

DDAS Accident Report

Accident details

Report date: 30/12/2007	Accident number: 452
Accident time: 07:45	Accident Date: 24/07/2006
Where it occurred: MF No-070719-013-021, Ali khil village, Jaji District, Paktya Province	Country: Afghanistan
Primary cause: Unavoidable (?)	Secondary cause: Inadequate equipment (?)
Class: Excavation accident	Date of main report: 24/07/2006
ID original source: QM.2.4.03/139.006	Name of source: UNMACA
Organisation: [Name removed]	
Mine/device: PMN AP blast	Ground condition: dry/dusty hard metal fragments rocks/stones
Date record created: 30/12/2007	Date last modified: 30/12/2007
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system:	Coordinates fixed by: GPS
Map east: 69 710889	Map north: 33 934311
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

inadequate equipment (?)
inadequate investigation (?)
long handtool may have reduced injury (?)
request for machine to assist (?)
squatting/kneeling to excavate (?)

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 led to some of the formatting being lost. The substance of the BoI report is reproduced below, edited for anonymity. The original PDF file is held on record.

File: QM.2.4.03/139.006

To: [Name removed] Senior Operation Manager UNMACA Kabul

From: [Name removed], OIC SEA UN SAMAC Gardiz

SUBJECT: ATC DEMINING ACCIDENT ID NO E-04

Please kindly find attached demining accident investigation report of team No. 20 in MF No-07-0719-013-021, Ali khil village, Jaji District, Paktya Province on July 24, 2006 at 7:45 AM.

Initial Demining Investigation Report

The accident occurred during the prodding in the field while the deminer was equipped by all means of protective tools and type of mine was Anti personal PMN. Whenever we get more detail then will inform you.

After gotten the first aid the casualty is transferred to Jaji Hospital. The General condition is good only right hand index finger including palm of right hand has gotten injured

The casualty is planned to [be taken to] Gardez then to Kabul.

The ground was hard because of draught and sand.



[A photograph of the crater showed that the ground was rocky.]

This area is more contaminated in comparison to other part of southeast

The area has been observed by investigation team, and the area was uneven and hillside. The position of mine might be changed by floodwater.

Command group observation:

The Deminer was using mine detector. In result, he found a signal, so he excavated the ground till he found a can and took it out. He checked again, still there was signal. He started for more excavation, suddenly the mine detonated. In result, he got injured on his right hand index finger and in palm.

Description of damages: In result of explosion, a Bayonet, Helmet Visor and PPE (Personnel Protective Equipment) have got damaged.

Site conditions (at the time of the incident/accident): The terrain was uneven open hillside. The soil was hard and dry. The weather was mild. The vegetation was burnt "heavy" grass and bush.

The team had been at the site for 45 days. They worked from 06:00 to 12:00 with a break every 30 minutes. The detector in use was the CIEA Mil D-1. The prodder was a bayonet.

Morale of the team was good, weather was pleasant and cooperation of people was the best. Only slope and hardness of the ground was a problem.

The paramedic was on site by 07:50. The victim was in the ambulance by 08:00. The Victim arrived at Gardez hospital (75 km) at 09:00.

Conclusion

[The "conclusion" paragraph was obscured by a post-it noting that "the conclusions need to be reviewed accordingly".]

Recommendations

I recommend: One Hitachi MDU to be sent to the area for preparation of the area for manual team. New equipments should be provided such as HF and VHF Radios and Visors.

Victim Report

Victim number: 600	Name: [Name removed]
Age:	Gender: Male
Status: deminer	Fit for work: not known
Compensation: Not made available	Time to hospital: One hour ten minutes
Protection issued: Frontal apron Long visor	Protection used: Frontal apron, Long visor

Summary of injuries:

minor Hand

severe Arm

severe Hand

COMMENT: See Medical report.

Medical report

IMSMA record: Rt: polex and index finger injuries. Right hand injury. Anti brachium multiple injuries. Digitus medius. Right arm injury and left hand injury.



1. Right arm (upper) injury.
2. Assessment of trauma and ABC
3. Bleeding control tie tourniquet heavy bleeding
4. Pass IV canulla to keep veins open
5. Analgesic given uj sosegan 30 ml IV
6. Use of splent

Cover with blanket

FMP:

1. Start IV Solution Ringer 1000cc
2. Check vital signs BP 130/80 HS PR 93/ RR 20
3. Wound irrigation by cold boiled water with poydin
4. H2O2 solution
5. Release tourniquet slowly clamping bleeding vessels
6. Administer uj Ampictor 1gr IV
7. Reassess the patent unnoticed injured
8. Transport by ambulance.

Transport: checked vital signs BP 135/80 PR 90 RR=18

STATEMENTS

Statement and Witness Report 1

[Assistant Team Leader, demining since 1995.]

Questions:

9. Please give information about your daily tasks?
10. Please explain that how the accident happened?
11. Give information about the victim's experience and personal life?
12. How much mines have you found in mentioned task?
13. In your opinion what was the main cause of the accident?
14. In your opinion were there any ways to prevent such accident if yes? What are they?
15. Give information about the victim's injuries?
16. What demining equipments have been damaged during accident?
17. Have they paid the salary on time?
18. Was the PPE use properly by victim?

Answers:

1. My name is [Name removed], I am assistant team leader of team No 20 ATC my responsibilities are to control the sections, equipments and field personnel.
2. The victim deminer found a metal can during their working in the field by detector and remove the metal can from the site and start the work again by detector. In this time again sound detected by detector. So the deminer started prodding that the accident happened.
3. The victim deminer is a respectable, obedient, person in our Team working with PPE and SOP.
4. In the task No: 021 Ali khil, Jaii, 76 Anti personal mine were found and exploded, but the party No: 05. For the first time faced with mine in this task and accident happened on them.
5. The accident happened during the prodding, the area is full of fragment and maybe mistake from the mentioned deminer as well.
6. In my opinion the preventive way of the accident in this task is to use backhoe for preparation of soil for deminer in such fields.
7. The respectable deminer had the below injuries.
8. The right hand index finger injury and some other small injuries on other fingers, Pollex injury, right arm injury and left hand injury.
9. During accident the following equipments have been damaged: Helmet, PPE, Prodder and hand gloves.
10. Salary has been given on time to deminers.

