4-7-2010

DDASaccident625

HD-AID
Humanitarian DeminingAccident and Incident Database

DDAS Accident Report

Accident details

Report date:	05/03/2011	**Accident number:**	625
Accident time:	09:11	**Accident Date:**	07/04/2010
Where it occurred:	MF 477, Jabir1, Jabir Village, Mafraq Province	**Country:**	Jordan
Primary cause:	Field control inadequacy (?)	**Secondary cause:**	Unavoidable (?)
Class:	Excavation 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:**	grass/grazing area hard rocks/stones
Date record created:		**Date last modified:**	05/03/2011
No of victims:	1	**No of documents:**	2

Map details

Longitude:		**Latitude:**	
Alt. coord. system:		**Coordinates fixed by:**	
Map east:	36.24206 E	**Map north:**	32.49548 N
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

no independent investigation available (?)

standing to excavate (?)

use of rake (?)

long handtool may have reduced injury (?)

Accident report

A PDF 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: JABIR 1 (477), NORTH BORDER PROJECT. EAST SECTOR

GRID REF: 32.49548 N: 36.24206 E: VILLAGE NAME: JABIR

MINEFIELD NO: - 477; MINEFIELD TASK ID:- JABIR 1

INVESTIGATION CONDUCTED BY – [Name removed]

DEMINER: [the Victim]. DATE OF BIRTH: 16/3/1964. NIC NO (ID NUMBER): [removed]

TEAM LEADER: [Name removed]: TEAM : JULIET

TIME OF INCIDENT : 09:11 HRS: DATE OF INCIDENT: 7 APRIL 2010

NATURE OF INJURY: NO INJURY. TYPE OF MINE: M14 AP mine

IMSMA DETAILED REPORT FOR MINE INCIDENT Wednesday, 7 Apr 2010,

Part 1 - Description of the incident

1. Organisation name: [Demining group], JORDAN Team No: Juliet

2. Incident date: 7 March 2010: Time: 09:11 hrs

3. Location of incident: East SECTOR, Province: Mafraq, Village: Jabir; Project or task No: Jabir1

4. Name of site manager or team leader: [Name removed]

5. Type of incident: M14 AP mine uncontrolled detonation.

6. Device was detonated by: Team leader

7a. Device detonated while: Raking with Heavy Rake.

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):

During the recovery of an AP mine the deminer hit the mine with heavy rake which initiate the mine and caused the incident.

Part 2 — Injuries

10. Did the incident result in any injuries? No

11. List people injured and nature of injury: [None]

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: Heavy Rake (NA), Damaged (not reusable)

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: Buried

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. 18 cm / Width: approx. 30 cm

Part 5 - Site conditions

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

Ground/Terrain: hard, flat

Weather: Clear, mild

Vegetation: Grass, Medium

Part 6 — Team and task details

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

Name	Position in Location	Occupation
[Name removed]	Deminer	Deminer

21. How long had this team been?

a. At this site? 3 Months

b. working on this task? 3 Months

c. working on the day? 1 Hours & 26 minutes

22. Detector type: F3; Serial Number: 16223; Detector status: Functional

Passed to [Name removed] for technical inspection at Jabir 2 Site (location) on 7 of March 2010 (date) Tripwire feeler used? No

23. Hand tool: HEAVY RAKE

24. PPE: Vest, Visor

25. Comments: [None]

Part 7 - Medical & First Aid

Medical treatment required: no

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 (2) minutes

b. Time spent at site administering treatment: [None]

c. Time from evacuation FROM to arrival at hospital: Not Applicable

Part 8 – Reporting procedures

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

Investigation conducted by: [Name removed]

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

Verified by: [Name removed]

Findings of the investigating officer

1. The deminer didn't use the light rake.
2. He didn't make the visual check because there were stones in the clearance box.
3. The deminer checked the signal out of the box and it was 70 cm from the base stick.
4. The base stick is in the right place.

5. He didn’t do the right procedures in cutting grass and removing loose stones according to the SOP.

6. The area is hard with lots of stones which mean to be careful in using the heavy rake.

7. The depth of crater is 18 cm and the mine was on 13 cm depth.

8. He started progressing from the right side then he took it from the front which is wrong and caused a mine blast.

9. The heavy rake has been damaged because of the blast.

10. The marking sticks are put in the right place according to SOP.

Signed: Investigation Officer

Observation and recommendation of Operations manager

1. The Deminer didn’t follow the right drill before searching the mine.(visual check and clearing the loose stones in the clearance box).

