DDAS Accident Report

Accident details

Report date:	19/01/2008	**Accident number:**	487
Accident time:	10:45	**Accident Date:**	11/11/2005
Where it occurred:	BF No.1196, Qala-e-Zeni Village, Nahr-e-Shahi District, Balkh Province	**Country:**	Afghanistan
Primary cause:	Field control inadequacy (?)	**Secondary cause:**	Inadequate equipment (?)
Class:	Excavation accident	**Date of main report:**	03/01/2006
ID original source:	OPS/01/04/02	**Name of source:**	UNMACA
Organisation:	[Name removed]		
Mine/device:	Fuze	**Ground condition:**	hard
Date record created:		**Date last modified:**	19/01/2008
No of victims:	1	**No of documents:**	2

Map details

Longitude:		**Latitude:**	
Alt. coord. system:	WGS 84	**Coordinates fixed by:**	GPS
Map east:	E: 067 44 09.5	**Map north:**	N: 36 44 09.2
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

inadequate medical provision (?)

inadequate equipment (?)

metal-detector not used (?)

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 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. The English is sometimes poor.

Demining Accident Report

Location: Qala e Zini, Balkh District, Balkh Province: Coordinates: E: 067 44 09.5: N: 36 44 09.2: WGS 84, GPS. GPS Name, GARMIN: accuracy at the time of fixing coordinate 5m.

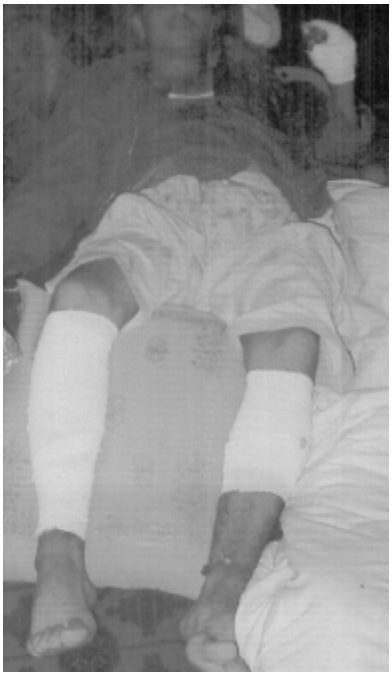
Description of Accident

Based the [International demining NGO] OPS Officer verbal report, the injured Deminer was during the prodding /excavation of sub surface check of Battle field in Qala e Zini area to initiating the unexploded Fuse when the prodder touched with a sensitive part of this buried fuse and blow up, so accident happened.

CASEVAC intentions: According the [International demining NGO] report the victim was evacuated by ambulance to Mazer civilian hospital after he received the first treatment aid by team medic in field total transporting time was around 30 minutes from site of Hospital.

Description of Injuries: He got some injuries not serious without any amputation on his hands and legs. The detailed report of this injury will send after investigation. Over all condition of his health is not threatened he is conscious and talking.

[The bandaged Victim is shown below. Injuries indicate that he was squatting with his shins facing the detonation.]



History of the Minefield

The Battle field (BF) no.1196 is located at Langar khana (Qata-e-Zini) village, Nehr-e-Shahi district Balkh Province, This is a rain military fort, according to the team leader information there were Ammunition stock during Taliban in 2000, seven causality of Unexploded ordnance (UXO) occurred on civilian. Four of these victim killed and three injured. Surrounded area of the mentioned task is Safe. 9115 UXO and 38 OZM-72 mines destroyed. Total area of the task is 21600sqm. 12208sqm area cleared and 9392sqm area remaining.

As you know this is the military area. So, after clearance the government of Balkh province would take benefits and the residents of the surrounding area be safe and secure from the risk of UXO and other hazard device.

The area has been already surface checked but due rain walls some of these UXO were buried. So the team decided to check the area physically.

