7-17-2007

DDASaccident500

Humanitarian Demining Accident and Incident Database
AID

DDAS Accident Report

Accident details

Report date: 02/02/2008

Accident number: 500

Accident time: 11:07

Accident Date: 17/07/2007

Where it occurred: MF/ No 0009, Dasht-e-Chinar Village, Rusted District, Takhar Province

Country: Afghanistan

Primary cause: Field control inadequacy (?)

Secondary cause: Management/control inadequacy (?)

Class: Excavation accident

Date of main report: 19/07/2007

ID original source: OPS/ 03/ 01 - 45

Name of source: UNMACA

Organisation: [Name removed]

Mine/device: PMN-2 AP blast

Ground condition: dry/dusty
grass/grazing area
hard
metal fragments
rocks/stones

Date record created:

Date last modified: 02/02/2008

No of victims: 1

No of documents: 2

Map details

Longitude:

Latitude:

Alt. coord. system: WGS-84

Coordinates fixed by: GPS

Map east: E 069 59"00'.8

Map north: N 37 01" 58'.5

Map scale:

Map series:

Map edition:

Map sheet:

Map name:

Accident Notes

metal-detector not used (?)

inadequate communications (?)

inadequate medical provision (?)

inadequate area marking (?)

use of pick (?)

visor not worn or worn raised (?)

protective equipment not worn (?)

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 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. Text in [ ] is editorial.

[This accident is variously reported as having occurred on 11th, 17th and 21st July 2007.]

Cover letter

File: QM/10-10: Internal Memo

To: Chief of Operations, UNMACA Kabul

From: Chief of Quality Management, UNMACA Kabul

Date: 26 July 2007

Subject: Demining Accident Investigation Reports of [NATIONAL DEMINING GROUP] DT-01 occurred in Dasht-e-Chinar village of Rusted district, Takhar province

With reference to demining accident investigation reports of AMAC Kunduz, dated: July 17, 07.

We endorse the recommendations of the investigation officer as a preventive measure and would like to add the following points:

1. The aim of investigation should be conveyed to the team level, as it has been conducting as a lesson learned to be considered in future operations.
2. The refresher training should he assessed by QM section of AMAC to ensure that, the quality of training is acceptable, as this team was trained on 01 of July 2007.
3. This team should be reassessed after training for license/accreditation.

IMSMA demining Accident Investigation Report

To: chief of Operation UNMACA

From: Area Manager Northeast

Date: 19/07/07

Subject: Demining Accident Investigation Report [National demining group] DT No 1

Attached please find the Demining Accident Report and the witnesses statement which the accident is happened on 11/07/07 in MF/ No 0009, Dasth-e- Chinar village Rustaq district of Takhar province.

It is worth to mention that the soft copy of the report has already been sent to you by email. The pictures of the accident site and the casualty will be sent on a CD because of some problem.

Accident/Incident investigation report

Accident/incident-happened on 11/07/2007 at 11: 07 AM.

Casualty data: male, DoB: 1980

Injuries sustained: Loss eyesight (both sides), left arm. Other injuries: chest and upper limbs.

Accident/incident Location: WGS 84: E 069 59"00'.8: N 37 01" 58'.5: GPS

Site conditions: The terrain was described as “confined, rocky, hillside”. The soil was medium, dry. The weather was clear, calm and mild. The vegetation was grass and bush.

It is worth to mention during the investigation the team left the task with their important equipment so we had to check [that they had the correct medical equipment] on the base camp.

The Ambulance was available on the time of accident, but during investigation that evacuated the casualty and wasn't available.

The Codan radio was available but didn't work properly.

Medical reaction time: The paramedic was at the accident site within 5 minutes. The ambulance took one hour to take the Victim 23 km to the hospital,

Last time a CASEVAC drill was done: 02/07/2007

They have not proper MEDEVAC plan with the team.

Device caused the incident/accident: PMN-2 AP mine.

