

DDAS Accident Report

Accident details

Report date: 21/01/2008	Accident number: 492
Accident time: 10:00	Accident Date: 19/05/2006
Where it occurred: Task # 1144, Wazirabad Village, Pule Khumri District, Baqhlán province	Country: Afghanistan
Primary cause: Field control inadequacy (?)	Secondary cause: Inadequate survey (?)
Class: Excavation accident	Date of main report: 14/06/2006
ID original source: OPS/03/01-07	Name of source: UNMACA
Organisation: [Name removed]	
Mine/device: grenade	Ground condition: grass/grazing area
Date record created:	Date last modified: 21/01/2008
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system:	Coordinates fixed by:
Map east:	Map north:
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

inadequate survey (?)

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.

Demining Accident Report

Location: Minefield code: 13/1302/13125/H1144, Khoja Kamal Wali, Pule Khomry District, Baghalan Province.

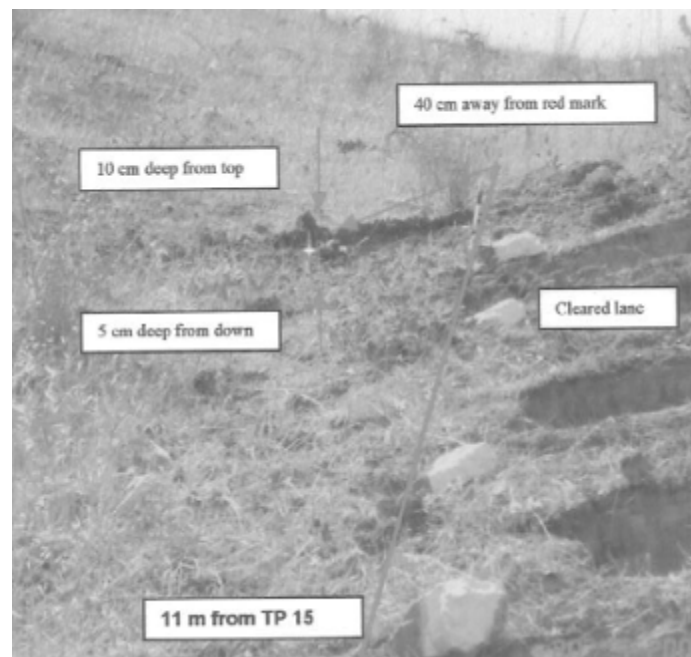
Description of Accident: Based the [International demining NGO] OPS Officer verbal report the injured Deminer was during the prodding /excavation at Task No 1144 in Khoja Kamal e Wali area to initiating the unexploded Garnet when the prodder touched with a sensitive part of this buried fuse and blow up, as per the explanations of OPS Officer he was recognized the initiation of fuse for explosion when take a special sound for its readiness so Deminer started to gotten away when the garnet exploded and the fragments beached to his body specially in his hand , shoulder and leg.

CASEVAC intentions: According the [International demining NGO] report the victim was evacuated by ambulance to Pul a Khomry 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, Shoulder and legs from backward. The detailed report of this injury will send after investigation. Over all condition of his health is not threatened he is conscious and talking but hospitalized.

Note: the investigation team has tasked today to physical investigate the accident point.

Accident Point measurement



History of the Minefield: The task No1144 is located in Tapa-I- Khwaja Kamal Walli, Wazir Abad village Puli Khumri district of Baghalan Province. Team is occupied on the top of hill where the side of this hill is unknown for existing mine and UXO. Basically MF has not technically surveyed and mentioned team is working in open field. This area has the two times PMN and PMN-2 mines contamination history once in 1984 by the Russian Troops , and second by north alliance during conflict with Taliban in 1996 2001. Because of the Russian's troops camping in this location, a great number of Abandoned Explosive Ordinance AXO and UXO have been spread around the area. Previous to turning this area as a mine UXO contamination field the land was using as grazing area. Since the plantation of mines within 6 Mine and UXO accidents are happened by local people and 15 more accidents are

happened and this is the last accident that accounted on deminer of team No 27 on 19/05/006. The direct beneficiaries of this task are 25 families that consist of 175 inhabitants.