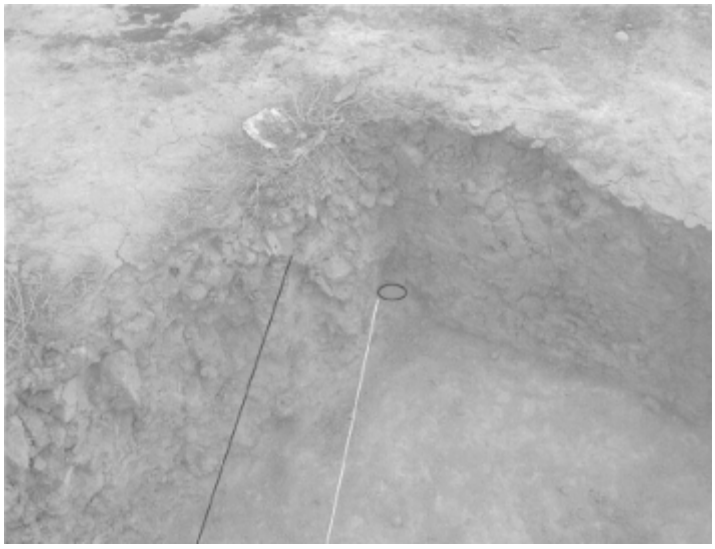
Apparently the accident has occurred in the clearance lane of the de-miner and seems that due to the hit of the fuse by trowel the 82mm mortar fuse has detonated during the excavation. There were not available any kind of piece(s) of the mentioned blasted fuse. The 12.7mm artillery was very close to fuse which was buried in the ground and can't seen. At the result the mentioned artillery front point just damaged.

The accident point did not look that blast occurred their but looked drops of blood in the mentioned point.

Description of the incident/accident

According to the team leader statement "at 10:45 hrs on [the Victim's] accident of UXO (82mm mortar fuse) occurred during demining operation. [Name removed] team leader of BAC-17 said: The casualty happened in task no 1196 during excavation, I was 12m away from deminer. Suddenly I heard blasted I stopped the operation and reached to injured for help at result Injured deminer evacuated by me and [Name removed] driver and deminer of the team. The paramedic [Name removed] was busy on first aid, I passed the message to relevant office. The casualty happened on 82mm mortar fuse, the fuse was in the ground couldn't see able, prodder (Trowel) touched to fuse and accident happened. According to information of team leader no any equipment damaged just visor of the helmets stroked three fragments.

[The accident site is shown below: the point of detonation is circled and blood splashes indicated.]



The Assistant Team leader [Name removed], reported:

On 10:45 am I heard sound of blast. I command to personnel to stop the operation and reached to the accident point. When I reached to the accident point the injury has been asking for help. According to instruction of team leader done the job and help injured. The team Leader was in the accident point and instruct the team. According to information of team

leader and Assistant team leader team didn't have Ambulance in the spot, after accident team leader requested from relevant office and at the result ambulance reached to task no 1196 at 11:10am and evacuated to civilian hospital of Mazar-e-Sharif at 11:35am .

Injured Statements:

I am [the Victim] insurance no.2844 deminer of EOD-17 [International demining NGO].

The operation was continuing normally, time was 10:45am. The task no1196 was store of ammunition, which was blast previously a lot of soil, covered the UXO. So,

I was busy on excavation and found 14,5 bullet. The face of the bullet was to me, I decided to excavate it from side after one and two-stroke by trowel casualty happened. I wore PPE and helmet as well.

Injuries: both legs injured. Left hand injured.

Site Conditions: The terrain was described as “uneven”; the ground “hard”. The weather was clear and there was no vegetation.

Description of damage to property: According to Team Leader information, the “Trawler” was damaged and also the “Visor of the Helmet stroked three fragments”.

Quality Assurance had not been conducted in the [International demining NGO] BAC -17 teams at all from the beginning of the QA system. The team has been working since 18-05-2005. Working hours were from 07:00 to 12:00 with a ten minute rest break after each 30 minutes of work. The last team leave was between October,24 —November 07,2005. The detector in use was the Schonstedt ordnance locator.