Activity during Accident/ incident was Excavating: The deminer was excavating the mine area due to majority signals the land was contaminated by many shrapnel.

The last QA of the team was conducted on 18/06/07 and had a minor NCR.

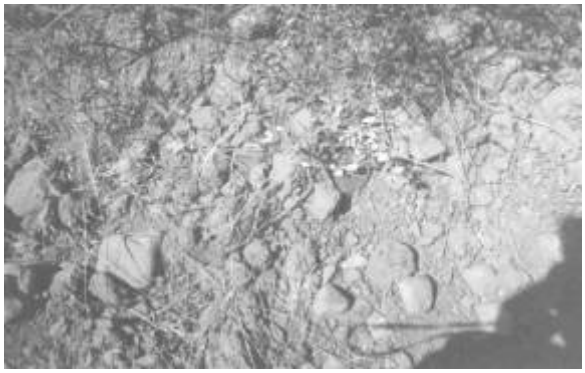
Team Operation outlook: The last refresher/revision course was on 01/07/07. Start of Task 14/04/07 Start of Mission 01/07/2007. Working hours are 6: 00 AM — 12:00 PM with a 15 minute break every hour. The prodder being used was a bayonet. The PPE was not used properly (if the PPE was used properly the victim will not got serious injuries on his eyes and face).

Task details/history: The land was mined during the conflict between Russian and Mujahedeen. Type of the mine used in the area is PMN 2. About 7 accidents occurred on local people in SHA Not of the HQ No 1455 and, 3 accidents occurred only in this task (0009) on the local people. The surveyed area of the task is 68368 sqm. The demining team started the work on 14/04/07 and has cleared the area about 67205 sqm. During the clearance they found and destroyed 59 PMN 2 mines and two 82 mm Mortar. The beneficiaries of this SHA are about 200 families that they need for collecting wood and tending their animals.

The land is hillside and steep.

Accident details: According to the narration of the related section leader it was 11: 05 am 11/07/07. He was standing back side the deminer at the remote safe area to control him. At this time the deminer who became victim said to the section leader I am bored and I need for a break. The section leader told him no problem you can get some refreshment in the safe area. The section leader moved to other parties. As soon as he moved the deminer put off his Helmet, visor and protective Jacket and it was fell down from him on mine area. the mine was exploded when he heard the explosion he came back and saw the mentioned deminer was felled down on the ground and was seriously injured, also the helmet and visor was

completely destroyed and the jacket was seriously damaged. The section leader called the team leader and aware him regarding the accident. The work was stopped and then they evacuated the casualty to a safe area. The team's medic came and implemented the first aid to him then they evacuated the casualty to Rustaq hospital and then to Kunduz PRT hospital, the deminer got serious injuries on his eyes, face and right hand and some shallow injuries on his chest and leg. It was the narration of Section Leader and related Team Leader.



[The accident crater.]

But according to our investigation and observation from the site when we got to the accident site we found that the accident site has been changed. We didn't find any sign and pieces of destroyed helmet and jacket on the accident site and it seemed that the accident might [not have] happened here, so we searched the rest area. We found about 7 m away from the accident site an explosion point [where] there was available the signs and pieces of the destroyed helmet and Jacket.

[The frontal apron and parts if the Visor helmet: damage is far too extensive for a normal AP blast.]

We checked the logbook of the vehicle there was 50 Km distance deference between the logbook and vehicle odometer it wasn't recorded.

We checked the explosive log sheet and the explosive in the store the 250-gram of the explosive were not recorded and were unavailable in the store.

We asked the local people they said that on evening the Demining vehicle had come in the area and were available there for long time.

Description of damage to property: The helmet along with visor was completely destroyed. The protective jacket was seriously damaged. The deminer's uniform was also damaged.