Local people and the authority of the cement ghorri requested for clearance.

After the clearance it will be used by the local people as grazing area, by the labourers of the cement ghorri corporation, and also recently there is erected an antenna of Afghan telecom wire less company so it is going to be used by them as well.

Now this task is clearing by team No 27 of [International demining NGO] which operation is started on 10/10/005 and was suspended for 6 days during the period of 01/04/006 to 07/04/006 due to rain and mud. From 08/04/006 the clearance was [started] again. The area is estimated 14,000 sqm from which the 7366 sqm area is cleared by this team since beginning of clearance.

Description of the accident: Based to observation and witness comments of the [International demining NGO] team No 27 the general situation and condition of this task was too sloppy [sloping, steep gradient] which was difficult for normal operation on it. This is why the site supervisor initiated a protection system to save deminers to rolling down from the hill upper side to down. Hence he recommended all deminers to tie themselves by a rope and the same action was exercised with the injured Deminer who was busy in the clearance lane with same condition in task No 1144. His location was 11m ahead from TP-15. This lane was cleared by him during this operation. He recognized a signal through his detector 40 cm out of his clearance lane left side and starting excavation for initiation of this buried item. While the excavation was going on his trowel touched with grenade which was buried in the ground. Because he had not full control on his hand in order he was squatting remote from the signals and additional his site also was not stable. Before that accident happened the injured Deminer heard a sound of fuse activation through his trowel touching with sensitive part of the grenade. By recognition of this the Deminer started to escape from the scene and he was able to get away about 2-3m but because of his fastening by rope he was blocked to going further. So the grenade exploded and he got injuries and fell down on the ground. As the ground was sloppy the existing rope prevent him to rolled down in suspected area. The rope had advantage and disadvantage. The advantage was that it stopped him from being fallen down in the suspected area and the disadvantage was that if he wasn't fastened to the rope he might run a little more and might saved himself to being hit by fragments of the detonated grenade.

After the accident the team leader who was located 150 m away from the accident point, recommended team to stop their operation and assist casualty. The casualty was evacuated to a safe first aid administration area. After receiving first aid the victim was evacuated to the Pul e Khumry Hospital.

Casualty data

Male, DoB: 1971: [On the IMSMA sketch, the Head/neck, back, pelvis/buttocks and upper limbs were indicated.]

Time until first facility reached: 5 minutes

Time until first hospital reached: 10 minutes, Puli Khumri Public hospital

The Victim wore protective equipment.

Equipment/property damage: Head band of visor was torn and the tip of the visor was scratched during the accident. And also the casualty's clothes and uniform was torn.

Site conditions: The terrain was described as uneven hillside. The soil was hard and dry. The weather was clear. The vegetation was grass.

Team Operation outlook: Last refresher/revision course was in February, 2006. The team been at the site for 153 days (excluding 7 days of suspension). Working hours are from 06:00 to 12:00. There is a ten minute break every thirty minutes. Last leave was 21/04/ 006 to 01/05/006. The last QA was done by OMIT No 14 on 08/05/006 and the result of the QA is CR, good.

Medical reaction time: After one minute the Paramedic was on the accident site. The paramedic treated the casualty who was then taken to hospital by ambulance, a journey of 7 km which took ten minutes.

Conclusion:

1. The area contamination circumstance was not well analyzed because the Deminer had not pre- idea for presence of such buried ordinance (grenades, rocket... etc) that was caused that Deminer worked careless.
2. The Deminer was not controlled/supervised when he was in wrong prodding drill during his operation on signal.
3. Miss classification of SHA for prioritization to leave the lower part of hill suspected in hazard of mine / UXO and the pick of hill covered as MF whereas the surface of this MF is also slope with much possibilities of deminers rolling down from other hand. The Deminers are operating apprehensively under two concerns at the same time; one mine threat and second the slippage from that area to downside.
4. The Deminer tried to operate on a signal out of his adjacent lane's safety margin in the 40cm distance far — off the lane, this is why he did not have sovereignty / over control on his hand so the trowel was touched to device and accident happened.
5. Not care during the excavation drill to consider the regulation of prodding (30 degree).
6. Deminer started to run away within MF after hearing the sound of fuse activation as he could pull him back by which he could reduce the hitting of fragments on his body.

