DDAS Accident Report

Accident details

Report date:	28/12/2007	**Accident number:**	445
Accident time:	07:04	**Accident Date:**	13/05/2007
Where it occurred:	Bahadul-Gaig village, Jabal Seraj district of Parwan province	**Country:**	Afghanistan
Primary cause:	Inadequate training (?)	**Secondary cause:**	Management/control inadequacy (?)
Class:	Excavation accident	**Date of main report:**	16/05/2007
ID original source:	OPS/03/01-38	**Name of source:**	UNMACA
Organisation:	[Name removed]		
Mine/device:	PMN AP blast	**Ground condition:**	agricultural (recent) building rubble hard residential/urban
Date record created:	28/12/2007	**Date last modified:**	28/12/2007
No of victims:	2	**No of documents:**	3

Map details

Longitude:		**Latitude:**	
Alt. coord. system:	WGS-84	**Coordinates fixed by:**	GPS
Map east:	E 069 27 34.2	**Map north:**	N 35 12 88.9
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

protective equipment not worn (?)

visor not worn or worn raised (?)

inadequate training (?)

safety distances ignored (?)

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

INTERNAL DETAILED DEMINING ACCIDENT REPORT

16 May 2007

PART ONE BACKGROUND

1. Demining organisation name. [Demining group]
2. Organization sub unit, team name/number. DT #4, Section 2.
3. Name of worksite supervisor. Section Leader: [Name removed], Team Leader: [Name removed].
4. Location of accident (province, district, village, minefield number): PARWAN Province; District „labe‌l Seraj; Village; Bahador Bag, AF/0302/00000/MF002. Coordinates: 69 16 507 / 35 07 157
5. Date and time of accident. 13 May 2007 7:04 AM
6. Type of accident. Unintentional detonation of an anti-personnel blast mine during probing (prodding). Preventable.

PART TWO - DETAILS OF ACCIDENT

7. Specific location. The accident occurred at the work site of [Demining group] DT#4, on Clearance Task MF002 — approximately 4 km east of Jabel Seraj — at coordinates: 69 16 50.7 1 35 07 15.7. The site is 470 m2. The hazard area consists of one mine belt outside a residential wall. Erosion from the mud wall has buried the mines to a depth of approximately 30cm.
8. Personnel involved in accident: Deminer [Victim no.1] Mohammed and Deminer [[Name removed]ictim no.2]. Both are assigned to Section 1 of DT 4. The Section Leader is [Name removed], but at the time of accident, Deminer [Victim no.1] was the acting Section Leader. This temporary promotion of derniner [Victim no.1] was approved by TL [Name removed] on the proposal from SL [Name removed].
9. Activity being performed when accident occurred: According to [Demining group] Field Officer, Mr. [Name removed], both deminers were together on the base stick when the accident occurred because acting SL [Victim no.1] was verbally instructing Deminer [Victim no.2] how to perform excavation. Deminer [Victim no.2] was performing excavation with a bayonet probe (prodder) and hit a PMN mine. It is not clear why was he using his bayonet prodder for excavation, or if he probed the soil before excavating. No MDD or MDU were in support of DT #4 on the day the accident occurred.
   [In fact the deminer was not prodding at the time of the accident – the Acting Section Leader was prodding, demonstrating how to do it “safely”.]
10. Accident cause: Detonation was caused by unintentional contact of the bayonet — type probe (prodder) by the deminer onto the top of the PMN. It is not known why acting SL [Victim no.1] was instructing deminer [Victim no.2] in a "live" minefield.

Note: This is the first accident to occur on DT#4 between May 13 and 15, 2007. The second accident occurred at the same location, and involved Section 2.

PART THREE — INCIDENT SITE CONDITIONS

Conditions on the incident site

Worksite was marked in accordance with SOP. This demining task is outside a residential wall; the line is approximately 1.5m wide. 420 out of 470 m2 were already completed when the accident occurred.

This picture shows the east side of the area outside house wall. The deminer is pointing to the detonation site of the first PMN.

Ground at the site is flat. The soil is baked hard, and compacted by wind and water. It is difficult to probe and excavate.

Vegetation on the site is medium density grass and brush.

It was sunny and clear at the time of the accident. The temperature was approximately 30° Celsius (85° Fahrenheit). Wind was light.

