

DDAS Accident Report

Accident details

Report date: 18/01/2008	Accident number: 486
Accident time: 07:35	Accident Date: 11/11/2006
Where it occurred: Bedak Village, Gul Dara District, Kabul Province	Country: Afghanistan
Primary cause: Inadequate training (?)	Secondary cause: Inadequate equipment (?)
Class: Excavation accident	Date of main report: 06/12/2006
ID original source: OPS/27/470-06	Name of source: UNMACA
Organisation: [Name removed]	
Mine/device: PMN-2 AP blast	Ground condition: rocks/stones wet
Date record created:	Date last modified: 18/01/2008
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system: WGS 84	Coordinates fixed by: GPS
Map east: E 69.12359	Map north: N 34.79536
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

inadequate equipment (?)
inadequate training (?)
squatting/kneeling to excavate (?)
visor not worn or worn raised (?)

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 report is reproduced below, edited for anonymity. The original PDF file is held on record.

IMSMA Demining Investigation Report

[Derived from IMSMA pages.]

Report dated 30th November 2006

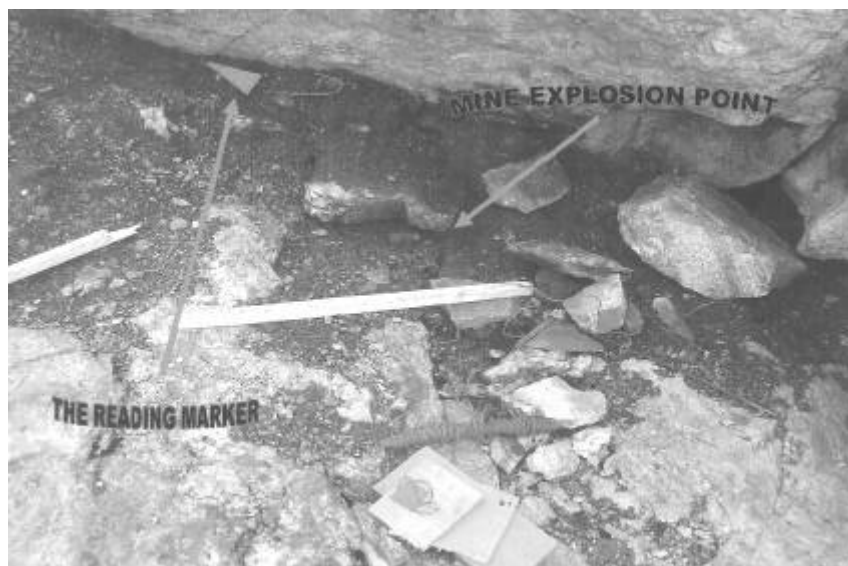
Accident occurred: Nr Qala-i-Wassel, Bedak Village, Gul Dara Distrct, Kabul Province: WGS 84, E 69.12359: N 34.79536: GPS.

During excavation the deminer has brought pressure to the “scraper” on a PMN-2 mine causing the explosion.

History of the Minefield

Mujahiddin planted mines in this MF in the year 1996 to 1997 for the security of Mujahiddin from the Taliban attack most of the planted mines are Russian made from the type of PMN and PMN2. As many accidents happened on the local people and local animals then the local people requested [International demining NGO] to clear this area for them. Then on 15.06.06 [International demining NGO] surveyed the area and after that the clearance of task started. In the year 2002 an accident happened to a lady by the name of [Name removed] at the result of the accident she lost her both eyes.

[The accident site is shown below.]



Description of the incident/accident

On 11.11.06 in the [International demining NGO] task No (1384) located in Bedak village of Gul Dam district of Kabul province suddenly a mine exploded in the lane of [the Victim] deminer who have the insurance No.3001 at 0730 hrs in the morning. At the same time the report of the accident was reported to the supervisor of the site and the Field doctor. Then the medics and the near by party started to help the injured person. After the completion of the First Aid at 0850 hrs in the morning they moved the injured person to the Emergency hospital Kabul. Then the lane of the mentioned deminer was checked and assessed by the [International demining NGO] authorities.

“The deminer’s trowel detonated the mines and was broken in two pieces which were projected a considerable distance from the site of the accident.”

[The Victim suffered] “Head injury and right hand and nose.” “...The deminer’s injuries were relatively minor and he was discharged from hospital on the following day.”

Description of equipment damage: The scraper, Visor, PPE Wooden Stick, trowel, Stand of the detector and the gloves had got damaged.

[The Victim's gloves are shown below. The damage to them, and the blood on the body armour (photo reproduced elsewhere) imply that the injuries may have been more severe than the demining group acknowledged.]



Site conditions (at the time of the incident/accident): The terrain was described as uneven. The soil was medium, wet. The weather was cloudy, calm and mild. There was no vegetation.

Team and task details: The last QA inspection had been held on 14/10/06. The team had been at the site from 15/06/06 until 12/11/06. The Team worked from 0630 hrs in the morning up to 13.00 hrs in the afternoon. They had a ten minutes break after each thirty minutes. The last leave was between 19.10.06 up to 31.10.06.