The Team Leader reported that PPE was in use at the time – it was not available for the investigators to see.

Medical reaction time: it took 3-4 minutes for the paramedic to start treating the Victim. The paramedic spent 15 minutes giving First Aid and dressing the wounds at the site. It took 45 minutes for the ambulance to drive the 26 km to the hospital. Total evacuation time: at least one hour and four minutes. No CASEVAC drill had been practiced at the site.

According to information of Team leader, Assistant team leader and injured deminer he attended demining course two years ago and attended just spring season revision course.

The team leader told us we requested of mechanical unit, one day [it] worked than due technical problem, which is found in the mentioned Machinery, we start operation manually in this hard surface land.

Suggestion of team leader and Assistant team leader:

For the rescue of more accident/incident here in this task, first should soft the ground by Mechanical Unit.

For the rescue of more accident/incident, effort should give to the able for example place of EOD to EOD team place of Mechanical-to--Mechanical team.

Conclusion:

Hence this is the 4 day of this accident that has happened, it is very difficult for investigation team to know about the exact concluded cause of the accident, well judgement and what was happened and where were the problems. As per Demining Investigation SOP, investigation team has to be reach to the accident point as soon as possible for easy found of the accident

cause(s), well judgement and for well identification of the problems in the accident site, and blasted site must be protected/guarded as safe without changing. While in the mentioned accident the accident point was look changed otherwise wasn't any sign of demolition just seen drops of blood.

As the accident point was observed, which was occurred on 11/11/05 at 1045hrs there are many possibilities, which can be causes of the mentioned accident.

1. Land was hard wasn't soft on Mechanical unit.

2. Emphasize of office about achieving the target.

3. The command group were not paid full attention about the mentioned case and the deminer was not controlled during the excavation.

4. As per information of assistant team leader the area was not suitable for EOD team, it was suitable for Mechanical team.

Recommendations

1. In order to decrease the number of demining accidents and develop the effectiveness/efficiency of the demining operations out put, this is very important to pay more attention to the field staffs' safety. As experiences showed that Quality control/ Quality Assurance is so important especially in demining operations. As investigated Quality control and quality Assurance were not sustained in the mentioned task. Therefore it is strongly recommended to pay attention to the mentioned issue.

2. Also keeping the respective AMAC on the picture of Demining accident at the first moment will be another positive signal for the improvement of the field work to screen ups the main factors of accident.

3. The team's command group is strongly recommended to be aware of their staff and keep sight to each single activity that are carried out by each deminer when they are in demining site.

4. Cause of the accident was the poor instructions of the command group, this is recommended that the command group should lead EOD team to the EOD place and Mechanical team to it suitable place.

5. As per [International demining NGO] policy they have just one refresher course in the year, if increase refresh courses more than one time in the year that will be batter.

6. It is recommended by investigation team to operation section of the Honourable agency to reinstruct all command group of the mentioned site to Conduct safety briefing for field staff on daily basis prior to start work, specially In such kind of areas where the surface is hard.

7. Team didn't have ambulance in the spot, the casualty happened on 10:45am and Ambulance reached to the spot on 11:10 am this is big gap in that sensitive time. If the [International demining NGO] provide ambulance for each demining team that would be better.

8. As per team leader information from one side land was so hard and from other side emphasize of [International demining NGO] operation section regarding target achievement these were one of the reason that the casualty happened, if the team couldn't able to achieve the target, shouldn't emphasize on team regarding target, visit the team and find the reason of non achievement of the target.

Follow-up letter

File: Ops/03/01-01

Date: March 29, 2006

To: See distribution List

From: Chief of Operations/Deputy Program Manager MAPA/UNMACA, Kabul

Subject: Follow up action on demining accident happened with [International demining NGO] BAC-17 at Qala-e-Zeni village, Nahr-e-Shahi district of Balkh province.

