8-28-2001

DDASaccident372

HD-AID
Humanitarian DeminingAccident and Incident Database

DDAS Accident Report

Accident details

Report date:	15/03/2004	**Accident number:**	372
Accident time:	09:35	**Accident Date:**	28/08/2001
Where it occurred:	Rasa Koshare, Albania border, minefield number 315	**Country:**	Kosovo
Primary cause:	Field control inadequacy (?)	**Secondary cause:**	Management/control inadequacy (?)
Class:	Other	**Date of main report:**	12/09/2001
ID original source:	BOI: No 012/2001	**Name of source:**	KMACC
Organisation:	Name removed		
Mine/device:	PMA-3 AP blast	**Ground condition:**	bushes/scrub leaf litter trees
Date record created:	22/02/2004	**Date last modified:**	22/02/2004
No of victims:	1	**No of documents:**	1

Map details

Longitude:		**Latitude:**	
Alt. coord. system:	DN 34963 01785	**Coordinates fixed by:**	
Map east:	GR 34T	**Map north:**	
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

inadequate training (?)

vegetation clearance problem (?)

mechanical follow-up (?)

metal-detector not used (?)

Accident report

What follows is the report of a Board of Inquiry investigation that was made available in January 2002. It has been edited for anonymity.

REPORT FOR ACCIDENT INVESTIGATION BOARD OF INQUIRY – No 012/2001

Mine Accident that occurred in MNB West on Tuesday 28 August 2001 in which [the Demining group's] Task Site Leader [the Victim] was injured.

Introduction

1) In accordance with the Mine Action Co-ordination Centre (MACC) Standard Working Procedure No 4, the MACC Programme Manager issued a Convening Order on Tuesday 28 August 2001 for an Accident Investigation Board of Inquiry. Annex A details the Convening Order.

2) This is a comprehensive report by the Board of Inquiry into the mine accident that occurred on Tuesday 28 August 2001. Based on the investigation, interviews, statements from [the Demining group's] personnel involved in the accident, visits and photos of the accident site, this accident is considered to be preventable.

3) This finding is based on the fact that at the time of the accident the Task Site Leader [The Victim] intentionally stepped over the base stick into an uncleared area and then subsequently stepped on an anti-personnel blast mine.

4) The accident occurred at one of the Rasa Koshare minefield's, Task Dossier Number W02-37, minefield number 315, GR 34T DN 34963 01785 on 28 August 2001 at 09:35 hours.

Events leading up to the Accident

5) All [the Demining group's] manual clearance teams are conducting operations in the Rasha Koshare minefields. There are now only two minefields left to clear, minefield numbers 366 and 315. Minefield number 315 has been divided into three areas and each area is supervised by a National Task Site Leader, with The Victim being one of them. The [demining group] Bozena Team had conducted operations in minefield 315 and had previously cleared a number of access lanes through the dense scrub to the mine rows. The Victim was responsible for one clearance lane only. This lane continued on from one of the Bozena cleared access lanes.

6) On the morning of the accident at approximately 09:25hrs the Victim was informed by the section leader that one of his deminers [name excised] had seen a tripwire to the front of his base stick. [The Team Leader] then directed that both the deminer and section leader return to the base line at the start of the Bozena cleared access lane. [The Team Leader] then proceeded to step over the base stick at the end of the lane into the uncleared area. He has stated he did this in order to investigate the tripwire and identify the location of the PMR2A fragmentation mine. No one witnessed him at this time, and at 09:35hrs an uncontrolled detonation was heard in the location of where [the Victim] had walked.

7) On hearing the explosion [two named deminers] entered the lane and saw that [the Victim] was injured and had made his way to the base stick from the uncleared area. He was then placed on a stretcher and taken to the base line. The Victim had suffered a traumatic blast injury to his left foot. A KFOR helicopter CASEVAC was requested through the MNB (W) senior partner, to HLS Red – 26. The medical team was waiting at the baseline and provided [the Victim] with first aid treatment. Once stabilised he was then taken by ambulance to the HLS approximately 1 km down the hill.

8) The helicopter arrived at the HLS at 09:50hrs, and was waiting for the casualty to arrive by ambulance from the minefield. The helicopter departed at 0957hrs with the casualty and team medic to the Italian KFOR Field Hospital in Peja arriving at 1007hrs. The Italian doctors assessed [the Victim's] condition and as there was a possibility of saving his foot, they

decided to transfer him to the Pristina Civilian Hospital. This hospital has a very good plastic surgeon that is able to provide suitable treatment to [the Victim's] foot.

9) This is the sixth mine accident that [the demining group] have had since May of this year, and their third for this particular minefield.

10) The seat of the explosion was at a distance of approximately 10m from the end of the clearance lane. Therefore in order to safely continue the investigation, an access lane was manually cleared to the location of the explosion. There was evidence at the seat of explosion that the mine involved was a PMA3 anti-personnel blast mine.

11) Upon investigation it was apparent that [the Victim] had cleared the surface leaves away where he placed his feet as he walked out into the uncleared area. There was no evidence of any marking or other approved methods of clearance where [he] had walked.

