

DDAS Accident Report

Accident details

Report date: 21/01/2008	Accident number: 491
Accident time: 09:40	Accident Date: 18/08/2006
Where it occurred: Durrani Village, Koh-e-Safi District, Parwan Province	Country: Afghanistan
Primary cause: Field control inadequacy (?)	Secondary cause: Victim inattention (?)
Class: Excavation accident	Date of main report: 03/10/2006
ID original source: none	Name of source: UNMACA
Organisation: [Name removed]	Ground condition: dry/dusty
Mine/device: PMN-2 AP blast	Date last modified: 21/01/2008
Date record created:	No of documents: 1
No of victims: 1	

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 medical provision (?)
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.

DEMING ACCIDENT REPORT

AREA AND TASK INFORMATION

DURRANI VILLAGE, KOH-E-SAFI, Parwan Province. Task No.H/1397

Grid 3857 586 N, 42 534 493 E Lat/long: 34.86026° N, 069.37710°E

General survey: 1 July 2006

Technical survey: 1 August 2006

Area cleared so far: 629 m2 (cross lanes)

Mines found so far: 9 PMN2

Land type: Residential, agricultural, and cemetery 54,000 m2

Accident date: 18 August 2006

Accident time: 0940hrs

Victim been deminer since: 2002

Team: Technical Survey 5

Donor: Norway

Investigation Carried out by [Name removed] (Regional Operations Officer (Central)), with input from [Name removed] (Senior Operations Officer) and [Name removed] (Expat Officer (Central)).

Minefield History

Durrani village is located to the SE of Bagram airbase, and within rocket range of the latter. During the Russian occupation, the Mujahedin launched rocket attacks on the base from the Durrani area. The Russians therefore set up a post in the village and laid a protective AP minefields around it. To date there has been no mine clearance in this area; it is reported that there have been 63 Human and 120 animal accidents in Koh-e-Safi district.

[International demining NGO] Clearance

In June 2006 AMAC(C) tasked [International demining NGO] with the clearance of Koh-e-Safi district. Two general survey teams were sent to the area; so far they have surveyed 33 tasks totalling 4,410,937 m2 of high priority minefield and 5 battle fields. Of these, the Durrani minefield was assessed as priority 1a. In August 06 a TS team was deployed to prepare the task for manual clearance.

SEQUENCE OF EVENTS

The deminer stated that he started demining work at 0600 at the morning; he was not medically or physically unfit. Before 0940 he had found two PMN2, which were destroyed by the team leader - marked by the two further green stones in the photo (below). At 0935 he found a signal with his detector, approximately 40 cm to the right of the previous mine. He proceeded to excavate towards the signal, adopting a squatting position and holding his detector in his left hand. He admitted that he had not placed an isolation marker before he started excavating.



The deminer stated that the two mines that he had found earlier that day had only been 5cm deep, and that he did not expect to find another mine so close to the last one [even though the previous three had been with 2 metres of each other], or so deep; he therefore assumed that the signal was not a mine. He thinks that the mine was deeper than 10cm below the surface. He accepts that he may have exerted too much pressure whilst excavating.

The deminer was taken to a safe area, where the field doctor (Hakim) carried out first aid. He was conscious, and had two minor injuries: there was a cut on his brow (probably caused by his visor) and two fingers of his right hand were slightly injured. He was taken by Land Rover ambulance to the [International demining NGO] clinic in Bagram camp, where he was able to talk and eat normally. He spent one night there before being sent home to his family.

The field doctor's report is at Annex A. [A photograph showing a bandaged hand and a dressing above the right eyebrow has been removed.]

The team leader reported the incident by VHF radio to Bagram camp. All relevant staff were informed by radio and mobile telephone within 10 minutes.

OBSERVATIONS

Debris found nearby (below) indicates that the mine was probably another PMN2,

The ground sloped down from the deminer to the crater. In front of the deminer was a slight rise in the ground, which may have directed the blast away from the deminer and hence protected him from the worst of the explosion.

