

DDAS Accident Report

Accident details

Report date: 15/03/2004	Accident number: 263
Accident time: 10:00	Accident Date: 30/11/1999
Where it occurred: One km west of Ladrovac village, Suva Rica, MNB South	Country: Kosovo
Primary cause: Other (?)	Secondary cause: Other (?)
Class: Missed-mine accident (survey)	Date of main report: 02/12/1999
ID original source: KC/MD/JF	Name of source: KMACC
Organisation: Name removed	
Mine/device: PMA-2 AP blast	Ground condition: leaf litter route/path woodland
Date record created: 18/02/2004	Date last modified: 03/03/2004
No of victims: 1	No of documents: 3

Map details

Longitude: 85° 45' 5_" E	Latitude: 04° 96' 0_" N
Alt. coord. system: DN 85530 05017	Coordinates fixed by: GPS
Map east:	Map north:
Map scale:	Map series: KFOR Misc 003
Map edition: 6	Map sheet: 12&13
Map name: 1:50,000	

Accident Notes

inadequate medical provision (?)
mine/device found in "cleared" area (?)
inadequate area marking (?)
protective equipment not worn (?)
metal-detector not used (?)

Accident report

An accident report was made available by the National MACC. It is reproduced below, edited for anonymity.

Introduction

1. This is a comprehensive report by the Investigation Team on the mine accident that occurred on the 30 of November 1999. Based on the statements from the personnel involved in the accident included in [demining group's] Mine Accident Report and the photos from the accident site, this accident is considered as a non-preventable mine accident.
2. The Investigation Team consisted of the following MACC personnel:
 - Quality Assurance Officer.
 - Quality Assurance Officer EDD.
 - Quality Assurance Medical.

Order of events

3. On 30 November 1999, an ex-pat Team Leader, an interpreter and the Victim were tasked to confirm whether site 059 at grid 845 052 was still identifiable and marked. The Team Leader used the demining group's reconnaissance report dated 21 October 1999. The Team Leader had never been to this specific site before hence another Team Leader had conducted the marking/survey level 2 at site 059. The MACC had advised that the demining group should revisit the sites and check that the areas were as the teams left them and if necessary, carry out remedial work. The purpose was just confirmation, no further work was to be carried out.
4. As the Team Leader was looking for any signs of the benchmark or any other marking from the site, he used a track well used by the locals. This track had hazard warning tape leading down (red and white chevron tape), either side of it forming a corridor. There were no mine signs or any other signs of restricting access and the track was marked in a way that it should be safe to use. The Victim was tasked to park 15 metres down the track and the Team Leader and the Victim alighted from the vehicle. The Team Leader proceeded down the track on foot with the Victim 10 metres behind. A detonation took place and the Victim set off a mine. The Team Leader took immediate action to remove the Victim from the dangerous area and initiated casevac procedures.
5. With help of local people the casevac continued and the locals took him by road to the military hospital in Malisevo from where he was airlifted to Prizren at approximately 11:24.
6. At 11:50 the demining group's Operation Manager was notified of the accident. Another Team Leader and his medic had at that time left their site to assist at the accident place.
7. In the afternoon the demining group's Programme Manager and Team Leaders visited the accident site to carry out visual assessment. The following are the contents of the visual assessment:
 - The accident place was marked with red and white chevron plastic tape on both sides.
 - There were no mine signs visible at this time.
 - Local population frequently used the track.
 - The assessment team concluded this was a well used safe route.

[The picture below shows the accident site during the investigation when extra tapes were in place.]



