

DDAS Accident Report

Accident details

Report date: 07/03/2011	Accident number: 703
Accident time: 12:30	Accident Date: 29/09/2010
Where it occurred: Task: Ramtha 1 (346), Ramtha village, Irbid Province	Country: Jordan
Primary cause: Victim inattention (?)	Secondary cause: Inadequate equipment (?)
Class: Vegetation removal accident	Date of main report: Not recorded
ID original source: None	Name of source: Demining group
Organisation: [Name removed]	
Mine/device: M14 AP blast	Ground condition: dry/dusty grass/grazing area hidden root mat
Date record created:	Date last modified: 07/03/2011
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system:	Coordinates fixed by:
Map east: 36. 04100 E	Map north: 32. 59186 N
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

no independent investigation available (?)
inappropriate vegetation cutting tool (?)

Accident report

A report of this accident was made available by the demining group involved in late 2010. Its conversion into a DDAS file has led to some of the original formatting being lost. Text in square brackets [] is editorial.

The internal investigation report is reproduced below, edited for anonymity.

Incident investigation for [Demining group] – MINE ACTION TEAM - JORDAN

Task Name: Ramtha 1 (346), north border project, NW SECTOR

GRID REF: 32. 59186 N, 36. 04100 E, Village Name: Ramtha, 29 Sept 2010

MINEFIELD NO – 346, minefield TASK ID - Ramtha /1, SECTOR - NW

Investigation conducted by – [Demining group],

Operations Coordinator [Name removed], Internal QA Officer [Name removed]

Deminer: [The Victim]. DATE OF BIRTH: 10 JAN 1967, NIC NO: [removed]

TEAM LEADER: [Name removed], Team: charlie

TIME OF INCIDENT: 12:30 hrs, DATE OF INCIDENT: 29 Sept 2010

NATURE OF INJURY: cut wounds at the right finger, multi scratches on both arms

TYPE OF MINE: M14 AP Mine

IMSMA DETAILED REPORT FOR MINE INCIDENT, Wednesday, 29 Sept 2010

Part 1 – Description of the incident

1. Organisation name: [Demining group], JORDAN, Team No: Charlie
2. Incident date, 29 Sept 2010, Time: 12:30
3. Location of incident: NW SECTOR, Province: Irbid, Village: Ramtha, Project or task No: Ramtha 1 (346).
4. Name of site manager or team leader: [Name removed]
5. Type of incident: Uncontrolled detonation of a mine
6. Device was detonated by: Deminer
7. Device detonated while: Removing grass with bare hands
8. Device was found in an area classified as a known Hazardous Area
9. Narrative (Describe how the incident happened. Attach additional pages and photographs or diagrams to assist in clarifying the circumstances surrounding the incident):



Part 2 – Injuries

10. Did the incident result in any injuries? Yes

11. List people injured and nature of injury

[The Victim], Deminer, Cut wounds at the right finger, Multi scratches on both arms.

Part 3 – Equipment damages

12. Did the incident result in any damage to equipment or property? Yes

13. List any mine action equipment or property damage:

Mask Visor, Damaged (Reusable need Maintenance).



[The mask-visor after the accident.]

[A photograph of a frontal apron with light damage to its cover is held on file.]

14. List damage to equipment or property owned by a member of the public or the government. Include contact details of the owner or responsible person. None

Part 4 – Explosive hazard

15. Provide details of mines/UXO/ other devices that were involved in the incident.

Device Type:	Method:	Determined by:
AP (Blast) Mine	Buried	Suspected only

16. State specific device (if known): Anti-Personal Mine M14

17. Comments (include measurements of any crater resulting from the explosion): Crater
Depth: approx. 20 cm / Width: approx. 50 cm

Part 5 - Site conditions

18. Describe the conditions at the site at time of the incident

Ground/Terrain: Soft, flat

Weather: Clear, hot

Vegetation: medium, grass

Part 6 – Team and task details

20. Qualifications of Member(s) involved in the incident:

[The Victim], Deminer

21. How long had this team been?

a. At this site? 1 Month & 1 Week

b. working on this task? 1 Month & 1 Week

c. working on the day? 5 Hours & 30 minutes

22. Detector type: F3, Serial Number: N16236(43), Detector status: Functional. Passed to
[Name removed] for technical inspection at Ramtha 1 Site on 29 Sept 2010 (date)