PART FOUR - TEAM AND TASK DETAILS

Team details. Structure of the MCT 4 is 4 Sections of 5 deminers each 4 Section Leaders, 2 Medics, 1 Assistant Team Leader and 1 Team Leader. At the site MF 002, only one section was deployed (Section 1). Sections 2, 3 and 4 were deployed at site MF 085 in District Charicar under the supervision of TL [Name removed], some 10 km south from Section 1. Section 1 is undergoing refresher training following their accident on 13 May.

It should be noted that this week one SL and the Deputy TL from DT 4 were absent from the worksites due to their attendance of the training course on the new Concept of Operations being held in Kandahar.

DT 4 last attended refresher training conducted by [Demining group] Training Officer [Name removed] and [Name removed] and TL [Name removed] on 8th May 2007.

Last QA from UNMACA was conducted with this Team on 12 May 2007.

Task details

The task is to clear the minefield laid in 1997 around the house of the former Government MOD Area Commander in the village Bahador Bag. The number of beneficiaries is 13. The Technical Survey was done by [Survey demining group].

Until the time of this accident, DT 4's Section 1 had removed 11 mines and 2 UXO. Section 1 cleared 420 m2 out of the 470 m2 that comprise the site, or 89% of the task in 14 working days since 15 April 2007.

MF002 is made with Soviet PMN mines laid in one belt. [Demining group] DT 4, Section 2 is performing manual clearance, and is not supported by [Demining group] MDU (Backhoe) because of inadequate road access.

Copies of training records, monitoring reports, technical survey reports, Task folders, task progress reports are not included here.

PART FIVE - EQUIPMENT AND PROCEDURES USED

Equipment used: 5 Metal Detectors, 5 Demining Kits, 6 sets of PPE, 2 Motorola Radios. 1 Codan, 2 Vehicles (1 Ambulance and 1 Pickup). According to SL [Name removed], all of deminer [Victim no.2]'s equipment is functional and undamaged except for the probe, visor, and vest. Deminer [Victim no.2] was properly wearing his PPE when the PMN detonated. His only injuries are superficial, primarily on his left hand.

Procedure used. One Man Drill.

Work routines. 5 45-6:00 Briefing by SL 6:00-:6:45 Work First Shift 6:45-7:00 Break 7:00-7:04 Work Second Shift and after 3 m2 cleared that day accident happened at 7:04

At the moment of the accident, Mr. [Name removed] SL1 was supervising other Deminers at north Wall.

PART SIX - EXPLOSIVE HAZARDS INVOLVED

[PMN mine details removed.] Details of blast holes (size and depth)

The location of the PMN detonation is approximately 70-80 cm from the green marking stone [centre of photograph]. This photo was taken the day after the accident. The blast hole is not clearly visible due to mud. Specific depth and size of the hole are not known.

PART SEVEN — DETAILS OF INJURIES

Deminer [Victim no.2] has eye injuries and superficial injuries to both hands.

Acting SL [Victim no.1] has chest and facial injuries and superficial injuries to both hands.

[These are reversed. The investigator clearly became confused about the details of the accident. The SL received the severe injuries because he was prodding at the time. See IMSMA form reports below.]

PART EIGHT— EQUIPMENT/PROPERTY/INFRASTRUCTURE DAMAGE

No equipment was damaged in the incident.

PPE "ROFI" and Visor were moved to Base Camp and not inspected by author of this report.

PART NINE - MEDICAL AND EMERGENCY SUPPORT

Plan was to evacuate casualties to the local hospital in Charicar, 8 km from the worksite. Casualties were evacuated to the hospital in Charicar 8 km from the worksite. Further evacuation of Deminer [Victim no.1] (acting SL) to Kabul Wazir Akbar Hospital (70 km) was made by [Demining group] Ambulance after recommendation from Charicar Hospital.

No Comment related to the effectiveness of the medical and emergency support

PART TEN - OTHER MATTERS OF RELEVANCE

[Demining group] sent deminers from Section 1 to refresher training following their accident on 13 May. Section 2 began working this site on May 14. After the second accident on 15 May 2007, [Demining group] DT 4 was suspended until refresher training and the accident investigation are both complete. The suspension was declared by [Name removed], [Demining group] Executive Manager.

[Name removed], [Demining group] Field Officer, assisted me in making this Internal Accident Report.

I was informed by [Demining group] FO Mr [Name removed] that staring on 17 May 2007, task 002 will be supervised by TL Mr. [Name removed].