Conclusion:

As a result of the investigation we found some major points described as below:

- The deminer was excavating the mine area by folding shovel/pick.
- The deminer didn't use the visor and protective jacket.
- The related section leader didn't have control over the deminer.
- The team leader and related section leader changed the actual accident site.
- The helmet, visor and protective jacket were blown up in other site after accident to hide the actual factor of the accident.
- The related section working was not as per SOP when it was checked in other portion of the task.
- In one portion of the task the clearance was started from up to down side, which is against the SOP.
- Marking between cleared and unclear area wasn't available and some part of the task.
- The Codan radio of the vehicle was available but didn't work properly.
- The proper MEDEVAC plan wasn't available.

Contributing factors to the cause of accident were:

1. Poor supervision: The supervision of the team leader and section leader was poor because the deminers were working without PPE they don't have control over them.
2. Lack of training: The teams got refresher training on the 01/07/07 but it seemed it wasn't useful.
3. Carelessness of Victim: The victim excavated the area carelessly by folding shovel/pick without using PPE.
4. Improper Marking: The cleared area that the victim worked wasn't marked before but it was marked after accident.
5. Standards were ignored: The PPE wasn't used.

Summary:

Considering the above main factors of the accident, it is found that the command and control of the team was poor.

Recommendations

1. The refresher training has to be conducted to the whole team.

2. The team operation is suspended until further notification.
3. The Deminer must not use the folding shovel/pick in anti personnel mine area for investigating a signal.
4. The Deminer must use the PPE every time he is working in MF.
5. The accident site must not be changed till the investigation is completed.
6. The Endeavour has not to be taken place to hide or change the main facts of the accident and the fact of situation.
7. It is unacceptable to blow up the Demining equipments to hide and ignore the real facts of the accident.
8. The command and control group is strongly recommended paying attention on the command and control of the team.
9. The marking of the area is to be updated.
10. The Demining equipments shall not be put in the MF after working and it would be conveyed to base camp.

[Signed by: Operation Assistant and the QMI]

Attachments: [Kept on file.]

LESSONS LEARNED

File: OPS/ 03/ 01 - 45

From: Chief of Operations, United Nations Mine Action Centre for Afghanista

Date: 8 August 2007

Subject: Investigation Report and Lessons Learned – Demining Accident

Reference:

Please find attached the Investigation Report and Lessons Learned from the demining accident involving [National demining group] Demining Team 01 that occurred at Datshte Chinar Village, Takhir Province on 11 July 2007.

Distribution List: Complete Investigation Report to: [National demining group]

Lessons Learned to: [All demining groups and AMACS in country]

Lessons learned from [National demining group] demining accident on 21 July 2007

INTRODUCTION

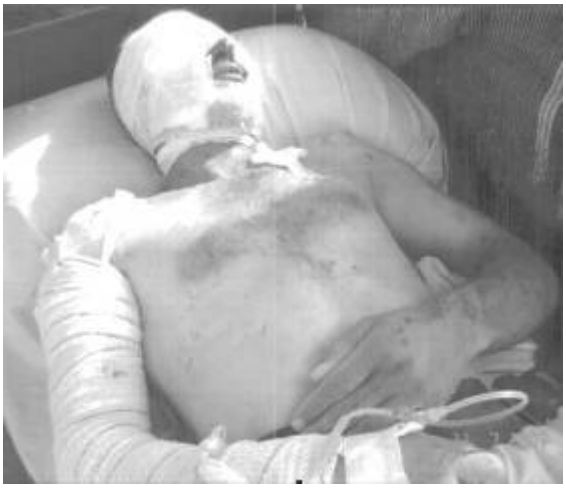
An internal investigation team was convened by the Area Manager of AMAC North East (Kunduz) into the demining accident involving [the Victim] a deminer from [National demining group] Demining Team 01. The accident occurred at 11.07 hours on 11 July 2007 at Task: AF/1208/12494/MF0009 located near to Dashti Chinar Village, in Rostaq District of Takhar Province. The accident resulted in face, eye, hand and chest injuries to the deminer and destroyed his helmet and PPE.