Recommendations

1. It is recommended that team to start the clearance of the area systematically from the start point of the existing risk over the area base of the following factors:
 - Team will be able to work without apprehensive of additional risk for rolling down from the area or to need fasten themselves by ropes during their operation.
 - The people will not be confused between cleared and suspected hazard area also to reduce the coming up mine UXO victims by inhabitants around.
 - The SHA will be not suspended for insignificant reasons to create problem for the future plan.
 - To reduce the repeated deployments of team to the same location.

- To have the clear picture of the existing mines and UXO in the area to adjust the operation according to the special circumstances of the area and brief Deminers for further precaution.

2 Task is to [be] technically surveyed prior to commence the clearance operation in the area because team can not plan their activities and to adjust the progress percentage and overall information is also not gathered systematically that can be considered for such carelessness against the buried ordinance in the area.

3. It is recommended that team to be put in training to know how to work in the clearance lane to not move out from the standard wide of lane.

4. In such special operation team leader and site supervisor is to provide enough information and organize a field training and briefing about the existing circumstances in MF for safe dealing during their operation.

5. Deminer is not to operate on the signal where his bench is not stable to control him self or the reading points [are] out of his normal reach. He should change his position to run a smooth operation on the spot.

Follow-up letter

File: OPS/03/01-07: Date: 08 July 2006

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

Subject: Follow up action on de-mining accident happened to the de-miner of

[International demining NGO] in task # 1144 in Wazirabad village, Pule Khumri district of Baghlan province.

Reference: Demining investigation report dates June 14, 2006, of UN-AMAC North.

A demining accident happened on May 19, 2006 in clearance lane of [the Victim] the deminer of MCT-27 of [International demining NGO] in task # 1144 of Khuaja Kamal-e-Wali village, Pule Khumry district of Baghlan province, causing multiple injuries to the deminers' hand [arm], shoulder and legs.

The investigation report concluded that, the accident occurred because of poor supervision and control by the command group and carelessness on behalf of the injured deminer, as he was conducting excavation on a signal about 40cm out of his clearance lane. The investigation report further indicates that, the minefield had been planned on a very steep part of a hill while the lower parts were also suspected of being mined, to prevent deminers from rolling down to suspected mined area during clearance operation, they were instructed by command group to fasten themselves with ropes, the injured deminer was practicing the same, while he was excavating, his trowel touched the sensitive part of a grenade and he heard a sound and tried to escape from the point but the rope kept restricted his movement.

Recommendations:

I. The supervisors are to plan the tasks systematically, from the start point of existing risk especially in such steep areas.

II. As the lower part of above mentioned hill is suspected of being mined, [International demining group] is recommended to conduct exploratory cross lanes there, for either clearing the task as a minefield or cancel the task as per their current procedure.

III. The deminers should not be allowed to operate on a signal, from an unstable position without close support and supervision.

IV. Refresher training should be held for the team members,

Regards,

Distribution List

With attachment: AMACs (5), Sub AMAC Gardez and Director[International demining NGO]

Less attachment: [All demining groups working in-country.]

Victim Report

Victim number: 654	Name: [Name removed]
Age: 35	Gender: Male
Status: deminer	Fit for work: presumed
Compensation: Not made available	Time to hospital: 34 minutes
Protection issued: Long visor Short frontal vest	Protection used: Short frontal vest, Long visor

Summary of injuries:

minor Abdomen

minor Arm

minor Back

COMMENT: All injuries were to the back of the torso and arms. See Medical report.

Medical Report

Age: 35 Y.

Blood Group: AB Rh+

To whom it may concern:

This is certifying that [the Victim] deminer of 27 Manual team was injured whilst he was working in [International demining NGO] Task No.1144 in Khoja Kamal-i-Wali Poi-i-Khomri Baghlan Province.