PART ELEVEN - DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Deminer [Victim no.2]'s eye injury indicates that the Protective Visor was not used at the moment of blast of PMN. Acting SL [Victim no.1]'s chest injury indicates that the Protective Vest was not used at the moment of blast of PMN. It is not known why they were not wearing their PPE as per SOP.

[Demining group] permits the Team Leader to promote deminers to SL upon their recommendation. No minefield supervisor training program is provided.

The search and excavation error made by Deminer [Victims] may have been a single instance or may have been a procedure performed improperly for some time. The same may be said for both men in regards to their protective equipment. Both contributed to the injuries they sustained. Proper minefield supervision would have prevented the accidental detonation as well as the injuries.

A series of events contributed to this accident:

1. Some assigned leaders are attending training and were away from the team.
2. The acting section leader was not an experienced minefield supervisor. Deminer [Victim no.1] may have experience as a deminer in the field, but, his lack of leadership (management) skills or training resulted in multiple injuries. He violated basic, fundamental rules of demining which he was supposed to maintain and demonstrate (use of PPE and safety distance). His excavation instruction was a primary cause of the accident.
3. The acting section leader did not prevent or correct the improper excavation techniques employed by the deminer.
4. The deminer used improper technique — using a bayonet probe to excavate, rather than probing the soil first, then excavating horizontally with a trowel.

My recommendations are:

1. [Demining group] should not promote any deminer to Section Leader — acting or permanent — without previous minefield supervisor training that is followed by 4-6 weeks of supervision under an experienced TL or Site Officer.
2. All clearance operations should be under the supervision of experienced minefield supervisors.
3. [Demining group] Operations and QA need to conduct refresher training for all [Demining group] deminers on probing and excavation drills.
4. All [Demining group] minefield supervisors, including section leaders, assistant team leaders, and team leaders need to attend a supervisor training program to reinforce SOPs, leadership responsibilities and authority.
5. DT 4 must demonstrate safe clearance procedures to a UNMACA or AMAC QA Officer to be re-accredited.

Signed: WRA Demining TA

Demining Investigation Report (from IMSMA forms)

History of the Minefield

MF # AF10302/00000/002 locates at Bahadur Baig village, Jabul Saraj district, Perwan province. The MF includes the house, garden and outskirts of the house of Mr. [Name removed] known by the name of [Name removed] covering SHA (1) of impact community 54. In the reign of Taleban this house was base of [Name removed] who is currently chief of infantry forces of Afghan Army. At that time he was a prominent commander of the Northern Alliance Forces. He had planted anti -personnel mines around his house for security of his base in the year 1997. In the time being the house owner Mr. [Name removed] and his family is living in the house and has requested clearance of the house. The direct beneficiaries of the task are 13 persons and indirect beneficiaries of the task are about 60 persons. Size of

this MF is 470 sqm of which 420 sqm has been cleared, 14 anti personal PMN mines and 2 UXO have been discovered so far. Three accidents in this area have been recorded, two on humans and one on an animal. Since planting the mines, a lot of soils have been gathered on the mines so the depths of the mines differ from one another.

The task clearance has been started on 15 April 2007. Section-1 of [Demining group] MCT-04 has been deployed for clearance of the task. Section leader of the section is Mr. [Name removed]. Since the task has been divided by mud walls, control of all parties by one section leader is impossible, therefore one deminer of the team by the name of [Victim no.1] has been appointed as acting section leader for control of one party worked in garden of the house. The acting section leader has been appointed since outset of the task clearance.

Description of the incident/accident

On 13 May 2007 at 07:04 while [Victim no.1], acting section leader was showing the correct excavation procedure by bayonet for deminer [Victim no.2], a deminer of Section-01, MCT-04, worked under his control on an un-investigated signal in live MF, the bayonet hit the top of an anti personnel PMN mine as a result the accident happened.

During the accident [Victim no.2] was stand adjacent to the acting section leader [Victim no.1]. As a result of this accident the acting section leader and the deminer seriously injured. Acting section leader received multiple injuries on his face; arms and hands as well as a small hole created on his chest, but did not harm vital parts of his body. During this accident deminer [Victim no.2] was stand near the acting section leader received injuries on his hands, right eye and multiple superficial injures on his face. It is to be mentioned that the injuries of the acting section leader were more serious than the deminer.