SUMMARY OF EVENTS

The demining task site was located on a hillside in rocky terrain that was heavily contaminated by Anti-Personnel mines (AP mines). Over the period of the clearance operation Demining Teams had located and destroyed 59 x PMN-2 Russian AP mines and 2 x UXO. Just prior to the accident the deminer was performing excavation drills using a folding shovel and pick and requested to take a break as he was bored, which was granted.

Demining team management claim the deminer was injured when he laid his helmet and PPE down onto a mine, which was in an un-cleared area, as he was moving back to take a break from his work. The Section Leader who had previously been observing him work was moving to observe another party when the accident occurred.

The casualty was first evacuated to Rustaq Hospital, Kunduz and then moved to the German PRT Hospital in Kunduz for further treatment.



[The Victim in hospital.]

CONCLUSIONS

The investigation team made the following conclusions regarding the accident;

The accident site had not been preserved intact as is required in AMAS.

The injuries received by the deminer were not conducive to him wearing his helmet and PPE at the time of the accident as is required when ever inside a hazard area.

There was no evidence of the helmet and PPE having been destroyed at the scene of the deminers work place. There was however evidence that indicated the helmet and PPE may have been destroyed approximately 7 metres away from the scene of the accident in a previously cleared area.

There was a 250 gram discrepancy in the total usage of explosive recorded in the teams Explosive Records and physically in the explosive store.

There was a 50 km discrepancy between the team's vehicle odometer and its log book.

Local villagers confirmed some demining team members returned to the clearance site after normal working hours.

The Team and Section Leader display very poor management, supervision and command and control of the work performed by its team.

RECOMMENDATIONS

The following recommendations shall occur;

1. All IP's are to be reminded of their responsibility to take immediate photographs of a demining incident sites, and then preserve the site intact until it is inspected and released by the investigation team. This means nothing should be tampered with or removed!
2. All staff are to be reminded that PPE shall be worn at ALL times once moving into the hazard area after leaving the administration area.
3. The Team and Section Leader of [National demining group] DT 01 shall be demoted immediately to Section Leader and Deminer respectively and re-employed into other teams.
4. Accreditation for [National demining group] DT 01 is to remain suspended until such time as a new Team and Section Leader has been found and the new team has undergone refresher training to be observed by QA Staff from AMAC North East and new accreditation is issued.
5. The Area Manager of AMAC North East shall provide a detailed program of revision subjects for the [National demining group] DT 01 to achieve prior to it undertaking accreditation. This program is to include specific benchmarks and timelines so as not to delay the teams return to work when all standards have been met.

Victim Report

Victim number: 660

Name: [Name removed]

Age: 27

Gender: Male

Status: deminer

Fit for work: no

Compensation: Not made available

Time to hospital: One hour and five minutes

Protection issued: Long visor
Frontal apron

Protection used: None

Summary of injuries:

severe Arm

severe Chest

severe Face

severe Head

AMPUTATION/LOSS: Eyes

COMMENT: No Medical report was made available.

STATEMENTS

Statement and Witness Report 1: Section leader team No 1

Date: 12/07/07

Q1. Kindly state that the victim has been dressed with PPE while working, it is seemed apparently that the PPE was destroyed after accident in another area to hide the actual factor of the accident?

A1: Before the accident the deminer was dressed by PPE he said to me that weather is very warm and I am bored I want to take break, I said to him you can take the break at the same time I moved to other party, the victim put off his PPE and dropped it on the un cleared area, as soon as he put the PPE on the ground it was came up on the mine and the accident happened.

We never destroyed the PPE after accident.

Q2. It is seemed from evidences that the deminer was excavating the area by pick/shovel without being dressed by PPE because he got the injuries on his eyes and face. To avoid such accidents in the future what is the right path to do?

A2: I believed that the deminer never was working by shovel or pick while accident happened, the helmet and visor was fill down from him on the mine and was exploded. We are trying to avoid from such accident but some time it occurred.

