

DDAS Accident Report

Accident details

Report date: 07/07/2011	Accident number: 714
Accident time: 07:50	Accident Date: 25/10/2010
Where it occurred: MF457A, NW Sector, Village: Al Ramtha, Province: Irbid	Country: Jordan
Primary cause: Field control inadequacy (?)	Secondary cause: Unavoidable (?)
Class: Excavation accident	Date of main report: None
ID original source: None	Name of source: Demining group
Organisation: [Name removed]	
Mine/device: M14 AP blast	Ground condition: grass/grazing area
Date record created:	Date last modified: 07/07/2011
No of victims: 2	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system:	Coordinates fixed by: GPS
Map east: 36.04657 E	Map north: 32.58680 N
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

use of rake (?)
no independent investigation available (?)
visor not worn or worn raised (?)
standing to excavate (?)
vegetation clearance problem (?)

Accident report

The demining group involved made available its report of this accident in May 2011. The conversion into a DDAS file has led to some of the original formatting being lost. Text in square brackets [] is editorial.

The internal report is reproduced below, edited for anonymity.

Accident investigation FOR [Demining group] – Mine Action Team – Jordan

Task Name: Al Ramtha 1 (457 a), North border project, NW Sector, Al Ramtha, Irbid

GRID REF: 32.58680 N, 36.04657 E

Investigation conducted by – [Demining group],

Deminer: [The Victim]

DATE OF BIRTH: 2 March, 1970

NIC NO (ID NUMBER): [Removed]

TIME OF INCIDENT: 07:50 hrs

DATE OF INCIDENT: 25 Oct 2010

NATURE OF INJURY: SCRATCHES

TYPE OF MINE: M14 (AP Mine)

IMSMA DETAILED REPORT FOR MINE INCIDENT Monday, 25 Oct 2010,

Part 1 – Description of the incident

1. Organisation name [Demining group], Jordan, Team No: Lima
2. Incident date :25 Oct 2010 Time: 07:50 hrs
3. Location of incident: MF457A, NW Sector, Village: Al Ramtha, Province: Irbid
4. Name of site manager or team leader: [Name removed]
5. Type of incident: Uncontrolled detonation of a mine/UXO
6. Device was detonated by: Deminer. Device detonated while: Raking with light rake
8. Device was found in an area classified as: 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):
While the Deminer was investigating an expected AP mine (12 O'clock Mine) using the light rake, a pressure applied on the mine and activated it which caused the blast 2.2m away from the deminer (The length of Rake handle).

Part 2 – Injuries

10. Did the incident result in any injuries? Yes
11. List people injured and nature of injury: Hussein Al Shar'a, Deminer, Scratches right arm and face

Part 3 – Equipment damage

12. Did the incident result in any damage to equipment or property? Yes
13. List any mine action equipment or property damage: Light Rake, Damaged (Not Reusable)



Damage to light rake

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: AP (Blast) Mine. Method: Surface. Determined by: Raking

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

17. Comments (include measurements of any crater resulting from the explosion): Crater
Depth: approx.15 cm / Width: approx.35 cm

Part 5 - Site conditions

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

Ground/Terrain: Soft, Flat, open

Weather: Clear, mild

Vegetation: Heavy grass



Accident site

Part 6 – Team and task details

20. Qualifications of Member(s) involved in the incident: Deminer (Acting Team Leader)

21. How long had this team been?

a. At this site? 27 Days

b. working on this task? 27 Days

c. working on the day? 50 minutes

22. Detector type: F3, Serial Number: N16218 (53) Detector status: Functional, Passed to [Name removed] for technical inspection at Ramtha 1 Site on 25 of Oct 2010 (date)

Tripwire feeler used? No

23. Hand tool: Light Rake

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

25. Comments: [None]

Part 7 - Medical & First Aid

Medical treatment required: Yes

26. Medical Support at Incident Site: Medic, 1st Aid Kit, Stretcher, Ambulance, 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: (21) minute's

c. Time from evacuation FROM to arrival King Abdullah Hospital: Not Applicable

Part 8 – Reporting procedures

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

Investigation conducted by: [Name removed]
Report compiled/translated by: [Name removed], [Name removed]
Verified by: [Name removed], [Name removed]
Printed Name: [Name removed]
Organisation: [Demining group]

Attachments:

Statements by Injured Members: yes
Statements by Witnesses: Yes
Photographs of Injuries: yes
Injury data sheet(s): yes
Photographs of Incident Site: yes
Copy of Incident Report: yes
Copy of Medical Report: yes

Victim Report

Victim number: 904	Name: [Name removed]
Age: 41	Gender: Male
Status: deminer	Fit for work: yes
Compensation: Not made available	Time to hospital: Not made available
Protection issued: Frontal apron Mask Visor blast boots	Protection used: Frontal apron; blast boots; raised visor (?)