Tripwire feeler used? No

23. Hand tool: No Tools

24. PPE: Vest, Mask Visor, [Blast boots]

25. Comments:

The deminer was working in the centre lane in the main minefield 346 and he recovered 6 M14 APs. At 12:15 hrs he started to approach AP M14 and he located one cluster then he moved to the next one, and while he was conducting visual check stage, he did not follow the proper procedure to remove the grass ,instead of using grass cutter to remove the grass he used his bared hand to pull the grass which accidentally caused the blast.



[The Victim's rakes at the accident site.]

Part 7 - Medical & First Aid

Medical treatment required? Yes

26. Medical Support at Incident Site: Medic, 1st Aid Kit, Stretcher, Ambulance, Safety Vehicle, Radio to call forward medic.

27. Was a Mine Incident Drill carried out? Yes

28. Time and distance data

a. Time from incident to SECTION MEDICAL POINT: (1) minutes

b. Time spent at site administering treatment: (3) minute's

c. Time from evacuation FROM to arrival King Abdullah Hospital: (15) minutes

Part 8 – Reporting procedures

Reported by: [Name removed], [Demining group] Jaber Office to: [Demining group] Offices & NCDR

Investigation conducted by: [Name removed], [Name removed]

Report compiled/translated by: [Name removed], [Name removed]

Verified by: [Name removed] (OPSCO), [Name removed] (OPM)

Findings

The deminer did not use light rake to make a clear vision inside clearance box.

The deminer did not use grass cutter to remove the grass in the clearance box, instead of, he tear out grass strongly with his bare hand which initiated the mine accordingly .

According to:

The shape of the crater in the incident location.

Type of injuries on deminer arms (wounds and scratches).

Feedback from team leader about the average depth of mines in the task (0-5)cm.

Type of grass (soft, density, length).

Soil type (loose).

We assume:

The blasted mine case was NOT as usual (pointing to the top), but pointing to the left side of the deminer direction, and the grass roots engulfed the buried mine, so, when the deminer pulled the grass around the buried mine by his right hand the mine was pulled with the grass and a type of pressure was made on the pressure plate which activated the mine.

[Name removed] Ops Coordinator, [Demining group]-MAP-JORDAN.

Attachments:

Statements by Injured Members

Statements by Witnesses

Photographs of Injuries
Photographs of Incident Site
Copy of Incident Report
Copy of Medical Report

Victim Report

Victim number: 889	Name: [Name removed]
Age: 43	Gender: Male
Status: deminer	Fit for work: presumed
Compensation: Not made available	Time to hospital: 19 minutes
Protection issued: Frontal apron Mask Visor blast boots	Protection used: Frontal apron, Mask visor, blast boots

Summary of injuries:

INJURIES: minor Arms, minor Chest, severe Hand

COMMENT: See Medical report.

Medical report

A Medical report in Arabic is held on file. The photographs below show the injuries to the Victim's hand, forearms and upper chest.





Statements

Statement 1: Deminer [the Victim]

I remember my entering the field in the fifth part and started approaching to the mines without removing them as it's the last part of work, I finished a cluster and started another one in front of it and started working on the 1st box then the 2nd then the 3rd and I was removing the grass and making visual check for the area without using the rakes, at the west area of the box I heard a signal but it was an old piece of metal I removed it as it was on the surface then I worked on the east area of the clearance box and I was removing the grass by hands because it was soft and the ground loosen so it's easy to remove it, while that I faced a bush that wasn't easy to remove so I pulled it hard when the accident happened, I felt to the back then stood up, checked myself then sat on the ground and the deminer [Name removed] and the team leader came to me and evacuated me while I was walking to the out of the minefield then I was transferred to the hospital by the ambulance.