Statement and Witness Report 2

[Paramedic, in demining since 1990.]

Questions:

1. Where were you busy when the accident happened?
2. How you got information about accident and when you reached the spot?
3. What first aid have you done with victim?
4. Give detail information about the injuries of the victim?
5. Give detail about the medical status of the victim before and after accident?

Answers:

1. My location was among three sections.
2. The accident happened at 7:45 AM and at the same time I reached the clear spot.
3. Assessment of Trauma and ABC, Bleeding control Tie Tourniquet heavy bleeding, Pass IV Canola to keep Veins Open, Analgesic given nosegay 30 ml IV, use of splint to cover the blanket, carrying by stretcher to FMP.
4. Right hand injuries and pollex and index finger injuries, Anti brachium multi injuries.
5. Normal

Question No 6: Where was the second medic when your location was among three sections?

Answer No 6: Now our team is working in two tasks, so our second medic was in task no 029.

Statement and Witness Report 3

[Team Leader controlling Section No.4: demining since 1989.]

Questions:

1. Please give information about your daily responsibility?
2. Please explain how the incident happened?
3. Give information about the victim experience and personal life?
4. How many mines did you find and how many mines found by the victim deminer?
5. In your opinion, what was the main cause for the incident?
6. In your opinion, were there any ways to prevent such incident if yes? What are they?
7. Give information about the victim's injuries?
8. Which demining equipment damaged during the incident?
9. Did the salary of personal pay on time?

Answers:

1. My name is [Name removed]; I am working as a team leader of team no 20 ATC my responsibility is to control the deminer section leaders and field personal.

2. A metal can has been indicated by the mentioned deminer and removes it from the reading point. He started again and indicated another sound in the same location and dug the spot 25 cm. The mine detonated suddenly. The reason might be change of mine position
3. 78 Anti personnel mines have been found and exploded by the team and party No 5 found only one mine that is detonated by him
4. The incident happened during the prodding, the area is contaminated by fragment and might be some mistake from the mentioned deminer and didn't to observe the angle during the prodding.
5. In my opinion the preventive way only one that is use of Backhoe loader
6. The respectable deminer had the [following] injuries. The right hand index finger injury and some other small injuries on other fingers, Pollex injury, right arm injury and left hand injury.
7. During accident the following equipments has been damaged: Helmet, PPE, Prodder and hand gloves.
8. Salary has been given on time to deminers.
9. PPE has been used according SOP.

Question 10 : How Backhoe loader was available on the site and you did not use it?

Answer 10: Now Backhoe was busy in task no 029 and could not reach to two tasks at one time.

Statement and Witness Report 4

[Section Leader, deminer since 1993.]

Questions:

1. Please give information about your daily responsibility?
2. Please explain how the incident happened?
3. Give information about the victim experience and personal life?
4. In the mentioned task till now what number of mines founded and what number of these mines found by the victim deminer?
5. In your opinion what was the main cause of the incident?
6. In your opinion were there any ways to prevent such incident if yes? What are they?
7. Give information about the victim's injuries?
8. What demining equipment damaged during incident?
9. The salary of personal pay on time?
10. During the operation [was] the PPE used properly?
11. Where the partner of the victim was busy on the accident day?

Answers:

1. My name is [Name removed]. I am working as a Section leader in team No. 20 ATC. My responsibility is to control section No.02 deminers and field personal.

2. [The Victim] indicated a sound when he excavated the sound in result he found a metal CAN. While he checked the spot again still there was sound. Then he started to digging suddenly the mine detonated by him.
3. 76 Anti personnel mine found and exploded by deminers, but the party No 05 found mine for first time.
4. The incident happened while he was prodding. In fact the task is too contaminated by fragments.
5. In my point of view the proper way is to use Loader in this task
6. The respectable deminer had the following injuries: The right hand index finger injury and some other small injuries on other fingers, Pollex injury, right arm injury and left hand injury.
7. During accident the following equipments has been damaged:
8. Helmet, PPE, Prodder and hand gloves.
9. Salary has been given on time to deminers.
10. PPE has been used according SOP.
11. The partner of the victim named [Name removed] was on leave without pay, so the victim start the work at 6:30 AM and stopped at 7:00 AM and rested from 7:00 AM to 7:30 AM and again he started the work at 7:30 AM that the accident happened at 7:45 AM.

Question: As loader was available in the site and why you have not used yet it?

Answer: Since Loader was engage in task no 029 and could not reach two tasks at same time.

Analysis

The primary cause of this accident is listed as “Unavoidable” because it seems that the Victim may have been working as directed when the accident happened. The locally made bayonet stayed in one piece and may have reduced the Victim’s injury, but the deminers recognised that the use of the bayonet as an excavation tool may not have been the best choice. The use of the metal detector clearance in an area with a lot of metal fragmentation (and no strong magnets) may also have been unwise. The deminers wanted to prepare the ground mechanically but the machine was busy elsewhere. Because appropriate equipment and systems to conduct the task in safety were not in place, the secondary cause is listed as “Inadequate equipment”.



A photograph showed that the Victim’s bayonet bent as designed and the hand-guard (the side-wall of a tyre) seems to have done its job. The Victim’s hand injuries may have occurred when it was violently twisted from his hand.