8. The demining group's staff then erected mine signs at the entrance to the track. The entrance was also marked with mine tape. In the opinion of the Operations Manager, there was no requirement to forensically seal any mine/UXO clearance equipment as no mine/UXO clearance activity was being undertaken at the time of the accident.
9. After being informed by the demining group of the accident, the MACC Chief Operations Officer tasked the QA Office to conduct an investigation. Following an assessment of the information, the QA Officer requested another commercial demining group (Group B) to provide a mine/UXO clearance team for investigation purposes.
10. On the 1 December, the MACC investigation team with the Group B mine/UXO clearance team were led by the demining group's Program Manager to the accident site. On arrival at the accident site, there were Team Leaders and a medic at the site.
11. After a quick summary of the events and an accident site description, the Group B deminers started to clear a safe lane for the investigation team. The demining group's Operations Manager pointed out that there were three breaching lanes that had been cleared on the East site of the marked area. This was one of the indications that the marking was possibly done by a mine/UXO clearance organisation. The Group B deminers were requested to QA one of the lanes that had been cleared by the unknown organisation.
12. Using the demining group's interpreter on site, we questioned the local population with regards to who had been working in the area. Two ex-UCK soldiers indicated that they had removed PMR-2 mines in the field adjacent to where the accident occurred and informed us that the area was still suspected to have PMR-2 mines. One boy mentioned that an ex-UCK Operations Officer from the region might know who had been working on that site. We were introduced to the ex-UCK officer and asked him the following questions:
 - Do you know who marked the area where the accident took place yesterday?
Approximately three weeks ago Albanian deminer's led by what he thought to be a German expatriate, driving green vehicles had worked in the area. They were the ones who marked the area.
 - What do you know about that area?
I personally removed 93 mines (PMA-2, PMR-2A and PROM-1) in that area. *He identified them on pictures.*
 - Did you talk with the deminers that marked the area?
Yes and I told them that I found 93 mines in that area.
 - What did you do with the mines?
I gave them to KFOR.
13. According to the ex-UCK Operations Officer the organisation that did the clearance at the accident site only cleared the high ground and did not clear the bottom because it was full of mud and water.

14. During the Group B clearance operation a local kid walked by the deminers and attempted to head up the trail where the accident happened. He was stopped by the deminers and told that there are mines in the area.



15. A substantial amount of metal was found in the area marked as safe. [One of the scrap-areas is shown in the picture above.]
16. On arrival to the MACC HQ, verification was done in the weekly report to identify which organisation had been working in that area. It was found that Group C had teams working exactly in this area during the week of 1- 6 November 1999.
17. On the morning of the 2 November the Programme Manager from Group C came to MACC HQ to clarify what had happened and to explain what his group intended to do with this dangerous area. In the afternoon, he came back with the expatriate in charge of the team that did the marking at the accident site and they gave a brief explanation of what had occurred three weeks before.

General Information

18. The following information was obtained from the Operations Manager and witness statements of personnel at the accident site:
- Name of the injured person
 - Company
 - Location: One km west of Ladrovac village.
 - GR: DN 85530 05017
 - Time of the accident: Approximately 10:00.
 - Date: 30 November 1999
 - Time of the CASEVAC requested: Approximately 10:10 he was evacuated by road to the military hospital in Malisevo from where he was airlifted to Prizren German military field hospital at approximately 11:24.
 - Transportation used: land rover vehicle.
 - Type of injuries: Right foot and minor injuries on right hand from blast.
 - Number and names of the witness: One witness, ex-pat team leader.
 - Suspected type of device or mine: PMA-2.
 - Action at time of accident: Verification of BAC marking fence.

Conclusions

19. The following are conclusions based on the investigation:
- The Team Leader and the Victim were more than one kilometre from site 059 at the moment of the accident.
 - Group C marked the area where the accident occurred as a cleared area three weeks ago.

- The casevac procedure went well.
- The demining group marked the track and the area with mine signs immediately after the accident.
- During the clearance operations conducted by Group B for investigation purposes, evidence indicating that the area marked by Group C had not been cleared in accordance with the MACC guidelines and standards.
- Ex-UCK local had found mines in that area and reported to them when Group C was marking the area.
- The locals on a regular basis use the track, especially the kids that go to the school.
- The Victim had his right foot amputated and minor blast damage to his right hand.
- This accident was non-preventable.

Recommendations

20. The following are recommendations based on the investigation findings:

- Better hand over between the Team Leader or with the Operation Manager should have been done before sending the Team Leader to check the marking of the site.
- Further investigation will have to be conducted to clarified with Group C why they decided to mark without taking in consideration the information from the local ex-UCK that lifted mines in the area. The following questions will have to be answered during the investigation:
- How was the clearance operation conducted?

After partially marking the area, why did he do not submit a Dangerous Area Report or Survey Report?

What kind of information did the site supervisor pass to Group C management after he marked the area?

What kind of action is Group C going to take?

- Group C will have to send back a clearance team to clear the trail used by the local population and mark the rest of the Dangerous Area for the winter period.
- As soon as possible, mines awareness presentations should be given to the local population, especially kids.
- It is obvious that the supervisor of Group C made the assumption that it was safe to mark the area cleared. The end result of the assumption should be explained and passed on to all mine/UXO clearance organisation in Kosovo.