It appears that the deminer started excavating at a depth of 10cm below the surface at his end-of-lane marker, instead of starting 10cm below the signal; and that he was therefore excavating down the slope instead of horizontally. It is not possible to tell whether he started his excavation the full 15cm back from the signal; given that he did not use an isolation marker it may be that he did not. However it is clear from other excavations further back in the same lane that the deminer had not always maintained the correct 10cm depth.

From the condition of the visor and PPE, it appears that the deminer was wearing his PPE correctly. [The visor, broken from its plastic head-frame, is shown below.]



The right glove was damaged [picture showed torn forefinger]. The trowel was not found; nor was any isolation marker found. The detector was found approx 8 metres to the deminer's left, slightly damaged.

The other mines in this minefield have all been found not more than 10cm below the original ground level. However in many places the ground is uneven.

The deminer's lane was two metres wide and over 35m long: the start of the lane was approx 75 metres from the nearest deminer. Whilst this does not contravene [International demining group] SOPs, it did mean that the deminer was isolated from the rest of the team.

CONCLUSIONS

The explosion probably occurred when the deminer exerted pressure on the top of a PMN2 with his trowel.

There is no reason to believe that the mine was more than 10cm below the ground; however the slope of the ground meant that it was approximately 20cm below the ELM.

The deminer did not start his excavation at the correct depth, and consequently excavated downwards onto the mine.

He also contravened SOPs by failing to use an isolation marker, although this was not necessarily a direct cause of the accident.

The deminer was saved from serious injury by the fact that he was wearing PPE correctly; and possibly also by the shape of the ground.

The mine density (seven mines had been found in this lane in the last 25 metres) and the uneven ground surface make this minefield potentially very dangerous. In this situation the team leader and assistant team leader must supervise the deminers very closely. From the fact that this and several previous excavations were not at the correct depth, it is clear that this did not happen.

RECOMMENDATIONS

The team leader will be demoted to manual section leader.

The assistant team leader will receive a written warning and be fined five days' pay.

The deminer will undergo five days of retraining when he is medically fit to return to work.

The Regional Operations Officer (Central) will ensure that all supervisors explain to all team leaders the importance of excavating at the correct depth and in the correct direction, and that team leaders pass this on to their teams.

Annexes: [Held on file.]

- A. Field doctor's report
- B. Team nominal roll
- C. Minefield map
- D. General area map

Victim Report

Victim number: 653	Name: [Name removed]
Age:	Gender: Male
Status: deminer	Fit for work: presumed
Compensation: Not made available	Time to hospital: Not recorded
Protection issued: Short frontal vest Long visor	Protection used: Short frontal vest, Long visor

Summary of injuries:

minor Face

minor Hand

COMMENT: See Medical report.

Medical report

Summary from handwritten Medic's report:

Radio message to ambulance 77 located at Khalazie led the ambulance to arrive at 09:55 in Kohi Safi District. Casualty loaded to ambulance after first aid. Medic to assist casualty and ambulance move to Dosarka camp clinic. The casualty had two injuries. One is a part of eyebrow and another the right hand medus and index fingers. The vital signs of casualty normal but the BP is down and request for casualty IV liquid adequate and request medicme antibiotic Cap Amoull 500 mg for five days and analgesic pain killer Amp Dulifancis (?) oral analgesic Tab Brufen from clinic.

Now the condition of casualty is better and satisfactory.

Signed and dated 18.08.06

Analysis

The primary cause of this accident is listed as a "Field control inadequacy" because the investigators concluded that appropriate supervision was not in place and recommended punishment of the supervisors.

The secondary cause is listed as "Victim inattention" because the Victim admitted that he did not think the signal was from a mine and did not use appropriate caution.

The "Inadequate medical provision" referred to under "Notes" refers to the fact that there was no ambulance on site (as required to meet the IMAS).