DDAS Accident Report

Accident details

Report date:	22/01/2008	**Accident number:**	498
Accident time:	06:00	**Accident Date:**	09/06/2006
Where it occurred:	Task # 084, Abdiby Village, Charikar District, Parwan Province	**Country:**	Afghanistan
Primary cause:	Field control inadequacy (?)	**Secondary cause:**	Inadequate equipment (?)
Class:	Excavation accident	**Date of main report:**	30/07/2006
ID original source:	OPS-271354-06	**Name of source:**	UNMACA
Organisation:	[Name removed]		
Mine/device:	PMN-2 AP blast	**Ground condition:**	building rubble dry/dusty hard rocks/stones
Date record created:		**Date last modified:**	22/01/2008
No of victims:	1	**No of documents:**	2

Map details

Longitude:		**Latitude:**	
Alt. coord. system:	WGS 84	**Coordinates fixed by:**	GPS
Map east:	E 35 02 07	**Map north:**	N 67 4 45
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

use of pick (?)

squatting/kneeling to excavate (?)

visor not worn or worn raised (?)

inadequate equipment (?)

inadequate training (?)

request for machine to assist (?)

Accident report

The report of this accident was made available in August 2007 as a PDF file. Its conversion to a text file for editing means that some of the formatting has been lost. The substance of the BoI report is reproduced below, edited for anonymity. The original PDF file is held on record. Text in [ ] is editorial. An MDU is a Mechanical Demining Unit.

Cover letter

File:OPS-27/ 3r4/06

To: Senior National OPS Manager, UNMACA

From: Area Manager UNAMAC Kabul

Date: 30 July 2006

Subject: Investigation Report

Attached please find the investigation report along with its supporting documents of the Demining Accident happened on [the Victim] deminer of [National demining NGO] MCT- 04 at MF 084 in Abdiby village, Center of Perwan province on 03 July 2006. [Name removed] QM Assistant and [Name removed] OPS Associate for AMAC, Kabul carried out the investigation.

The findings and recommendations are mentioned in this report, forwarded for your information and further action.

IMSMA Demining Investigation Report

Date of incident/accident: 03/07/06: Time of incident/accident: 0600 hrs.

Location: WGS 84, E 35 02 07: N 67 4 45: GPS

Accident caused by improper use of the demining tool during excavation.

History of the Minefield: Task No. AF/0301/01414/MF084 locates in Abdiby village, Charikar district, Parwan province is part of Impact Survey 1D-34 SHA-03 which has been reported by ALIS as high impacted area and its Technical Survey was conducted by [Survey agency] during year 2004. In the year 1998, Taliban planted mine while they were fighting with their opponents.

Considering the impact level of the minefield and request of locals, clearance of the mentioned task was started on 10 May 2006 by [National demining NGO] MCT. Before starting clearance activity in this task one mine accident on a local woman has been reported.

Till occurrence of the accident the team has worked 35 days in this task and at 36th day of the work the accident occurred.

The total survey area of the task is 47251 sqm of which about 14851 has been cleared. 25 items of surface UXO has been found in this task and disposed of, but any mines has not been found in till the accident happened. The mine which caused the accident was the first mine of this task.

Description of the incident/accident: On 03 July 2006 the team as usual started operation at 06:00 am. Deminer[the Victim] a deminer of section 1, party 1 also started to work as other members of the team at that day. At the outset of operation while the deminer was working on a located signal a PMN-2 exploded in the result the deminer was seriously wounded.

The accident occurred at 6:00 am and no later he was shifted to cleared area, after 5 minutes applying medical first aid was started on him, at 6:10 the victim was made ready for shifting to hospital, at 06:25 he was admitted to Charikar city Emergency Hospital and then was shifted to Shahri Naw Emergency Hospital.

As a result of the accident he got head trauma plus serious injuries in his eyes, face and chest during the explosion he was dressed with PPE, but his visor was up.

Description of equipment damage: 1-Mine Detector: Telescopic rod of the mine detector was bent. 2-Visor: It received minor damages (un zapped strip). 3- The pick and bayonet of the party was missing.

