DDAS Accident Report

Accident details

Report date:	01/02/2008	**Accident number:**	497
Accident time:	07:40	**Accident Date:**	09/07/2007
Where it occurred:	Qalai Gulay Village, Bagram District, Parwan Province	**Country:**	Afghanistan
Primary cause:	Field control inadequacy (?)	**Secondary cause:**	Inadequate training (?)
Class:	Excavation accident	**Date of main report:**	Not recorded
ID original source:	None	**Name of source:**	UNMACA
Organisation:	[Name removed]		
Mine/device:	AP blast (unrecorded)	**Ground condition:**	bushes/scrub rocks/stones
Date record created:		**Date last modified:**	01/02/2008
No of victims:	1	**No of documents:**	1

Map details

Longitude:		**Latitude:**	
Alt. coord. system:	Not recorded	**Coordinates fixed by:**	
Map east:		**Map north:**	
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

visor not worn or worn raised (?)

handtool may have increased injury (?)

inadequate training (?)

protective equipment not worn (?)

squatting/kneeling to excavate (?)

Accident report

A UMACA letter about 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 letter is reproduced below, edited for anonymity. The original PDF file is held

on record. The demining group's internal investigation was made available in January 2008. It follows the UNMACA letter below.

Text in [ ] is editorial.

LESSONS LEARNED SUMMARY

OF DEMINING ACCIDENT OCCURRED ON [demining NGO] DEMINER ON JULY 09 ,2007 AT QALAI GULAY VILLAGE OF BAGRAM

INTRODUCTION:

As a result of a demining accident on [the Victim], deminer of [demining NGO], DT-03 at 07:40 hours on July 09, 2007 in task # AF/0308/01624/MF132 located at Qalai Gulay village, Bagram district of Parwan province, investigation team was convened by UNAMAC Kabul to conduct the investigation and find out the main causes of the accident.

The accident caused serious injuries on face, eyes and right hand of the deminer.

SUMMARY:

Task# 132 is part of security belt of Bagram Regiment -40 which is contaminated by AP mines. Deminer [the Victim] using a hand trowel excavated onto an AP mine and caused it to detonate. As a result of this detonation he suffered minor injuries to his right hand and more serious to his face and both eyes with serious corneal defect to right eye, first degree burns to his face and ear damage.

Following stabilization in the minefield, he was evacuated to Charikar hospital and subsequently moved by ambulance to eye hospital in Kabul.

CONCLUSIONS:

The following points were found by investigation team:

1. The two items of equipment (trowel and apron) both received blast/burn scorch marks as a result of the detonation, together with minor injuries to the deminer right hand and extensive peppering of the deminer face are consistent with the blast /burn effects experienced in many similar accidents. This directs the investigation team to conclude that the visor was not worn during the detonation of the mine.
2. Further, the intense blast/burn scorch marks to the central base of the visor indicate that this area of the visor was in very close proximity to the seat of detonation.
3. Additionally, in view of there being no blast/burn marks to the underside of the chin, or the exposed neck and no burning or singing of the beard, the team concludes that the visor was nor worn in the correct position or more probably that it was not worn at all.
4. The proximate cause of the accident was the shaving procedure, independent of prior prodding with the hand trowel detonating the mine during this procedure. First, he should have been conducting prodding procedure with bayonet or prodder, followed by excavation procedure with the hand trowel.

5. A contributory cause of the accident was weak supervision by both team leader and section leader. This allowed both the incorrect drill and the failure to wear the issued visor.

RECOMMENDATIONS:

The following points are to be considered:

1. The team leader and section leader have been disciplined by [Demining NGO] management, and the investigation team concurs with the decision taken by [Demining NGO] management.
2. Further retraining of [Demining NGO] team must be conducted and the training should be monitored by concerned AMAC.
3. The team command group must strictly control the deminers to be dressed with PPE and their visors down.
4. The team command group is to ensure that all demining tool and equipment are used properly that is why the team command group is [exists].
5. Since the task ground is hard and the task is dense contaminated area, it is recommended that a supporting MDU be provided for clearance of this task.