Summary of injuries:

INJURIES: minor Arm; minor Face

COMMENT: A Medical report in Arabic is held on file. A photograph showed the Victim with a sticking plaster on his upper right arm. A portrait showed no obvious facial scratches.

Statements

Deminer: [The Victim]

I remember on the 25th of Oct. 2010 on the first part of work I cleared 3 AP mines from the first cluster as all the AT mines are cleared from the belt, then I headed to the next cluster following the team leader orders and started removing a 12 o'clock mine, when I was near its suggested location after making visual check and cleared the grass around it using the light rake I detected the area and there was a signal, I knew it was for a mine as I checked it three times and did all the right procedures to follow it but the incident happened suddenly I moved backwards, put the light rake on the ground and took off the visor, checked myself but there

were no injuries thanks god, then the team leader came with deminer {name removed] and checked me and evacuated me walking to the ambulance which was waiting at the end of the lane ,they found a small injury on my right arm they first aided me and took me to the hospital.

Q: Did you and all team take the morning safety brief before you started working?

A: Yes we took it detailed.

Q: Were you using the light rake according to SOPs?

A: Yes I did and most of the mines I cleared were using it.

Q: What kind of mines are there in the field?

A: M19 and M14.

Q: What is the situation of cleared mines on that field?

A: Most of them were burned and some of them dealt with as stuck.

Q: Did you see the exploded mine situation?

A: No I didn't as it was underground.

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

A: about 2-3 CM and most of them exposed.

Q: Were you wearing all the safety tasks?

A: Yes I was.

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

A: Yes he did at the beginning of the first part.

Q: How far was the team leader from your site when the accident happened?

A: about 50-60 meters.

Team Leader: [Name removed]

I remember on that day I gave the team the morning safety brief and distributed work on them and they started working at 7:00 am, while I was making my morning round I was checking on de-miner [Name removed]'s work , and at 07:50 am, we heard a sound of explosion to find it at d-miner [The Victim]s site, we went to him, checked him if he has any injuries as there were nothing and I asked him if he needed a blanket but he said no need and he could go out of the field walking, so we got him out of there and the ambulance was waiting at the entrance of the lane then they took him to hospital after the 1st aid.

Q: Did you check on the injured deminer's work on the first part of work?

A: Yes before the accident in about 10 min.

Q: Does the injured have any violations at work?

A: No he doesn't have any and he is considered to be the acting team leader in case I'm not available.

Q: Was he wearing all the safety tasks while working?

A: Yes he was.

Q: Have you had any explosion happened while using the light rake before?

A: No we didn't.

Q: How do you analyze the explosion of a mine while using the light rake?

A: I think that the mine was unstable and in a very critical condition.

Q: Were there any injuries in the injured face or body?

A: No only a small injury in his right arm.

Witness deminer: [Name removed]

We entered the field after we took our duties from the team leader and I was near the injured deminer, when the team leader was making QC on my work we heard a sound of explosion from his site so we went to him, he was at the centre lane, we checked him he was fine with no injuries then we evacuated him walking to the ambulance then they took him to the hospital.

Q: How long was the distance between you and the injured deminer?

A: Around 50-60 meters.

Q: Could you see the injured deminer from your site?

A: Yes I could.

Q: Was the injured deminer wearing all the safety tasks while working?

A: Yes he was.

Q: Was there any kind of injuries on his face or body?

A: No only a small injury in his right arm.

Analysis

The primary cause of this accident is listed as a "Field control inadequacy" because the investigation concluded that the deminer was working improperly (without cutting the grass) and used the rake corner to tear grass as well as rake the ground. The investigators also concluded that the Victim was not wearing his Mask visor properly. Because it is impossible to see through the Mask visor if it is raised, this implies that it was not worn at all, but the absence of obvious face or eye injury conflicts with this (and the witnesses claimed that the Mask visor was being worn at the time). The secondary cause is listed as "Unavoidable" because it is possible that the Victim was working properly (as directed) when the accident occurred.

The detonation with a light rake is unusual and tends to indicate that the rake was used improperly.

The use of the rakes to excavate metal-detector readings puts the deminer at a distance from the seat of any initiation. The accident record shows that this significantly reduces the risk of severe injury.