Q3: You said that the victim himself put the PPE on the unclear area that the accident happened, it shows your poor command and control don't it?

A3: It is not my poor command and control when I said to him take the break, I moved to other party. It is the fault of the deminer that he put the PPE on the unclear area.

Statement and Witness Report 2: Team leader of DT No 1

Date: 12/07/07

Q1: Kindly state the victim what did that the accident happened?

A1: It was 11: 7 AM I was controlling the section No 3 when I reached to the accident site I asked the related section leader what was the cause of the accident, he said that victim put his helmet and jacket on the un clear area it became on mine and was exploded.

Q2: How can it has possibility that both helmet and jacked were filled down together in the same time on the mine do the area was clear or un clear.

A2: I will tell you that at time of accident I wasn't near to the victim, when I came and ask the section leader the matter he told me that the helmet and jacket were fell down from the victim on to the mine area, so I accept the section leader comments.

Q3: We check Your vehicle log book, your vehicle odometer shows 50 Km distance which wasn't recorded. Also when we check your explosive balance sheet the 250 gram explosive weren't available in the store. What is the reason also when we checked your equipment it weren't complete where are your other team's equipment?

A3: The reason of the vehicle Km is that after we transported the victim to the Rustaq hospital I have forgotten my brief case in the pick up that was in the MF so I told the driver to go and bring my brief case. And about the shortage of the explosive I will say that it is recorded in my diary. About the equipment I will say that we are leaving some equipment on the site because

our task is situated in elevated area it is very difficult to convey the equipment every day from site to base camp.

Q4: You said that you are not able to convey the equipment to the base camp back to the site, if you lost or it would be stolen by what you will continue the operation, your operation will be stopped isn't it?

A4: The equipment which we are leaving on the site they aren't expensive, no one will stole it.

Q5: Kindly state the exact and main factor or cause of the accident, and what will be done to avoid such accident in the future?

A5: The main factor of the accident was the fault of the deminer who drops the PPE on the un clear area.

Q6: The evidences are available that you had gone to the task on evening

A6: [No answer.]

Statement and Witness Report 3: driver of DT No 1

Date: 12/07/07

Q1: As we checked your vehicle log book it was not recorded the 50 km where have you gone and why didn't you record it?

A1: When I conveyed the casualty to the Rustaq hospital the team I went back to the task with three deminers and they told me that they forget some things in the MF it wasn't known to me what time it was exactly.

Q2: On what time did you came back from the MF did you hear any explosion there.

A2: It wasn't exactly known to me but I think it was about 3: 30 o'clock and didn't hear any explosion.

Statement and Witness Report 4: Local people of the Dasht-I--Chinar village Rustaq district Takhar province.

Date: 12/07/07

Q1: When the accident was happened have seen Deminers on the evening in the MF?

A1: The accident was happened on about 11:00 o'clock. The deminers came back to the site on 2:00 PM and were exist in the MF till evening. Then we saw their lights of vehicle were on and then they went to their base camp.

Analysis

The Primary cause of this accident is listed as a "Field control inadequacy" because the Victim was working without PPE and his error was not corrected.

Other errors included working with the wrong tool; there was no working Codan radio communication on site; the area marking was wrong; and no CASEVAC route was known. The last may explain why it took so long for ambulance to transport the Victim 23 km. Perhaps the most significant error of judgement among the Field Supervisors was the decision to disrupt the accident site and fake damage to the PPE in order to mislead the investigators. The team's training had barely been completed when this catalogue of errors

was made, which implies that their training was inadequate. The training of supervisors is a Management responsibility, and this failing of group management explains why the secondary cause is listed as a “Management control inadequacy”. The investigators recognised this responsibility by suspending the team’s accreditation until retraining and testing had been conducted.

The folding pick/shovel is a military “sapping” tool with a spike on one side of the head and a shovel on the other, so allowing it to be used as a pick or a shovel.