During the accident both acting section leader and the deminer were not dressed with their PPE and helmets. During five minutes first aid was applied on both injured persons and were shifted to Charikar hospital. Distance of the designated hospital from the accident site was 15 km; time for ambulance to drive from site to hospital took 20 minutes (from 07:10 to 07:30).

The medic [Name removed] and [Name removed] deminer, with the same blood group as the casualty, accompanied casualties as a rescue team during evacuation from site to the hospital.

The team conducted the last CASEVAC drill on 09 May 2007.

Conclusions

1. Since the task has been divided by mud wall as one section leader could not control three parties of the section worked at different parts of the task, therefore a deminer of [Demining group] MCT-04 named [Victim no.1] was appointed as action section leader to control a party [that] worked in garden of the house.
2. The place in which the mine exploded was near a wall of the landowner house and soils were gradually gathered on top of the mine. The ground of this area was too hard and work on it was troublesome and difficult.

3. After tea break the acting section leader took the deminer bayonet in order to show him the correct procedure of excavation by bayonet on a detected signal in the life minefield as at this time the accident happened.
4. At the accident time the acting section leader and the deminer were not dressed with PPE and their helmets were not on their heads.
5. The acting section leader was deminer who has not attended the team leader course (TLC).
6. The main job of the acting section leader was to control work of deminers, but instead he was training the deminer on a detected signal in live MF without PPE, which is direct safety breach.
7. Appointing, an untrained deminer in TL course, as acting section leader is a big mistake of the team leader and the relevant site supervisor.
8. The mine that has caused the accident was about 45 cm under hard soil.

Recommendations

1. Deminers who have not attended TL course must not be appointed as the team command group member.
2. In the cases that the team is split and a section of the team is working in another task and is seen that the task clearance is difficult and section leader cannot cover overall activities of the section, assist team leader or TL should be appointed for control of all aspects of clearance activities in such tasks.
3. The teams all members working in the site must be dressed with PPE and visor down and consider the required safety distance from one another.
4. No one should train the deminers at live minefield. Whenever section leaders want to train deminers, should prepare a training site out of the MF at cleared/safe area then train the deminers at that area.
5. Section leaders considering the safety distance should stand at the required distance from deminers in order to control the deminers' activities.
6. When the deminer works on a signal at the worksite the only job of the section leader is to control the deminer in order to conduct safe operation.

Victim Report

Victim number: 592
Name: [Name removed]
Age: 26
Gender: Male
Status: supervisory
Fit for work: not known
Compensation: Not made available.
Time to hospital: 26 minutes
Protection issued: Frontal apron
Long visor
Protection used: None

Summary of injuries:

severe Arms

severe Chest

severe Face

severe Hand

AMPUTATION/LOSS: Eye

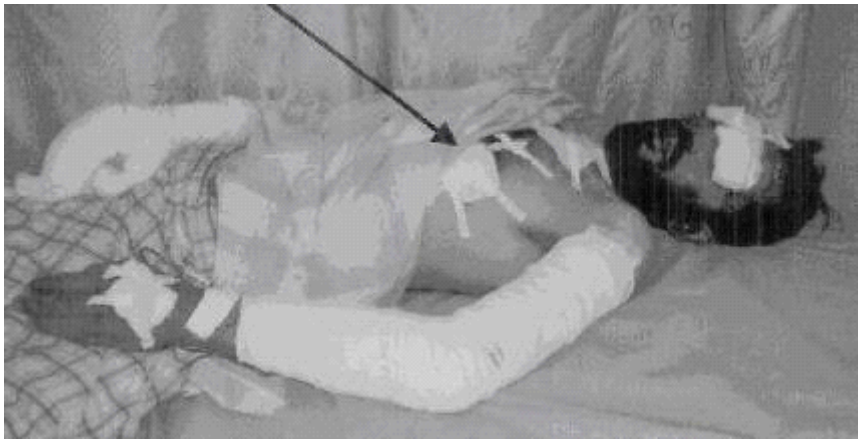
COMMENT: See Medical report

Medical report

No formal medical report was made available. The following is derived from the BoI content.

[Victim no.1] who was working as acting section leader received multiple injuries on his face, arms, hands and also a small hole created on his chest. "…has got his right eye completely damaged, left hand got injury and deep hurt in to near his …. And also left eye got injury".

Front parts of his body, parts around his right eye, some parts of his right and left hands and a hole at his chest which is not deep to affect important organs of his body.