Signed: UNMIK MACC, QA Officer

Signed: UNMIK MACC, Programme Manager

Victim Report

Victim number: 337

Age: 22

Status: surveyor

Name: Name removed

Gender: Male

Fit for work: not known

Compensation: not made available
Protection issued: None

Time to hospital: 1 hour 14 minutes
Protection used: none

Summary of injuries:

INJURIES

severe Hand

AMPUTATION/LOSS

Leg Below knee

COMMENT

See medical report.

Medical report

An internal injury report recorded that the victim suffered lower leg blast injuries.

A letter from the German KFOR field hospital gave the victim's date of birth and stated that the victim had "a below-knee amputation of his right leg".

A letter from the demining company reported that the victim has also suffered "blast damage to his right hand, in particular his 4th and 5th digits".

An IMSMA "Individual casualty data sheet" (usually used for civilians) listed the "loss" of "hand/finger".

Analysis

The primary cause of this accident is listed as "*Other*" because the peculiar circumstances prevent it being classified under the usual headings. The accident investigators identified failings at management level, but these were not failings of the group that suffered in the accident.

The victims were engaged in a confirmation survey and presumed (as civilians would have) that the marked corridor was safe. As full surveyors, they should have been better equipped. Tasked with visually confirming that marking was in place, their lack of protective and medical equipment was apparently not a breach of operating procedures. Their apparent lack of communications equipment may have been such a breach. This kind of missed-mine accident usually occurs to civilians and so is rarely included in this database.

Potential inadequacies in communications and marking were identified during the investigation and recommendations were made.

The report demonstrated an unusually thorough and critical approach to accident investigation. The Mine Action Co-ordination Centre which carried out the investigation was not engaged in demining, and this may (in part) explain the unusually objective nature of the investigation. However, there is some room to wonder why surveyors, who are not supposed to believe the old markings they encounter, were not required to be equipped with the means to check areas and also equipped for a possible medical emergency.

Related papers

The Accident report included an illustrated site map and many photographs of the site.

In a summary on mine/UXO accidents in Kosovo, (undated but covering September 1999 - August 2000), this accident was "considered non-preventable". The summary included "Lessons learned" and listed:

- 1) "Better hand over between team's leader or with the Operation Manager should be done."
- 2) "After marking the area, always submit a Dangerous Area Report or Survey Report."
- 3) "Never make the assumption that it is safe to walk in an area mark[ed] by an unknown organisation."

Internal Demining group Accident report

[The following has been edited for anonymity.]

1 Background

At approximately 1000hrs on Tuesday 30 November 99 a national member of [the Demining group] ([the Victim]) sustained serious injuries after being involved in a mine accident. This happened in the Ladrovac area of Kosovo.

He had been performing his duties as a driver/interpreter with an international team leader. The team leader had been tasked to confirm whether or not the permanent marking was still in place at a cluster strike site previously surveyed by [the Demining group] (known as [Demining group] site 059, grid Reference: DN 845 052).

The team leader decided to investigate what he thought was the correct approach track, trying to locate the benchmark of the site. The track which meandered through a copse of trees was apparently in constant use by the local population, even though temporary mine tape had been placed by an agency/person unknown, to either side of the track with some 5m between the marking. It appeared to delineate suspect areas to either side of the track. The track led to what appeared to be a previous VJ defensive position but this could only be seen from a distance. The original survey report made reference to a Serbian defensive position in the vicinity.

The team leader had walked approx 30m along the track, when there was an explosion approx 10m behind him. [The Victim], who had been following, had stood on a concealed anti-personnel blast mine.

[The Team Leader] immediately recovered him from the area and a medical evacuation from the scene ensued. The victim was evacuated to the local town hospital facility in Malishevo, where he was stabilised by a [a Doctor] prior to being helicopter evacuated to the German military field hospital in Prizren. A German military medical team arrived with the helicopter and departed at 1142hrs.

2. Personal details of injured

[omitted]

3. Suspected injuries sustained

After questioning the medical practitioners that stabilised him, it was ascertained that he had received a traumatic amputation of the whole right foot from the ankle down. Also blast damage to his right hand, in particular his 4th and 5th digits.

The full extent of his injuries will not be known until they are released by the hospital.

4. Accident details

Time of explosion: 1000hrs Grid reference: DN 855 049

Approximate location: 1km from the village of Ladrovac, Suva Raka, Kosovo.

5. Next of Kin

The next of kin (Mother and Father) were immediately located and informed. They were taken to the hospital facility in Prizren to be with their son, soon after the accident. His brothers were also briefed on the accident.