Medical reaction time: It took one minute for the paramedic to reach the accident site. The Victim was treated for 30 minutes before being put in the ambulance for transport. The ambulance took 36 minutes to drive the 36 km to the hospital. Total CASEVAC time: One hour seven minutes. The Last time a CASEVAC drill was done was on 06/11/06.

Conclusion

The investigation team concludes the accident that as per indication of the trowel damage, the accident has happened due to touching of the trowel to the PMN2 mine. As the operation manager also told us that, the mine was under the stone. In this case the position of the mines may have changed and the trowel head has touched the mine and caused the accident.

Recommendations

1. All deminer must do the excavation very slow and calm.
2. They should maintain one detector head distance for putting the reading marker from the center of signal.
3. They must concern the angle of the excavation to not touch the top of the mines.
4. All command Groups must properly check and control their deminers closely especially while they excavate a signal.

FOLLOW UP LETTER

Subject: Follow up action on demining accident happened to the deminer of [International demining NGO] MCT-15 in task #H 1384 of Bedak village, Gul Dara district of Kabul province

Reference: Demining investigation report File: OPS/271470-06 dated: December 06, 2006, of UN-AMAC Kabul.

A demining accident happened on November 11, 2006, at 07:35 in task #H 1384 of Bedak village, Gul Dara district of Kabul province, a PMN-2 mine exploded on [the Victim] the deminer of MCT-15 of [International demining NGO], causing head, right hand and nose injuries to him.

Contributor factor to the accident:

Carelessness of victim deminer and lack of training: the deminer was removing a stone from the pinpointed signal with his trowel (excavation tool), the edge of trowel touched with mine and caused the accident. As he started excavation directly from the signal point not from second reading marker (opposite to SOP) this issue refers to his carelessness and low level of understanding of excavating drill as per standard procedures.

Recommendations:

- i. The command group of the team should brief the deminers for safety measures especially for excavation of signal in such an area containing rocks and gravel.
- ii. The command group should keep constant supervision of deminers especially during excavation to ensure that the standards are being considered.
- iii. The deminers should excavate the signals not directly from the pinpointed spot, but from second reading marker and maintain the standard angle of prodding tool with the ground.
- iv. Refresher training to be held to the team members focusing on excavation drill.

The feedback of MCPA is needed as NL than the end of December 2006.

Regards [Signed for UNMACA]

Distribution List

With attachment:

AMACs (5), Sub AMAC Gardez, Director MCPA

Less attachment:

[All demining groups in country.]

Victim Report

Victim number: 649	Name: [Name removed]
Age:	Gender: Male
Status: deminer	Fit for work: not known
Compensation: Not made available	Time to hospital: One hour seven minutes
Protection issued: Short frontal vest Long visor	Protection used: Short frontal vest, Long visor worn raised.

Summary of injuries:

minor Face

minor Head

severe Hand

COMMENT: No Medical report was made available.

STATEMENTS

Statement and Witness Report 1: Field Doctor MCT No.15

Q. No. 01: While the accident happened where was your location and what did you do?

A. Q. No. 01: While the accident happened I was in the ambulance and ready for any help and assistance.

Q. No. 02: In which situation did you find the injured person and what how did you helped him?

A.Q. No 02: The Ambulance was located at the distance of 200 mts from the accident point then the Team leader called me out. At the same time the supervisor also, called me out and then I went to the accident point. Prior to my arrival the medic deminer and the team section leader had helped the injured deminer and had taken him out from the working lane. I controlled and general checked the injured deminer. The first aid which was initial and needed the medic deminer had given him and then we took him to the ambulance and shifted him to the Emergency Hospital in Kabul.

Q.No.03: Within how long did you transferred the injured person to the hospital, while you were transferred the injured person how was his situation and how is his situation right now?

A. Q. No. 03: Kabul Emergency hospital is about 36 Km away from the accident point it takes 45 minutes to reach there. The injured deminer situation was good on the way and for the time being he is admitted in the hospital and his general condition is normal and ok,

Q. No.04: What time did the accident happen?

A. Q. No.04: The accident happened at 0730 hrs in the morning.

Statement and Witness Report 2: Section Leader

Date: 12/06/06

Q. No. 01: Please explain how the accident happened.

A. Q. No. 01: On 11.11.06 it was around 0730 in the morning that I heard the explosion and suddenly I rushed to the accident point. I saw that the injured person had come out from his working lane and shouting. At this moment the medic personnel and the team leader arrived to the accident point. The medic personnel started their first aid assistance while they were busy with dressing the injured person at this moment the field doctor [Name removed] arrived. We did the first aid very well. After that field supervisor [Name removed] and then the operation Manager reached to the site. After the completion of the first aid at 0805 hrs in the morning we took the injured person to the Ambulance and then to the Emergency Hospital. The [International demining NGO] authorities arrived and assessed the accident and provide their reports.

Q. No. 02: After the accident as a section leader what actions did you take?

A. Q. No. 02: After the accident I stopped the operation and I marked the accident point and told the personnel to not going to that area other personnel arrived to the spot on time.

Q.No.03: As per your experiences in the field what do you thing what will be the main cause of the accident and to avoid of such accidents in the future what do you recommend?

