

**Victim number:** 147

**Age:**

**Name:** Name removed

**Gender:** Male

**Status:** deminer

**Fit for work:** yes

**Compensation:** not on record

**Time to hospital:** not recorded

**Protection issued:** Helmet

**Protection used:** not recorded

Thin, short visor

### **Summary of injuries:**

INJURIES

minor Hearing

COMMENT

See medical report.

### **Medical report**

Victim No.2's injuries were summarised as "right ear drum damaged".

A sketch of the victim showed that the right ear drum was perforated.

The insurers were informed that the victim suffered a "right ear perforation" in the accident.

No record of compensation being paid was found.

### **Analysis**

The primary cause of this accident is listed as a "*Field control inadequacy*" because the victim admitted that he used the pick inappropriately and his error was not corrected. The fact that UN guidance for the safe use of the tool was contradictory and impossible to implement constitutes the reason for the secondary cause being listed as "*Inadequate training*".

The use of a pick and a squatting position to "excavate" were both 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 SOPs 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.

### **Related papers**

The victim was interviewed by the researcher in Kandahar in July 1998. The photograph below shows him recreating his working position.



He described the accident, saying he was working in a residential area with a back-hoe on site, but he was not checking back-hoe spoil. He removed the back-hoe spoil as instructed and got to the original, undisturbed ground. He checked the original ground where there were many fragments and UXOs with his "Phillips" detector. The detector indicated a reading and he marked the place with three stones and started to use the pick. He mimed his action – swinging in from the side in an attempt to approach the ground at 30°. He thought the PMN mine he hit was on its side. He admitted that he worked all the way to the main detector reading with the pick.

He suffered superficial chest, arm and ear injuries (perforated ear-drum). He was not wearing a fragmentation jacket because no frontal safety equipment was issued (except to the back-hoe observer). He had six weeks off work in total.