[The picture above shows the accident lane. The accident happened in front of the cleared area.]

There was evidence of where the Victim had cleared small areas of leaves in which to place his feet when walking out into the uncleared area.

[The photograph below shows the seat of explosion after a lane had been cleared to the place.]

Work History of the Casualty

12) The Victim has been working for [the demining group] since August 1999, and he is considered to be one of the more experienced Task Site Leaders.

Past History of the Area

13) The accident site is Task Dossier W02 – 37, at minefield number 315. The minefields in this task dossier are all in the Rasa Koshare area, which is on the Kosovo – Albanian border. There was heavy fighting in this location during the war and there are numerous minefields along this border area. The minefields contain anti-personnel mines of both fragmentation and blast, and are predominantly laid in very high densities.

14) [Another demining group] conducted clearance operations in this minefield from July – November 2000. There have been a total of four mine accidents in this minefield since clearance commenced in July 2000. The [other demining group] had a mine accident in November of 2000 and this is the third mine accident that [this demining group] have had since taking over from [the other demining group] in this minefield.

15) Due to the difficult conditions around the stream and swampy areas of this minefield, these areas are to be fenced off and left uncleared.

Sequence, Documentation and Procedure of Tasking

16) The Task Dossier No W02-37 was issued to [the demining group] on 17 February 2001. As stated this was a minefield that [another demining group] had previously conducted clearance in, although had not completed.

Geography and Weather

17) The area in general is the Kosovo – Albanian Border approximately 25km NW of Gjakova. The border region around this area is mountainous and covered with forest and bush. The road access to this site is through the village of Junik. The route from here is a 12km very uneven gravel road which winds its' way up to the minefield. The minefield is heavily vegetated with low scrub and large trees. The weather at the time of the accident was fine with a temperature of approximately 25 degrees Celsius.

Site Layout and Marking

18) The site layout and marking at the site was in accordance with the [demining group's] SOPs for mine clearance. This minefield is on a hillside, and the area in which the accident occurred is approximately 50m west of the dirt road that leads to the upper minefields in the Rasha Koshare area. According to the Vojska Jugoslavije (VJ) minefield record, there are three mine rows containing PMR 2A fragmentation mines with PMA3 blast mines as keepers. The mine rows are running generally up the hill in a northerly direction.

Management Supervision and Discipline

19) [The demining group's] direct supervision on site is achieved by three National Task Site Leaders and a National Task Site Supervisor. There is a National Senior Demining Supervisor that oversees the supervision of all demining sites, and managing all [the demining group's] clearance operations is an International Operations Officer.

20) The Victim was one of the three National Task Site Leaders at this minefield.

Quality Assurance and Quality Control

21) [The demining group's] Quality Control is achieved through a system of on-site checks by the Section Leaders and Task Site Leaders to ensure adherence to the mine clearance SOPs. The MACC QA teams conduct external Quality Assurance on a regular basis, normally each site is visited a minimum of once per week.

Communications and Reporting

22) At the time of the accident there was effective communication by VHF hand-held Motorola radios between the Section Leaders and Task Site Supervisor on their internal net. There was further communication by hand-held VHF radios from the team site, and [the demining group's] base situated in Hereq also on the [demining group's] internal net. The communications between call sign 52, call sign 51 and call sign kilo foxtrot (KFOR) is on the MNB (W) VHF channel 4.

23) At the time of the accident the MACC QA Team Leader and MACC QA Officer were in the region and monitored all communications in regards to the accident on the MNB (W) channel. The MACC QA Team Leader was at the HLS when the CASEVAC helicopter took the casualty to the Italian KFOR Field Hospital in Peja.

Medical Details

24) The Victim has suffered moderate injuries to his left foot and was initially taken to the Italian KFOR Field Hospital in Peja. He was assessed, and as there was the possibility of not having to amputate the foot, he was then taken by helicopter to the civilian hospital in Pristina in order to receive more suitable treatment from specialist doctors. Annex D details the medical report from the MACC QA Medical Officer.

Personnel

25) A list of personnel and their duties is detailed at Annex D to the [demining group's] Preliminary Investigation Report. Written statements from the personnel involved in the accident form the Appendices to this Annex.

Dress and Personal Protective Equipment (PPE)

26) At the time of the accident [the Victim] was wearing personal protective equipment in accordance with [the demining group's] SOPs.

Tools and Equipment

27) The Victim was not using any tools at the time of the accident.

Details of Mine Involved

28) [A PMA fact-sheet including disarming procedures was pasted here.]