The following injuries were sustained on him after explosion:

One deep injury (2x2 cm) on his back under of left scapula which is produced pneumothorax and dyspnia.

One superficial laceration on his posterior left side of head with mild head trauma.

One deep injury on his posterior side of left elbow joint.

Two deep injury on his right iliac area and one deep injury on his left iliac area.

After first aid and dressing in the field the casualty received the following treatment before reaching to hospital.

Serum Plasma 500 cc

Vial Penicillin Crystal 5 M.

The casualty evacuated to the PIK Public health Hospital. After full examination he hospitalized in mentioned Hospital and he is under treatment there. His general condition is good and there is no serious problem, dyspnia is decreased and vital sign is normal.

Signed: Team Deminer Medic, Field Senior Medic

Date: 20/ 05/00: Doctor's comments at hospital:

While the casualty was brought to the hospital the following medicine were given to him.

1-Glucose serum

2- Centrex's

3- the radiography of his head, left hand, chest and scapula was conducted it showed that there was not any fracture there are seen small fragments in his chest and his scapula.

Then the casualty was administrated to the recovery ward.

STATEMENTS

Statement and Witness Report 1: Section medic

Please explain the evacuation of the casualty to the ambulance and then to the hospital.

[The Victim] is 35 years old the insurance No is 3112 the blood group is AR Rh + he is the deminer of team No 27. The accident was happened in task No 1144 which is located in Khwaja Kamal Walli village Pull Khumri district of Baghlan province the accident was happened on 19-05-006 at 10: 20. For 15 minutes the first aid was conducted to the casualty. The bleeding was stopped the serum plasma was dropt to the casualty and also the Penciline 5 mg was injected to the casualty on the site.

The casualty was evacuated to the nearest hospital in 10 minutes generally the health condition was normal. The casualty is now hospitalized in the public hospital of Puli Khumri.

Statement and Witness Report 2: the Victim

Please state forth how the accident occurred.

I was working on a signal in my clearance lane I excavated the signal point about 10-15cm ahead. In this time I heard a lower voice I understood that the sound is of hand grenade. Harshly I rushed to backward and wanted to save my self from being wounded. I went back about 2-3 m but I was stopped by the rope by which I had fastened myself because where I was working it was a slope area so, according to our supervisor instruction, I tied my self by rope on my waist and the other head of the rope is fastened to a stick in the ground to avoid me from being fallen down the hill.

Statement and Witness Report 3: the team leader

Date: 20/05/006

1. When and where the accident was happened?

The accident is happened on 19/05/2006 at 10:20 am in task No H-1144. While the accident was happened I was in next to [Name removed]'s clearance lane in front of TP 30.

2. Who was injured by the accident and state forth his injuries?

[The Victim] was injured and he got injuries in his elbow, and on his back.

3. Whether the accident was occurred in cleared area or it was occurred in uncleared area?

The accident is happened in uncleared area.

4. State the names of the persons who helped the injury.

The first ones who helped the injury were [Name removed], [Name removed] and [Name removed] Section leader.

5. Please state the procedure of evacuating the casualty and where it was evacuated.

The first aid was conducted by [Name removed] medic + section leader and [Name removed] deminer + medic. After the first aid that is conducted in 5 minutes the casualty was evacuated to ambulance in two minutes.

6. When and what time did you report the accident to your office and to AMAC?

On 19-05-2006 at 10:23 I reported the accident to site office in Puli Khumri the reporting to AMAC was not my responsibility.

7. Please narrate the accurate cause of the accident.

Due to the carelessness of the injured deminer the accident was happened.

8. You were working in the open area without being technical surveyed what is the reason to this issue?

Due to the instruction and recommendation of our office which this procedure is established in 2004 to work in open area. All of the team leaders had attended the technical survey course and had the capacity to carry out their job in good manner.

Statement and Witness Report 4: Section Leader/paramedic

Date: 20/05/006

1. Please introduce your self.

My name is [Name removed] I am section leader of section 3 of MCT No 27.

2. At the time of accident in which location you were and what activity were you busy?

At the time of accident I was busy in QC of [Name removed] cleared working lane.