A. Q. No. 03: In my opinion the deminer work was according to [International demining NGO] SOP he observed the rule and regulation but it is not clear weather the trowel has touched the mine during the excavation or a piece of stone has fallen down on the mine and caused the accident. Any prior to the accident has work was according to the demining procedure. But such kind of accident will happen in the future.

Statement and Witness Report 3: the Victim

Date: 23. Nov.06

1. Please explain how the incident occurred.

A. to Question No. 01: It was Saturday 11.Nov.06 around 0730 hrs in the morning that I had worked about one metre ahead and I was excavating on a signal which was located on a huge rock and there was about one or two cm soil and dust on it. I was trying to remove the soil by the trowel suddenly the accident happened. The reason beyond I don't remember weather my trowel touched the rock and the rock falled down on the mine or the position of the mine was changed and my trowel touched the mine.

2. How did you find the work and activity of the [International demining NGO] authority after the accident did they give you enough help and are you happy with their activities or not.

A. to Question No. 02: I found them very nice and cooperative every one Paramedic, section leader, team leader helped me al lot and I am very happy from them.

3. Would you explain you activities while you heard the signal till the explosion occurred?

A. to Question No. 03: While I received the signal, put down the detector and started the excavation about 15 Cm at the back of signal and I had excavated about 30 Cm that suddenly the mine exploded then I didn't know what happened then.

Question No.04: To avoid of such accident in the future what do you recommend?

A. to Question No. 04: I recommend and ask all my colleges to obey the rule and regulations and while they are in the mine field they must wear the PPE and visor as I had put.

Statement and Witness Report 4: Medic deminer

Q. No. 01: You as adjacent party and medic deminer what did you do after the accident?

A. Q. No. 01: While the accident happened I get to the working lane of the injured deminer. As per [International demining NGO] rule and regulation as I am a paramedic I started the first aid help. After 07 minutes the field doctor started to give the medical help to the injured deminer. Then we took the injured deminer to the Ambulance.

Q. No. 02: In which part of the body the injured deminer had got injured?

A.Q. No. 02: We stopped the bleeding, then we searched for the injuries there were a slight injury about 5cm on the right eyebrow and 4 Cm in between the thumb and indicate finger of the right hand which was shallow not deep and we stopped the bleeding easily.

Q. No. 03: How was the injured person breathing system, pulse, and the blood pressure at that time?

A. Q. No.03: After the accident while, I reached the injured deminer he had get out from the working lane himself and he was setting on a safe area he was talking and said what happened to me.

Q. No.04: At what time did you start the work on that day and when the accident happened?

A. Q. No. 04: We commenced the operation at six thirty and the accident happened at 0730 hrs in the morning.

Q. No.05: In your opinion why the accident happened and to avoid of such accidents what should we do in the future?

A. Q. No.05: As you observed the area the accident point was like a stone made position and the mentioned deminer was fully equipped with PPE, and the visor. Thus he was secured from the death. In this case it is very difficult to point out the fault. There is the possibility of stone sliding and dropping a piece of stone on the mine may cause the accident. As one day prior there was a heavy rain and the land was wet, soft by slight touch the stone moved. In my opinion the deminer working procedure was good. In this case it very difficult to make judgment.

Statement and Witness Report 5: deminer

Q. No. 01: Please clearly explain how the accident happened?

A. Q. No. 01: I was working in working lane near the working lane of [the Victim] the injured deminer. It was the second working period and around 0735 in the morning suddenly the accident happened and I rushed to the accident point. [Name removed] medic deminer was also, there. The injured deminer was laying down in a safe area and the medical personnel was helping him with the first aid after the completion of the first aid we took the injured person to the Emergency hospital.

Q. No. 02: After the accident what action did you take and what did you do with him?

A. Q. No.02: After the accident [Name removed] the medic deminer helped the injured deminer and give him some first aid help. The injured deminer himself had come out from the working lane and he was setting on a safe area.

Q.No.03: In your opinion what will be the main cause of the accident and to avoid of such accident in the future what do you recommend?

A.Q. No. 03: The main cause of the accident is not known and it is difficult to make judgment on that. As the deminer was working in a stone made position there might be two option whether the stone may have slide on the mine or the deminer trowel has touched the mine and caused the accident. To avoid of such accident in the future I recommend to use the scraper that is recommended by [Name removed] the operation Manager of [International demining NGO].

Analysis

The primary cause of this accident is listed as “Inadequate training” because the investigators determined that this was a prime cause. The secondary cause is listed as “Inadequate equipment” because the large builder’s trowel issued to the deminer was an inappropriate tool and the demining group’s body armour failed to protect the Victim.

[The victim’s PPE with no collar to interface with the visor is shown below. There are blood stains at the top.]



With the minimal frontal vest favoured by this demining group, there is nothing to prevent blast debris entering below the visor. This vest and visor does not meet the IMAS and is unsafe. This International NGO’s deminers frequently suffer facial injury and eye loss. This should have made them reconsider their protection years ago.

In this instance, it is probable that the visor was also worn raised because the Victim suffered a nose injury that appears to have bled significantly.