[Victim no.1: dressed injuries to left hand, right arm, eyes and chest.]

Taken to Chazikor emergency hospital and then shifted to Kabul emergency hospital.

The Medic stated [of Victim No.1]: "Front parts of his body [received injury], parts around his right eye, some parts of his right and left hands and a hole at his chest which is not deep to affect important organs of his body."

"I controlled the bleeding and IV Cenula and analjezic Diclofenac then he was shifted to FMU and wounds were dressed and then we transferred patient to the hospital, during the way I was applied him serum and I was controlling him at the whole time from the site to the hospital."

I reached [the Victim] myself with in one minute and applied him first aid for five minutes and it took 20 minutes which we shifted the patient to the hospital.

We shifted the patient to Charikar hospital, which took 20 minutes and has 10 Km distance from work site.

Victim Report

Victim number: 593 **Name:** [Name removed]

Age: 28 **Gender:** Male

Status: deminer **Fit for work:** presumed

Compensation: Not made available

Time to hospital: 26 minutes

Protection issued: Frontal apron
Long visor

Protection used: None

Summary of injuries:

INJURIES

minor Body

minor Face

minor Hands

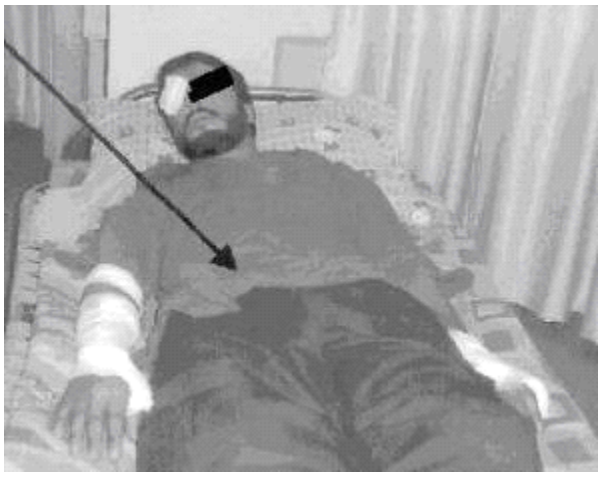
severe Eye

COMMENT: See Medical report.

Medical report

No formal medical report was made available. The following is derived from the BoI report.

[Victim no.2] a deminer belonging to section # 2 who was standing close to [Victim no.1] (the acting section leader) received injuries on his hands, eyes and multiple superficial injuries on his face. “His right eye got injury but not serious, surface injury in his body and hands”.



[Victim No.2: dressed injuries to both forearms and right eye.]

Casualty was evacuated to the hospital in Charicar 8 km from the worksite. F

During this accident deminer [Victim no.2] was stand near the acting section leader received injuries on his hands, right eye and multiple superficial injures on his face.

"Patient [Victim no.2] is now at site office and he has a little bit complain about his chest."

Related papers

Lessons learned

File: OPS/03/01-38, Date: 29 May, 2007

To: [Demining groups working in country]

From: Chief of Operations. UNMACA, Kabul

Subject: Investigation Reports & Lessons Learned from Demining Accident

Attached please find the investigation report and Lessons Learned from Demining Accident that has happened at DAFA DT # 4 worksite in Bahadur-Baig village, Jabal Seraj district of Parwan province on 13 May 2007.

LESSONS LEARNED SUMMARY

DEMINING ACCIDENT ON DEMINER OF DAFA DT # 4 AT BAHADUR VILLAGE. JABAL SERAJ DISTRICT OF PARWAN PROVINCE ON 13 MAY 2007

INTRODUCTION

A. On 13 May 2007 a demining accident happened at work site of [Demining group] DT # 4 at Bahadul-Gaig village, Jabal Seraj district of Parwan province. AMAC Kabul assigned an investigation team comprised of [Name removed] the Quality Management Assistant (QMA) and [Name removed] Operations Associate to conduct investigation in accordance with the UNMACA Standard Work Procedures.

B. The accident involved two persons:

1) [Victim no.1] who was working as acting section leader received multiple injuries on his face, arms, hands and also a small hole created on his chest

2) [Victim no.2] a deminer belonging to section # 2 who was standing close to [Victim no.1] (the acting section leader) received injuries on his hands, eyes and multiple superficial injuries on his face.