6. Details of [the Demining group] site 059

Situation: NATO cluster strike area
Grid Reference: DN 845 052 Name: Ladrovac
Date surveyed: 15 Nov 99 Action: Area reduced and marked
Priority: Medium Team leader: [Name excised]
Remarks: Tasked by MACC to confirm permanent marking still in position

7. Investigation/Follow up

The MACC were informed during the late afternoon of the 30th November. It is planned that a Mine Action Team deploy with MACC operational staff to carry out an investigation on Wed 1 Dec 99.

Further details and statement will be forwarded when forthcoming.

Signed: Programme Manager

Statements

What follows are selected extracts from statements made by the demining group, edited for anonymity.

Ex-pat Team Leader

The Team Leader gave the precise position of the accident as: DN 855 049 and the time as 10:00. He reported that he, the interpreter and the Victim were tasked to confirm whether site 059 at grid 845 052 was still identifiable and marked. He used the reconnaissance report dated 21 October 1999. He had not been to the site before - another Team Leader had conducted the marking/survey level 2 at site 059.

As the Team Leader was looking for any signs of the benchmark or any other marking from the site, he used a track well used by the locals. This track had hazard warning tape leading down (red and white chevron tape), either side of it forming a corridor. There were no mine signs or any other signs of restricting access and the track was marked in a way that indicated it should be safe to use.

The Victim was tasked to park 15 metres down the track and the Team Leader and the Victim alighted from the vehicle. The Team Leader proceeded down the track on foot with the Victim 10 metres behind. A detonation took place and the Victim set off a mine. The Team Leader took immediate action to remove the Victim from the dangerous area and initiated casevac procedures. With help from local people the casevac continued and the locals took him by road to the military hospital in Malisevo from where he was airlifted to Prizren.

Programme manager

The Programme manager reported that he was notified of the accident at 11:50. By that time another Team Leader and his medic had left their site to assist at the accident place. In the afternoon the Country manager, Team Leader and Programme Manager visited the site to carry out a visual assessment.

They found that:

- The accident site was marked with red and white chevron plastic tape on both sides.
- There were no mine signs visible at this time.
- The track was frequently used by the local population.
- The assessment team concluded this was a well-used safe route.

They then erected mine signs at the entrance to the track. The entrance had also been marked with mine tape.

It was their opinion that there was no requirement to seal equipment as they were not carrying out clearance nor survey. Their reasons for using the marked path to visit the demining site had been:

- To confirm that the site was still identifiable and marked.
- MACC had advised them to revisit the site and check that the areas were as we left them and if necessary carry out remedial work. The purpose was just confirmation not further work to be carried out.

Operations manager

At 11.50 on the morning of the 30th November 1999, one of our drivers notified me that [the Victim] had had a mine accident. At this point I was not quite sure if this was an accurate story. I called an interpreter to get to the bottom of the this and on further questioning found out that there was an accident and that [Name excised 2] and medics had left their site 071 to assist [Name excised] at site 059 (Grid 845 052)

At 1205 I dispatched two lorries to site 071 to pick up [Name excised 2] team and return to Dakovica.

On arrival back at Dakovica I immediately got on the radio in the returned Landrover to find out what had happened. Up to that point I did not have communications nor transport.

After all personnel had returned to Dakovica, the Programme Manager, Team Leader and myself visited the accident site to carry out a visual assessment.

I found that the track where the accident took place was heavily wooded on both sides and marked with red & white chevron plastic tape both sides, secured around the trees. There were no MINE signs visible at this time.

This track was frequently used by the local population including school children going to and from school. From this I would conclude this was a well used safe route.

[The Demining group] had erected mine signs at the entrance of the track after the accident, but some other person between the accident happening and [Name excised] returning to the area had erected the same type of tape across the entrance.

There was no requirement to seal equipment as they were not carrying out clearance nor survey, however due to it being a mine accident on the track, I was not in a position to enter the area without a MAT carrying out an instrument clearance of the track between the red & white taped area.

Reason for visit to site 059

The reason for the task was to confirm that the site was still identifiable and marked.

At no time was there any further work to be carried out at this stage except confirmation. This had been advised by the MACC that we should revisit our sites and check that the areas were as we left them and if necessary carry out remedial work.

There was no requirement to send whole teams at this stage around our previously surveyed or marked sites, only those that required re-fencing or marking.

This is all the information I have at this time.

Signed: Operations Manager