Q: Did the team leader give you the morning safety brief?

A: Yes he did.

Q: Were you working on the right way following the SOP?

A: Yes I was.

Q: Did you use the grass cutter in clearing the grass?

A: No as it's not efficient on that area because the grass is soft and heading parallel to ground level.

Q: Why didn't you use the light rake in removing the grass?

A: When we use the light rake it becomes missy and the grass would still be there and the grass would be stuck between the rake's teeth of the rake so it's hard to use it.

Q: Did the team leader check on your work before the accident?

A: Yes he did on the 4th part of work.

Q: Did the team leader see you removing the grass by your hands?

A: Yes he did.

Q: Does the grass cutter you have functional?

A: Yes it does.

Statement 2: Team Leader

I remember I was giving the cleared mines to the burning team on lane 249, after that I went to lane 50 to check on deminers, at 12:30 pm I heard a sound of explosion and looked towards the sound to find it at deminer [the Victim] site, I saw a huge dust and smoke from his site then he stood up and I headed to him while that I informed about the accident, when I reached him there was the deminer [Name removed] as he reached the area where the centre lane and lane 250 meet (50 meters far from the accident place), the injured was holding the detector in his left hand, we evacuated him walking then went to the hospital by the ambulance.

Q: Did you give the team the morning safety brief?

A: Yes I did as always.

Q: Did you check on the injured before the accident happen?

A: Yes I did half an hour before the accident.

Q: Was the injured following the right procedures when you checked on his work?

A: Yes he was following the SOP.

Q: Was the injured wearing all the safety gears while working?

A: yes he was

Q: What is the type of laid APs in this Task?

A: AP mines M14.

Q: What is the average depth of the mines there?

A: almost all of them are on surface and exposed.

Q: What is the method of clearing grass there?

A: They use grass cutter if it's possible but sometimes they find it difficult using it when the grass is soft or wet especially in the morning time so they use hands in removing the grass or the light rake.

Q: What was the method the injured used when the accident happened?

A: He was removing grass by hands because it was difficult using the scissors.

Q: Why didn't he use the light rake for that?

A: I don't know.

Q: Did you know that he was using his hands in removing grass?

A: No, I didn't see him as he always uses the light rake for that.

Q: What was the distance between you and the injured when the accident happened?

A: It was around 150 meters.

Q: Do all the grass cutters used by the team work efficiently?

A: Yes they do.

Q: Were all the deminers in the field under your control and sight?

A: Yes they were.

Statement 3: Witness Deminer

I remember that I entered the field in the last session of work and while am clearing the centre lane I heard a sound of explosion I looked towards the sound it was at deminer [the Victim]'s site and I saw a huge dust around him he stood up then sat down then stood up and moved towards me and I moved towards him with the blanket, when I arrived to him he was 15 meters far from the accident area and he was holding the detector in his left hand, I took it and asked him to lay on the blanket he refused and said: I want to get out walking when the team leader arrived and we evacuated him walking to the ambulance where they made the 1st aid to him then was transferred to the hospital.

Q: What was the distance between you and the injured when the accident happened?

A: Around 70 meters.

Q: What is the method you follow in clearing the grass?

A: We use the grass cutter to cut the grass but sometimes we remove them by hands because the grass cutter become not efficient.

Q: What are the cases when the grass cutter become not efficient?

A: If the grass was wet or soft.

Q: Do you use the light rake to clear the grass?

A: Yes, we do unless the grass was wet especially in the morning.

Analysis

The primary cause of this accident is listed as *Victim Inattention* because it seems that deminer was unable to cut the grass and was pulling it without conducting a visual check for surface mines. The investigator presumed that an overturned mine was concealed on the surface among the grasses, and made no recommendation that the Victim be disciplined, which may be an indication that the pulling of grass had been accepted before the accident. The secondary cause is listed as *Inadequate equipment* because the grass cutting shears seemed incapable of cutting the fine desert grasses (which require a very sharp blade).

The demining group's concern to investigate accidents, correct errors and share accident reports indicates a commendable professionalism.