Site conditions: The terrain was described as uneven. The ground was hard and dry. The weather was clear and warm. The vegetation was rocky bush.

Team and task details: The team had been at the site for 35 days. The working hours were 05:30 – 11:30. At each 30 minutes change over time second deminer receives 30 minutes break. The detector in use was the Mil-D1. The deminer visor was semi up. He was using a bayonet as a prodder.

Medical reaction time: The paramedic reached the Victim after two minutes. He treated him for three minutes before moving to the ambulance. The ambulance left for the hospital 15 minutes after the accident. The ambulance drove 10 km to the hospital [by implication, in ten minutes].

Conclusion

1. The deminer failed to locate the correct centre of the signal by detector.

2. The deminer has worked directly on top of the signal without considering the safety excavation distance.

3. The deminer was working with pick not with bayonet. The following points intensities our opinion that the victim was working with pick while the accident occurred:

   i. The broken handle of the pick was found adjacent to the explosion point.

   ii. The Gloves of the deminer is without any damage.

   iii. The victim hands do not have any injuries.

   iv. The pick and bayonet of the party was missed from the demining kit of the party.

4. The deminer did not use the correct procedure of excavation for the located signal.

5. The deminer was not correctly controlled by the relevant section leader and team leader. At that time the section leader was busy with other party and the assist team leader, working as acting team leader, was busy in the admin area for preparing brief board (shows weak command and control in the team)

6. The team leader being a key member of the team command group was not present in the site. He was on leave.

7. The deminer has used his helmet improperly (the injuries of his face make it obvious that the visor of his helmet was up).

8. Prior to this accident any mine has not been found in this task, this has made the team confident that there may not be any mine in this task. It was the first mine in this task resulted the accident on deminer [the Victim].

9. At the accident area which is near the entrance of the ruined house soils has been shifted by water on the original ground surface that should be worked by backhoe, but as it is seen the area instead of full excavation till original ground surface has been worked by signal reading from surface of the sediment soil. It is worth mentioning that an MDU is supporting the team.

Recommendations

1. Since a MDU is supporting the team, those places of the site having sediment soils or the grounds surface is hard should be raked and fully excavated by backhoe.

2. The team command group especially the section leaders should strictly control the deminers to correctly locate the signals by detector and then excavate in accordance with the set procedure.

3. The team command group should strictly control deminers to be fully dressed with PPE and keep the visors of their helmets down when they are working in the worksite.

4. The team command group should ensure that the deminers are excavating the signals with appropriate hand tool.

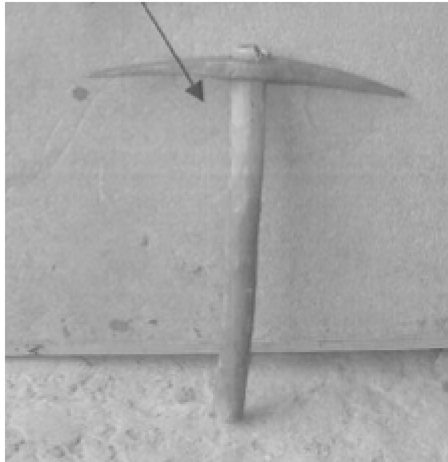
5. When the team is working in a site in which they do not find any mine for a long time the teams should not be confident that there is no mine in the task at all.

6. Whenever the team leader due to some reasonable reasons is not present in the site the assist team leader should strictly control the team and fulfil all the required activities that assigned for the team leader.

Attachments: [Held on file.]

[The accident crater is shown below.]

[An example of the pick that the team uses in the site.]



The entrance gate of the ruined house and the accident point

The broken handle of the pick which has been found adjacent to the accident point

The PPE & helmet-visor of the victim

Follow up letter

File: OPS/03/01-09

August 1st 2006

From: Chief of Operations and Deputy Programme Manager, UNMACA, Kabul

Subject: Follow up action on demining accident happened to the deminer of [National demining NGO] in task # 084 in Abdiby village, Charikar district of Parwan province.

Reference: Demining investigation report File: OPS-271354-06 dated: July 30, 2006, of UN-AMAC Kabul.