3. Who was injured by the accident and state forth his injuries?

The accident was happened on [the Victim] and he got injuries on his neck, his back and on up side of his right leg.

4. Whether the accident was occurred in cleared area or it was occurred in uncleared area?

The accident was occurred in uncleared area.

5. State the names of the persons who helped the injury.

At the first time [Name removed] and [Name removed] helped the casualty.

6. Please state fourth who conducted the first aid and where it was conducted.

The first aid conducted by [Name removed], [Name removed] deminer and [Name removed] section leader.

7. Please state the procedure of evacuating the casualty and where it was evacuated?

Firstly he was evacuated to cleared area and then to ambulance and then to hospital.

8. When and what time did you report the accident to your office and to AMAC?

We reported the accident to our office 19-05-006 at 10: 22.

9. Please narrate the accurate cause of the accident.

The main cause of the accident was the fault of the deminer as he started work outside of his cleared lane.

10. What can we do in the future to avoid from such kind of accident.

In my opinion it is worth to conduct the QA of the team and the team leader is to monitor his team every time during the operations.

11. You were conducting the clearance in the top of the hill whilst the lower side of the hill is suspected. What is the reason for working at top of the hill?

The top of the hill was requested by the people of Wazir Abad village and the authority of cement Ghori Corporation to be cleared.

12. You were working in the open area and without being technical surveyed what is the reason to this issue?

We are working in open area due to our office instruction and this procedure was established in 2004.

Statement and Witness Report 5: deminer

20/05/006

Q1: Please narrate your observation from the occurrence of accident, which is happened on [the Victim]?

It was 10: 20 that the explosion was heard I was working in my clearance lane at the right hand side of the casualty; I stopped my work with my detector rushed to the accident point.

Q2: While the accident is happened what kind helps you did?

In this time the section leader [Name removed] and deminer [Name removed] were carrying the casualty. I helped them and took the casualty to the cleared area. The medics came and administrated the first aid to the casualty. And then after a few minutes we took the casualty to the ambulance. And the ambulance reached to the hospital on 10:34am.

Q3: To avoid such kind of accident in the future please state forth your comments?

Whenever a deminer encountered with the suspected device it is worth to stop his work and report to his relevant team leader and not to proceed until the team leader give him the recommendation.

Statement and Witness Report 6: deminer

Date: 20/05/006

Q1: Please state forth your observation from the occurrence of accident, which is happened on [the Victim]?

I was working in my clearance lane the section leader was controlling me I heard the explosion and [Name removed] the section leader said me lets go to help the victim.

Q2: While the accident was happened what kind helps did you do?

We arrived to the accident point and helped to the casualty. We loose the rope which was fastened to his waist and took him to the safe area. The Paramedics came and administrated the first aid to the casualty, and along with other I evacuated him to the safe area near to TP 15.

Q3: To avoid such kind of accident in the future please state your comments?

My recommendation to avoid from such accidents is: the signal of detector will not to investigate which are out side the working lane and far from the safety margin.

Statement and Witness Report 7: hospital doctor

Date: 20/ 05/006

Doctor's comments at hospital:

While the casualty was brought to the hospital the following medicine were given to him.

1-Glucose serum

2- Centrex's

3- the radiography of his head, left hand, chest and scapula was conducted it showed that there was not any fracture there are seen small fragments in his chest and his scapula.

Then the casualty was administrated to the recovery ward.

Analysis

The primary cause of this accident is listed as a "Field control inadequacy" because the investigators determined that the site planning was unsatisfactory (requiring deminers to tie themselves in place) and the Victim was apparently working in an unauthorised way and his errors were not corrected.

The secondary cause is listed as "Inadequate survey" because the survey had not identified any threat from ordnance. It is probable that the deminer got a large signal with his metal-detector so knew that the source was not one of the anticipated mines. This led him to excavate the reading carelessly and so pull the pin on the grenade. Clearly the grenade had a delay of a few seconds but the man was tethered and could not run away. If he had thought to lie flat he might have escaped the injuries, which were all to the back of his body and arm. The tethering of deminers is not a common procedure and should perhaps include a quick-release method.