Reference: Demining accident investigation report dates January 03, 2006, File: OPS/01/04/02/ out 005/06 of UN-AMAC Mazar.

The accident happened on November 11, 2005 in BF No. 1196 located in Qala-e-Zeni village Nahr-e-Shahi district of Balkh province. The BF being checked both visual and some parts as subsurface by BAC-17 of [International demining NGO], the accident occurred in clearance lane of [the Victim] the deminer of mentioned BAC Team, caused multiple injuries to him, while he was excavating a buried unexploded fuse.

The investigation report concluded that, during excavation process, the trowel used by deminer made contact with an unexploded fuse of 82mm mortar, caused accident. The command group were found to be inattentive as the deminer was not controlled during the excavation activity.

Recommendations:

I. The QA of all demining teams should be conducted on regular basis.

II. A proper clearance plan to be made by site supervisors for each task and evaluate the requirement of tools to be used there.

Ill. The [International demining NGO] is recommended to provide the teams with ambulance and also conduct refresher trainings on regular basis.

IV. The AMACs should be informed immediately after accident to investigate and find the main causes of accidents.

Regards,

Distribution List

With attachment:

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

Less attachment: [All other demining groups in country]

Victim Report

Victim number:	650	**Name:**	[Name removed]
Age:		**Gender:**	Male
Status:	deminer	**Fit for work:**	presumed
Compensation:	Not made available	**Time to hospital:**	One hour and ten minutes
Protection issued:	Long visor Short frontal vest	**Protection used:**	Short frontal vest, Long visor

Summary of injuries:

minor Hands

minor Legs

COMMENT: No Medical report was made available. See Medic's notes under "Statements".

STATEMENTS

Statement and Witness Report 1: Team Leader

Date: 14/11/2005

1. Respectful Team leader, please introduce your self.

My name is [Name removed] insurance no. 2856. EOD-17 Team leader for the [International demining NGO].

2. Did the casualty happen in the work place or not?

Yes, Casualty happened in the work site.

3. When the casualty occurred, where was your location?

When the casualty occurred, I was 12m away from deminer.

4. Did the casualty occur on UXO, which was sensitive, or on UXO which was with safe fuse?

The casualty happened on 82mm Mortar fuse, which was under the ground because unidentified, was it safe or not?

5. What was the type of UXO?

82mm mortar fuse, which was near to 12.7mm bullet after blast front point of the 12.7mm bullet, damaged not blast.

6. Before accident did you follow up the following step?

1. Recognize of UXO. 2. Preparation of safety. 3. Preparation for destroys of UXO?

Fuse was under the ground so couldn't follow up these steps.

7. What is the name of victim deminer and who help his, after accident?

[Victim's name removed.] Mr. [Name removed] Paramedic and Mr. [Name removed] Deminer help him after accident.

8. Did the accident happen in clear area or in unclear area?

Accident occurred in unclear area during clearance operation.

9. Due accident did the safety equipments (PPE, Helmet etc) damaged?

No any equipments damaged just visor of the helmet hit three fragments.

10. Who did the First aid and what was the evacuation procedure?

I team leader and [Name removed] driver/deminer evacuated injured with support of Paramedic to safe area than First aid did by paramedic Mr. [Name removed].

After first aid I team leader and [Name removed] deminer evacuated injured by ambulance to hospital.

11. What was the reason of accident?

During operation trowel of the deminer touched to fuse and accident happened.

12. Did you inform your relevant office and UNAMAC about accident?

Yes I inform just my relevant office about that case.

13. What is your idea to rescue from more casualties here in this task in the future?

For the rescue of more accident, first the mentioned hard area should be soft by mechanical team.

Statement and Witness Report 2: Assistant team leader

Date: 14/11/2005

1. Please, introduce yourself and answer the following questions?

My name is [Name removed] Assistant team leader for EOD T#17, [International demining NGO].