SUMMARY

C. On 15 May 2007 at 08:35 hrs while [Victim no.1] the acting section leader would show the correct excavation drill for [Victim no.2] a deminer belonging to section # 1 DT # 4 on a un-investigated signal, his bayonet hit the top of an anti personnel PMN mine causing to uncontrolled explosion.

CONCLUSIONS

The investigation concluded that the accident has happened because of the following reasons:

a) Assigning a deminer who has not completed the Team Leadership course as an acting section leader.

b) The acting section leader tried to correct his deminer on excavation drill on a portion of live minefield while he should have done it on a clear/safe portion.

c) The depth of mine may has not been taken into consideration; as report states the mine accident location is near an old mud wall that has been rusted [decayed] due to passage of time and soil gradually came down on the top of the mine.

d) Both the Acting Section Leader and the Deminer who were involved in the accident did not wear PPE.

e) As the Acting Section Leader and the Deminer both have not had PPE, so they received multiple injuries.

RECOMMENDATIONS

The following are recommended by the Investigation Team:

a) Deminers who have not completed the Team Leadership course must not be appointed as Section Leader, Assistant Team Leader or Team Leader.

b) The team command group should not allow the deminers work without PPE.

c) Training the deminers or showing them the correct demining drills by their supervisors should be done on a safe area

d) Safety distance should be maintained at all the time when deminers work in live minefields

e) [Demining group] Operations Department should conduct refresher training for all the DT # 4 personnel and it should be QA by [Demining group] QA section. [Demining group] is advised to send the result of the refresher training to UNMACA QA section and the team should be subject to field assessment.

Internal Memo

To: Chief of Operations UNMACA Kabul

From: Chief of Quality Management

Date: 28 May 2007

Subject: Demining Accident Investigation Reports of [Demining group] DT 4 occurred in Bahadur Baig village of Jabal Seraj district, Parwan province.

With reference to demining accident investigation reports of AMAC Kabul, dated: May 23rd 2007 and internal investigation report of WRA dated. May 16th 2007.

We endorse the recommendations of the investigation officer as preventive measure and would like to add that one of the main contributed factors to these two incidents was poor command and control of team management.

Unqualified deminer was assigned as acting section leader. While the team leader could fill this supervision gap with his assistant.

The acting section leader was educating his deminer on the excavation drill in the real part of the minefield (clearance lane) who applied excessive force and set the mine off. If he was not confident of his deminer he could demonstrate the drill in clear part of the task.

The AMAC/QMA was not informed of such a change in the team command group.

The team leader did not learn any lesson of his/her team performance of the first accident to enforce some preventive measure so the section continued the same and similar factor caused the second accident.

The team should undergo refresher training. If they already attended during this reported period [Demining group] should send us the result, this team should be subject to field assessment so further corrective action could recommended.

During the initial visit of the site/finding the investigation office should advice corrective/preventive action and informs the AMAC and HQ through a memo as usually the investigation report take some time to process. In this case after the first accident the investigation should have advised the team of his poor management of the team which could have prevent the second accident as both were caused of a similar factor.

(I will take care of this point once the investigation report is finalised if you agree to it. Improvements of the investigation report will be one my agenda point for the up coming QM TWG)

Signed: Chief of Quality Management

STATEMENTS

Statement and Witness Report 1

[Section Leader, deminer since 1990.]

Please answer the following questions:

Q1: How the accident occurred explain?

I am [Name removed] section leader I was controlling party No 1. As the party 1 found mine, I came to emphasize safety to the party members. I was explaining them safety procedure how to deal with investigation of mine in such area. During investigation of the mine they should act very gently, meanwhile I heard explosion voice happened on [Victim no.1] and [Victim no.2]. Doctor [Name removed] and I came to the accident spot, [the Doctor] applied first aid to him and then patient transferred to Charikar hospital then to Kabul. I came back to the site and destroyed the found mine.

Q2: [Victim no.1] was assign to work as Section leader whose job is to control the operation not involving himself in direct work why accident happened on him?

I have requested for temporally assignment of [Victim no.1] as section leader which is deem necessary for controlling of the site and site officer did approve this assignment. I do not know what the section leader was doing because it was difficult to ask him question in that time.

Q3: What did he do wrong caused him the accident?

I do not know. When [Victim no.1] recovered for illness I would ask him.

Q4: Have they worn PPE and Visor? If yes then why PPE and Visor are remains with out any damage while their body received injuries?