Signed: Chief of Operations, UNMACA Kabul

Demining group internal report

INTERNAL INVESTIGATION REPORT, KABUL JULY 2007

1. Objectives

The objectives with the current report are:

To deliver the evidence to other staff within the organization.

To draw the attention of other staff to 100% implementation of standards.

2. General Information

Team/Site description: MCT 03, Section 01, Central Region, Bagram, Minefield 132

Location of accident: Bagram District, Division No: 40 Base of Russian army

Date & Time: 09th July 2007 at 07:40 am

3. Particulars of Injured Person

Name: [Removed]

Title: Deminer

Date of birth: 1979 - 26 Years old

Place of birth: Azraw-Luger

Blood group: A Rh + ve

4. Cause of the Accident

Antipersonnel PMN – mine during the demining work whilst excavating the land.

5. Brief Description of the Injuries

A. Multiple erosive fragmental injuries on the face, frontal and 1st degree burns all over the face and frontal anterior view.

B. Erosive fragmental injuries on dorsal view on right hand lateral side.

C. Both eyes slightly injured and the right eye serious corneal defect.

D. A fragmental wound in right side of the face include the ear auricular and an injury on the right eyelid.

E. Bruise injuries in chin and neck.

6. Chronological Overview of the Accident

Following describes the actions taken and the instructions given by the command staff directly after the accident:

Accident happened at. 07:40

Operation of MCT-03 stopped. 07:41

Team leader, paramedic and one deminer got to the accident point. 07:42

Paramedic started treating and doing the first aid to the injured. 07:42

First aid was given at the Ambulance pick-up point for 15 min. 07:57

Radio room at main office got the report of accident. 08:00

Patient was loaded into Ambulance and stabilised for 5 min. 08:02

UNMACA was informed by Senior Operations Manager. 08:20

AMAC Central was informed by Senior Operations Manager. 08:25

Ambulance reached Char-E-Kar hospital, re-irrigated and re-dressed. 08:30

Patient was moved after initial inspection to Kabul Nur (eye) hospital. 08:45

Patient arrived into Nur (eye) hospital in Kabul. 09:42

Internal Accident Investigation unit reached the accident site. 10:20

External Accident Investigation unit (UNMACA) reached the accident site. 11:00

Internal Accident Investigation unit reached Nur hospital in Kabul. 12:50

IMSMA Accident Report form was delivered to AMAC Central. 14:30

7. Brief Description on How the Accident Happened

The minefield is 20 years old and located in a village next to the Bagram Airbase and used to form a part to an old Russian military compound - in the middle of this theatre. At the accident lane, there is a stream for water coming from North, and a protective wall parallel to the stream across in a one meter distance. The mine location was on the top of one side of the water stream, near to the protective wall, where there is a deep gap between the wall and one side of the stream. The position of the mine may have changed in time due to the rain and snow falls in winter time or it may have changed during the heavy fighting in the village when hundreds of projectiles and artillery shells hit the terrain containing the landmines. During the internal investigation unit inspection on the accident environment, the accident point and the explosion crater was discovered and measured. Information were received from the support staff including the team leader [Name removed] MCT-3 concluding the sequence of the actions of the deminer prior to the accident.

For the deminer actions, see the summary at the end of the report.

[The Victim's PPE – clearly showing soot inside the visor.]

[Accident site: crater lower left.]

General Condition of the Injured Person: On 2nd priority, now admitted in Noor Eye hospital, his general condition according to the doctor was stable and prediction for recovery successful.

Damaged Equipment: Visor; Fragmentation vest; Base stick; Trowel; Rope

9. Technical Evidence

Within the immediate surroundings to the crater, there were numerous spots indicating the impact of artillery shelling, a Chinese 82mm recoilless projectile lying on the ground (0,5 m from the accident point), and a large amount of soil piled up in the explosion to the left side of the crater – indicating together with the injuries of the deminer and the damage to the property, that the mine was lying at an angle - not in horizontal position.

10. Treatment

Open the IV line and fixed the IV canola.

Given the IV Fluids (Ringer Lactate) 1000 ml.

Irrigated the injured face, eye and all erosive wounds by Normal saline.

Dressed and maintained his both eyes by the Normal saline and apply the poly fax ointment in his eyes.