2. Please write Detail of the accident?

At 10:45am suddenly I heard sound of blast, stopped operation team leader was busy on instruction in the place of accident I reached to accident point as well and helped in evacuation of injured to safe area and according to instruction of team leader done the job.

3. Please explain who was the first guy to help injured and what kind of help occurred with him?

When I reached to accident point injured was asking for help, he was set down on the ground. Blood was continuing from his left hand and complained from his both legs. Paramedic reached and first aid done. Team did not have ambulance; according to instruction of office ambulance started the movement from the office and reached at 11:10am to the accident place. Than evacuated on Ambulance at 11:45am to civilian hospital of Mazar-e-Sharif.

4. As a professional of demining what is your opinion regarding prevention from such accidents in the future?

For the prevention of more accident should give assignment to able for example place of EOD to EOD team and place of Mechanical team to mechanical team.

Statement and Witness Report 3: Paramedic of EOD T#17

Date:14/11/2005

1. Please introduce yourself?

My name is [Name removed] insurance no.1908 paramedic of EOD T#17.

2. Please explain when the accident happened? , Who was the victim? And where was the location?

On 10:45 accidents happened in Qala-e-Zaini village. The injured was [the Victim].

3. Please explain hurts of injured deminer.

Both legs and left hand were injured.

4. What kind of first aid done with injured please explains it?

First I opened breath way of the injured seconded I treated his hurts.

5. Please explain medicine that you used. Then where evacuated the injured?

Used medicine describe following: 1. S. Plasma 1500cc: 2. Amp. Pomtazosin: 3. Vic. Banzin: 4. S. Ringam 500cc.

6. You didn't have Ambulance in the site, when Ambulance reached from your office? And when you evacuated the injured to hospital?

On 10:45 team leader passed the report to relevant office, on 11:10 Ambulance reached to the accident place and on 11:35 evacuated to civilian hospital of Mazar-e-Sharif.

Statement and Witness report 3: the Victim

Date: 16/11/2005

1. Please give full details about accident that happened on your self?

Time 10:45 I was busy on excavation in my line, I found one bullet of 14.5mm, which was street to me. I decided to excavate it from side after one or two stroke by trowel suddenly casualty happened.

2. Please explain that in which task you're busy on operation?

I was busy on operation in BAC task no 1196

3. Please explain during execution how much technical equipments were with you?

1. PPE. 2. Helmet. 3. Trowel.

4. The area is BAC why you used the trowel?

The area was blast store of Ammunition a lot of soil covered on UXO didn't need to detector.

5. As per your information UXO was under the ground why you didn't use Mechanical team?

It isn't belongs to me.

6. Did you study BAC course? If yes when?

I studied BAC course two years ago.

7. What was your last leave?

From 22/10/2005 to 06/11/2005.

8. Did you have any mentally problem?

I didn't have any mentally problem. I was normal.

9. Which part of your body was hurt?

1. Left hand. 2. Both legs.

Analysis

The primary cause of this accident is listed as a “Field control inadequacy” because the investigators determined that “the command group were found to be inattentive as the deminer was not controlled during the excavation activity”. The secondary cause is listed as “inadequate equipment” because the appropriate machines to prepare the area were not available.

Fuzes from mortar bombs are not normally touch sensitive. If this area included touch-sensitive fuzes and the deminers were to recover them working in a squatting position and without first using metal-detectors to determine their approximate location, frontal aprons that hang in front of the shins should have been considered.

The “Inadequate medical provision” listed under “Notes” refers to the lack of an ambulance at the site. The International demining NGO’s failure to provide an ambulance is in breach of the IMAS and of National standards. Evacuation timing is confused in the report, but was delayed by up to twenty five minutes because an ambulance was not close by.

The failure of the national authority to conduct QA, and of the International demining NGO to ensure that appropriate resources were available, are Management control inadequacies that may be significant.