2. The area is grassy and hard hence light rake is not effective.

3. He shouldn’t check beyond 50 cm from the base stick (one clearance box) but he extended the search up to 70cm.

4. The mine blast incident occurred due to the individual mistake of doing wrong drills.

It is strongly recommended to issue a written warning to the deminer for not following the right procedure and drill which resulted in the mine blast incident.

Signed: Operations Manager

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: 808

Name: [Name removed]

Age: 45

Gender: Male

Status: deminer

Fit for work: yes

Compensation: N/A

Time to hospital: N/A

Protection issued: blast boots
Frontal apron
Mask Visor

Protection used: Frontal apron, Mask visor, Blast boots

Summary of injuries:

COMMENT: No reported injuries. A medical report in Arabic is held on file, along with pictures of the Victim showing no injuries.

Statements

Statement 1: the Victim

We took the safety brief before we start working from the team leader then we entered the field, through the 1st period of work I cleared 3 AP mines from the mixed cluster (AP, AT) in Jaber 1 area, on the 2nd period at 9:11 am I cleared a 3 o'clock mine then moved to 9 o'clock mine, while searching I heard a signal and marked it then looked for it using the light rake but because it's a hard stony area I used the heavy rake then, while progressing 15 cm from the right side I pulled the rake and I had some stones got out with the soil then I hit the mine using the heavy rake and the accident happened noticing that the mine was not appearing when I was looking for it, but I wasn't injured and got out of the walking

Q: You made the right progress operation for the signal you marked?

A: Yes, I did.

Q: Did you use the light rake when you were looking for the signal?

A: Yes, I did.

Q: Did you follow all the right instructions in marking system according to the SOP?

A: Yes, I did.

Q: Did you wear all the protection tasks especially the face mask when you were working?

A: Yes, I did, and that what protected my face.

Q: Which side you were progressing from?

A: From the right side.

Statement 2: Witness Deminer {Name removed]

We entered the field and we were working near each other I was on the other side of the injured from the same mine field, while am working I heard a sound of explosion, I put the detector and saw that the blast is from the de-miner [the Victim] site, I shouted that there is an accident and went to the injured asked him if he has any injury he said no and then he went out of the field walking.

Q: did the team leader give you a safety brief before you started working?

A: Yes, he did.

Q: do you have a sharing vision between you and the injured?

A: Yes, I could see him.

Q: was he wearing all the protection tasks when you arrived to his site?

A: Yes, he did.

Q: was it a strong blast with dust and sound?

A: Yes it was, I heard and saw it.

Statement 3: Team Leader: [Name removed]

I gave the team the safety brief and then they entered the field, I distributed them to their AOR, in the 2nd period of work at 9:11 am I heard a sound of explosion from lane 1 which is a mixed cluster with AP + AT mines and I saw a dust from the deminer [the Victim] site who was initiated the mine, I saw him standing, I informed the medic and clearance coordinator and headed to his site, the ambulance came in 2 minute, he got out of the field by walking and he was in a good situation and wasn't evacuated to the hospital.

Q: did you warn the team to be very careful in dealing with that hard stony area?

A: Yes, I did especially the injured whom I warned before the accident in 15 minutes.

Q: did he follow the right procedures in progressing to the signal showed to him according to the SOP?

A: No, he progressed in a wrong way.

Q: did he follow the right procedure in clearing stones and bushes and visual check?

A: No, as I saw the stones and bushes in the clearance box.

Analysis

The primary cause of this accident is listed as a *Field Control Inadequacy* because the investigators found that the Victim was not working to his SOP and his errors were not corrected. The secondary cause is listed as *Unavoidable* because the deminer may have been using the rake correctly and still initiated a mine The method of excavation with a long-handled rake keeps the deminer a safer distance from an initiation, but the distance also makes it harder for him to see things on the ground. The controlled use of these rakes in this demining group's raking procedure *may* increase the chance of an unintended initiation, but the accident record shows that the distance between the AP blast and the deminer prevents serious injury in all instances where the procedure is correctly applied.

It is strange that the Operations Manager recommended that the Victim be given a written warning for breach of SOPs, but did not recommend warning his Team Leader who failed to ensure that the Victim was working correctly.

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