Account of Activities

29) The following is a description of the events from the time of the accident until the casualty was at the hospital:

Tuesday 28 August 2001

- 0925hrs – [The Victim] informs the deminer [name excised] and the section leader [name excised] to return to the base line.
- 0935hrs – An uncontrolled detonation is heard in the vicinity of where [the Victim] has walked.
- 0937hrs – 52 calls 51 (senior partner MNB (W)) and reports the accident detail and requests a helicopter to HLS Red - 26. 51 then calls kilo foxtrot and passes the relevant information for the helicopter CASEVAC. First Aid medical treatment is given to [the Victim] by team medics and he is transported by ambulance to HLS Red – 26.
- 0950hrs – Helicopter arrives at HLS Red - 26.
- 0954hrs – Casualty arrives at HLS Red – 26 and is loaded into the helicopter.
- 0957hrs – Casualty is taken by helicopter to Italian KFOR Field Hospital in Peja.
- 1007hrs – CASEVAC helicopter arrives at Italian KFOR hospital. Initial examination is conducted of the casualty and it is then decided to take him to Pristina civilian hospital for specialist treatment in order to save his foot.

- 1235hrs – Casualty arrives at Pristina civilian hospital by helicopter from Peja.

Insurance Details

30) The Victim is covered by the [demining group's] personal insurance it has for all staff. All insurance policies for [the demining group] are through Willis Insurance Group of London. A copy of the insurance detail is kept in the MACC QA Office.

Conclusions

31) Based on the investigation, interviews, the statements and visits to the site, the Board of Inquiry concludes the following:

- The Victim committed a serious breach of [Demining group's] SOPs by intentionally walking into an uncleared mined area and subsequently stepped on a PMA3 anti-personnel blast mine.
- He suffered moderate injuries to his left foot, and there is a possibility that the specialist doctors in Pristina Hospital will be able to save it.
- The three mine rows as well as the end of these rows were clearly identified. Therefore the uncleared area in which [the Victim] walked into was a known mined area that contained PMR2A fragmentation mines as well as PMA3 blast mines.
- [The Victim] has stated the reason he walked into the minefield was to identify the location of the PMR2A fragmentation mine.
- This minefield was divided into three separate areas, which was directly supervised by three National Task Site Leaders. The Victim was one of the three Task Site Leaders and he was responsible for one clearance lane only.
- The Victim through his actions displayed a complete disregard for [the demining group's] SOPs and incredibly irrational behaviour. This is certainly not what is expected of a person in his position and responsibility.
- The first aid provided to [the Victim] on site by the team medics was to a high standard.
- The CASEVAC procedure went extremely well, with the helicopter at the HLS within 13 minutes of KFOR being notified, and the casualty arriving at the next medical facility within 30 minutes of the accident.

Recommendations

32) The following are recommendations based on the Board of Inquiry conclusions:

- [The Demining group] very seriously consider the retention of the Victim within their organisation in order to provide an appropriate precedence for this blatant disregard of procedures and totally irresponsible act.
- The [Demining group] medics are to be commended for their continued high degree of medical support.
- The Italian KFOR be commended for their very swift response in getting the casualty to the hospital.

Signed: UNMIK Mine Action Co-ordination Centre
Quality Assurance Officer

Annexes: [not made available]
A. MACC convening order for accident investigation Board of Inquiry.
B. Map of the general area.

C. Schematic diagram of the general accident area.
D. Medical report from the MACC QA Officer.

Attachment:

[Demining group's] Preliminary Investigation Report [Not made available]

Comments by the MACC Chief Operations Officer

The findings of this Board of Inquiry are agreed and concurred with.

- Whilst [the Demining Group] have had a number of accidents in the past, these are and have been considered against the backdrop of the high density minefields that they are working in and their continuing technical difficulty. This latest accident goes beyond these considerations and may be attributed to an unnecessary act of "sheer bravado" on the part of [the Victim].
- The fact that the injuries sustained are relatively light and that [the Victim] may retain the use of his injured foot is to be considered extremely fortunate. [The Demining group] are urged to take immediate action, within their mine clearance teams, to ensure that this foolish, and unnecessary accident, is not repeated.

Signed: UNMIK Mine Action Co-ordination Centre, Chief of Operations

Comments by the MACC Programme Manager

The conclusions and recommendations of this Board of Inquiry, along with the comments by the MACC Chief Operations Officer are fully concurred with.

Signed: UNMIK Mine Action Co-ordination Centre, Programme Manager

Victim Report

Victim number: 477	**Name: Name removed**
Age:	**Gender:** Male
Status: supervisory	**Fit for work:** not known
Compensation: not made available	**Time to hospital:** 3 hours 10 minutes
Protection issued: Not recorded	**Protection used:** Worn, type not recorded

Summary of injuries:

severe Foot

COMMENT

No medical report was made available.

Analysis

This accident classification is listed as *"Other"* because the Victim was not engaged in a normal demining act. As a site supervisor, he was mine-hunting in the uncleared area. The primary cause is listed as a *"Field Control inadequacy"* because the Victim was a field controller and behaved in breach of accepted SOPs. The secondary cause is listed as a

“Management/control inadequacy” because senior management were responsible for selecting field supervisors and for ensuring they wee adequately trained. Either the victim was poorly selected or his training was inadequate.

The inadequate medical provision listed in the notes refers to the unacceptable time that it took for the victim to reach hospital.