When I reached to the accident spot I saw PPEs and Helmet and visor lain down on the ground.

Q5: Where were your location while accident happened and what you were doing and which distance?

I was at the other party as the mentioned party found mine I was instructed them to do more investigation for the found mine, in order to find the type of mine. Which accident occurred? I had 100 metres for the party which accident occurred on.

[Signed and dated 14 May 2007.]

Statement and Witness Report 2

Place Date 15/05/007 Time 09:30

[Medic with one year's experience.]

Please answer the following questions:

Q1: Where you have been during the accident and how far was your distance from accident point and what you were doing?

I was at FMU about 100 metres away from accident point.

Q2: What were the faults of both deminer and section leader behind the accident?

I think the mistakes of both section leader and deminer were their careless and not wearing PPE.

Q3: What parts of the injured person body received wounds please use medical terminologies?

Front parts of his body, parts around his right eye, some parts of his right and left hands and a hole at his chest which is not deep to affect important organs of his body.

Q4: What first aid steps you have applied on patients?

I controlled the bleeding and IV Cenula and analjezic Diclofenac then he was shifted to FMU and wounds were dressed and then we transferred patient to the hospital, during the way I was applied him serum and I was controlling him at the whole time from the site to the hospital.

Q5: How long it took you to get to the injured persons and how long first aid took you and how long it took that injured persons were get ready for taken them to hospital?

I reached myself with in one minute and applied him first aid for five minutes and it took 20 minutes which we shifted the patient to the hospital.

Q6: How long it took transportation of the injured person to hospital and what hospital it was how and how far is the distance between working site and hospital and how much time it took take?

We shifted the patient to Charikar hospital, which took 20 minutes and has 10 Km distance from work site.

Q7: Where are the patients and how are they and which parts of their bodies received injuries?

[Victim no.2] Patient is at site office and he has a little bit complain about his chest.

Q8: When did CASAVC drill was done and the injured persons were participated at the drill or not?

Yes we did practice the drill and he was involved in that drill.

Q9: Who were accompanied with the patients during their shifting to the hospital?

Some personnel from team 4 were accompanied the patient. [Name removed] paramedic, [Name removed] deminer and myself.

Statement and Witness Report Victim No.2

Place Date 15/05/007 Time 10:00

[Deminer, “Acting Section Leader”, two year’s experience. The record states this man was Acting Section Leader, but elsewhere it is Victim No.1 who was Acting Section Leader: an error is presumed.]

Please answer the following questions:

Q1: How the accident occurred explain?

I was working as the ground surface was hard and I was tired [Victim no.1] my friend that were acting section leader start work and he tried to show me how to prod the area, meanwhile accident occurred.

Q2: When the accident happens and when you have started the work?

Work has been started at 6:00 hrs and accident occurred at 7:04 hrs.

Q3: When the accident happened during the work or at rest time?

Accident happened at the end of break time

Q4: You were doing excavation or section leader and who faced accident if section leader was doing excavation then how far you were from the section leader?

Section leader was doing the excavation and accident happened on both of us.

Q5: Why section leader was doing deminer job because he is supposed to control demining operations?

Section leader was showing us the way to prod the area which accident happened.

Q6: What was the reason behind the accident from your point of view?

Reason behind the accident was hardness of the ground.

Q7: Have you and section leader worn PPE if yes tell us have you worn the PPE during rest period and tell us if you worn PPE during the accident time then why Visor did not get damaged while your face reached injuries?

We did not wear PPE during the break time but we did wear PPE section leader did not wear PPE and did not wear Visor.

Q8: What demining tool you have use during the work?

We used prodder.

Q9: At the accident area what mark you used and in which angle prodding was being done?

Accident happened at the centre place of marking and angle, which we used, was 30 degree.

Q10: What preventive action should be taken into consideration to avoid such accident at the future?

To prevent such accident in such area, it needs to use water for the hard ground in order to soften the ground for easy prodding.

Analysis

The primary cause of this accident is listed as “Inadequate training” because the investigator determined that “no minefield supervisor training program is provided”. The secondary cause is listed as a “Management control inadequacy” because the provision of appropriate training is a management responsibility.

Victim no.1 was clearly taking his responsibility as “acting supervisor” seriously by trying to ensure safety in the minefield, but made fundamental errors that would not have occurred if he had been appropriately trained.