Applied Analgesic: Diclonat P 3ml/IM, Pentonil 1ml dilute

Applied Antibiotic: Vial Pan Ampicillin 1gr/IM

11. Summary

The accident happened during demining activities during excavation drill by PMN antipersonnel mine, involving a possible change in the position of the PMN from the actual planting position. When the deminer was shaving soil from the right side of the 1 m clearance lane by small trowel, the tool hit the PMN causing it to explode. It is likely that the deminer used his tool in an incorrect way, however it is evident that the PMN was lying in an angle towards left. The casualty was admitted into Noor Eye hospital in Kabul, his is stable and his health condition was set on 2nd priority.

12. Lessons Learnt

A full day of refresher training shall be conducted immediately for all 6 + 3 (JMAS) demining teams. The training subjects shall be the demining drills with a special concentration on the use of PPE combination of visor and vest and shaving the soil by using the small trowel.

13. Investigation Team

Operations: [Name removed]

Operations: [Name removed]

Medical: Dr [Name removed]

Victim Report

Victim number: 658 **Name:** [Name removed]

Age: 26 **Gender:** Male

Status: deminer **Fit for work:** no

Compensation: Not made available

Time to hospital: Not made available

Protection issued: Frontal apron
Long visor

Protection used: Frontal apron

Summary of injuries:

minor Hand

severe Eyes

severe Face

severe Head

AMPUTATION/LOSS: Eye

COMMENT: See Medical report.

Medical report

[From Ops Manager to AMAC Manager, dated day of accident.]

Description of injuries: Explosive fragmental injuries and 1st degree burns in face/ minor erosive fragmental injuries to right hand lateral side.

Treatments given: Opened IV line – fixed TH IV Canola, given IV fluids (ringer lactate 1000ml); irrigated the face, eye and erosive wound by saline

[From the inquiry report.]

Open the IV line and fixed the IV canola.

Given the IV Fluids (Ringer Lactate) 1000 ml.

Irrigated the injured face, eye and all erosive wounds by Normal saline.

Dressed and maintained his both eyes by the Normal saline and apply the poly fax ointment in his eyes.

Applied Analgesic: Diclonat P 3ml/IM, Pentonil 1ml dilute

Applied Antibiotic: Vial Pan Ampicillin 1gr/IM

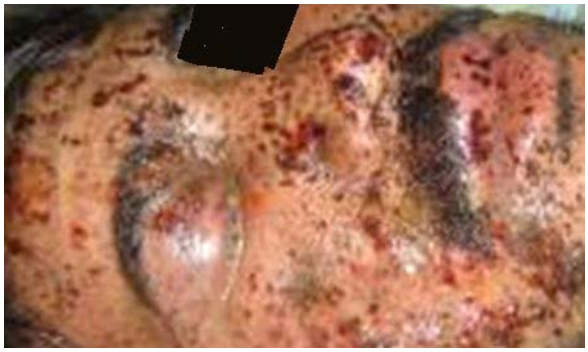
Description of injuries

A. Multiple erosive fragmental injuries on the face, frontal and 1st degree burns all over the face and frontal anterior view.

B. Erosive fragmental injuries on dorsal view on right hand lateral side.

C. Both eyes slightly injured and the right eye serious corneal defect.

D. A fragmental wound in right side of the face include the ear auricular and an injury on the right eyelid.



[The picture has been distorted to protect identity.]

E. Bruise injuries in chin and neck.

Analysis

The primary cause of this accident is listed as a “Field control inadequacy” because the investigators determined that the Victim was not wearing his visor in the down position at the time of the accident. Not only was this error not corrected, it is implied that the visor was deliberately damaged after the event in order to give a false impression that it was being worn at the time.

The secondary cause is listed as “Inadequate training” because the investigators determined that the deminer was not conducting the excavation in the correct way and recommended re-training.

The internal investigation provides a detailed timeline and good medical data but fails to address many of the concerns of the National Authority investigators. This raises questions about the level of cooperation between the demining group and the National Authority. The external investigators may have been over-critical, but the internal investigation shied away from making any critical conclusions that would require change.