A demining accident happened on June 09, 2006 in clearance lane of Samiullah S/0 Ghulam All the deminer of MCT-04 of [National demining NGO] in task # 084 of Abdiby village, Charikar district of Parwan province, causing multiple injuries to the deminers' face, chest and also caused head trauma to him.

The investigation report concluded that, the accident occurred because of lack of supervision, control and also poor planning of the task by command group and carelessness on behalf of the injured deminer, as he was conducting excavation on a signal covered with extra soil in an entrance way of a ruin house, his visor was in up position and used the pick for excavation instead of prodder, a PMN2 mine exploded. The investigation report further indicates that, the team was supporting by MDU, but has not been directed to this portion of the task to excavate the extra soil or at least soften the ground.

Recommendations:

I. The team command group especially section leaders should strictly control the deminers during clearance operation in order to be fully dressed with PPE and practice safe and standard drill.

II. A proper action plan to be made by supervisor/team leader for each individual task in order to utilize the available assets in suitable parts of the task, to facilitate the clearance operations and prevent the team from accidents.

III. Refresher training should be held for the team members.

IV. A disciplinary action to be taken against command group.

With attachment:

AMACs (5), Sub AMAC Gardez and Director [National demining NGO]

Victim Report

Victim number:	659	**Name:**	[Name removed]
Age:	23	**Gender:**	Male
Status:	deminer	**Fit for work:**	no
Compensation:	Not made available	**Time to hospital:**	25 minutes
Protection issued:	Frontal apron Long visor	**Protection used:**	Frontal apron, Visor worn raised

Summary of injuries:

severe Chest

severe Face

severe Head

severe Hearing

AMPUTATION/LOSS: Eyes

COMMENT: See Medical report.

Medical report

From paramedic's statement:

The patient general condition was checked A.B.C was applied on him and his injuries are listed as follows:

1. Head Trauma
2. All face injuries
3. Chest injuries

Applying of first aid at the site was completed at 10 minutes and his transferring from site to the hospital conducted at 25 minutes and firstly was admitted at Chrikar City Emergency Hospital.

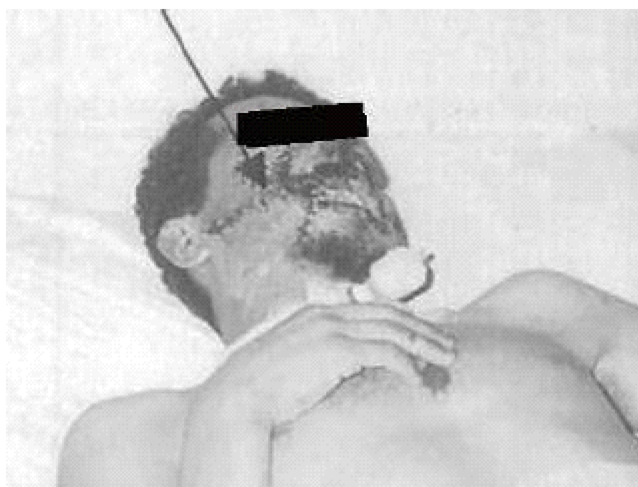
Now, he is under treatment in Emergency Hospital, Shahr-i-Now. Kabul city and his condition is 70% good.

IMSMA form:

DoB: 1983

Records "Loss of" eyesight (both eyes); loss hearing (both ears), chest and head/neck injuries.

[The victim is shown below. His eyes are closed. The black block is to preserve anonymity.]



STATEMENTS

Statement and Witness Report 1: Assist Team Leader, MCT-04

Date: 04/07/06

Questions:

1. Where is team leader of the team, whether he was present at the site at the accident time?

2. How the accident happened and how far you were from the accident point during the accident?

3. What you did while the accident happened?

4. The first party demining kit was checked, there was not the party pick in the kit and as per relevant section leader statement the accident has occurred during prodding then why the victim gloves and hands are intact?

5. How many mines and UXO have been found by your team in this task and what was the type of the mine which caused the accident?

Answers:

1. He was on leave on the accident day.

2. When the accident happened I was in vehicles parking area about 120 meters away from accident point therefore I do not know how does accident occurred.

3. I did the following:

   a. Ceased the demining operations immediately after the accident.

   b. Instructed nearest parties to help evacuation of the victim.

   c. Instructed paramedic to get ready for applying first aid and preparation of ambulance.

4. I think the gloves were not at the hand of the victim during the accident.

5. We have found 25 surface UXO but did not find any mine in this task. The mine which caused accident was the first mine of this task.

Statement and Witness Report 2: Paramedic

Date: 04/07/06

Questions:

1. Would you please explain the victim injuries by medical terminology?

2. How much time took the applying of first aid. transferring of the victim from site to hospital and at which hospital he was admitted?

3. Do you practice CASEVAC drills in the team, if yes, after how many days period and when you have practiced the last drill?

4. In which hospital the victim is under treatment and how is his condition for the team being?

Answers:

1. The patient general condition was checked A.B.0 was applied on him and his injuries are listed as follows:

4. Head Trauma
5. All face injuries
6. Chest injuries

2. Appling of first aid at the site was completed at 10 minutes and his transferring from site to the hospital conducted at 25 minutes and firstly was admitted at Chrikar City Emergency Hospital.

3. We practice the CASEVAC drills after each 15 and the last drill was practiced on [Name removed] 06/06/06.

4. Now, he is under treatment in Emergency Hospital, Shahr-i-Now. Kabul city and his condition is 70% good.

Statement and Witness Report 3: Section Leader, MCT-04

Date: 04/07/06

Questions:

Please answer the following questions:

1. Please explain how the accident occurred?

2. Which fault of the deminer caused the accident?

3. Before the accident, how was the deminer physical and mental condition, how long he has worked as deminer and whether you were satisfied with his work and practical experience?

4. What was your work method in the site reading of signals or full excavation?

5. What was you doing when the accident occurred and how far you were from the accident point?

6. We have found a broken handle of pick from vicinity of the accident point, what you say about this?

7. when we checked the party demining kit, there was no pick and bayonet in the kit, whereas at the other parties kit was available and also you had said that during prodding the accident has occurred, but as we saw there was not any damage to victim gloves. Please explain what is the fact?

8. Whether the accident occurred at hard place or at backhoe soften soils?

Answers

1 was doing QC of the second party located about 35 meters form the party accident happened on. The victim has taken responsibility from his partner and he worn PPE and helmet, when the accident occurred might his visor was up.

2. May [be he] has used his bayonet improperly.

3. His mental and physical condition was good; it is about three years that he is working as deminer so he had good practical experience.

4. Most part of the site has been worked by backhoe and the remaining part of the site has been worked by reading the signals.

5. While the accident occurred I was conducting QC of the second party, the distance between the two parties was about 35 meters.

6. 1 have not seen any broken handle of the pick and no handle has been broken.

7. During collecting the tools of the party, maybe the pick has been forgotten at the site and maybe the gloves were not being worn.

8. The accident occurred at hard place.

Statement and Witness Report 4: Deminer

Date: 04 July 2006

Questions:

Please answer the following questions:

1. Please explain how accident happened?

2. Which fault of the deminer caused the?

3. Did you use the portable shovel and pick for excavation and by what tool the deminer was excavating while the accident occurred?

4. Did the deminer work properly?

Answers:

1. I was at rest area that the accident occurred, after the accident I went toward the accident point then as per instruction of our section leader I checked the accident area by mine detector and evacuated the victim to the cleared area for applying first aid.

2. It is possible the he has not worked correctly. If he had worked correctly this accident did not occurred or he receive minor injuries

3. The deminers never works with the pick and shovel in the field, he just works whenever work by bayonet becomes impossible.

4. If he worked correctly this accident did not occur.

Analysis

The primary cause of this accident is listed as a “Field control inadequacy” because the Victim was working with his visor raised (or not worn) and his error was not corrected. This was identified by the investigators as a contributory cause.

The secondary cause is listed as inadequate equipment because the Victim was working with a pickaxe, which was not an authorised tool for his task (it has always been widely used in Afghanistan, and the distance it places between user and detonation has often prevented serious injury).