6-21-2007

DDASaccident721

Humanitarian Demining Accident and Incident Database
AID

DDAS Accident Report

Accident details

Report date:	08/07/2011	**Accident number:**	721
Accident time:	11:02	**Accident Date:**	21/06/2007
Where it occurred:	CBU-71, Al Maalieh	**Country:**	Lebanon
Primary cause:	Unavoidable (?)	**Secondary cause:**	Other (?)
Class:	Other	**Date of main report:**	26/06/2007
ID original source:	IMSMA-ID: 2265	**Name of source:**	Demining group
Organisation:	[Name removed]		
Mine/device:	submunition	**Ground condition:**	agricultural (recent) rocks/stones
Date record created:		**Date last modified:**	08/07/2011
No of victims:	1	**No of documents:**	2

Map details

Longitude:		**Latitude:**	
Alt. coord. system:	Not recorded	**Coordinates fixed by:**	
Map east:		**Map north:**	
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

no independent investigation available (?)

visor not worn or worn raised (?)

inconsistent statements (?)

non injurious accident (?)

Accident report

The report of this accident was made available in 2008. Its conversion into a DDAS file has led to some of the original formatting being lost. Text in square brackets [ ] is editorial. The report is reproduced below, edited for anonymity.

Subject: Incident on CBU-71, IMSMA-ID: 2265

Our Date: Thursday, June 21, 2007, (Compiled: 2007-06-26)

Introduction:

On 21 of June 2007 at approx 11:02 hours an explosion incident occurred at a [Demining group] clearance site, recognized as CBU-71 with IMSMA-ID: 2265.

Search methodology:

At CBU-71 site, [Demining group] conducting surface search with instrument assistance.

The area is searched with one lane/searcher using Ceia or Schonstedt metal detector and red cones/sticks as markings, detailed in [Demining group] SOP.

The area:

The search area is in a maintained orange orchard with small stony ground and more or less no under vegetation. The surrounding trees are without any fruits, indicating that harvest has been carried out. The density of branches on the trees is low to medium with relatively good view for visual search of eventual hanging clusters.

Events leading up to the incident:

The searcher was working in the lane when he had a need for toilet. The searcher closed his lane using a base stick (picture 1). The searcher put down his detector on the ground (picture 2). When the searcher was approximate 10 metres away the detonation occurred. The searcher fell down, turned on the side and become unconscious.

According to what the searcher said 2007-06-22:

The searcher did not see any cluster in the tree or on the ground.

The searcher did not see any signs of clusters.

The searcher used his detector but had no signal/reading before closing the lane.

The searcher did not hear or see any other person in the vicinity.

The distance to closest colleague was approximate 40 metres.

The first person he remembered/ recognized after the unconscious stage was the medic.

Immediate action taken following the incident:

The Team Leader was checking other searchers when the detonation occurred. After the detonation the team leader checked his searchers and tried to find out where the detonation was taken place. After approx 1 ½ minute the Team leader identified the lane and found almost simultaneously with two other nearby working searchers the searcher unconscious. The unconscious searcher was found in searched terrain, on same location as the vest indicates on picture 2. The Team leader together with assisting searchers recognized the unconscious stage but breathing of fallen searcher, and they called for medic assistance. When medic arrived, the Team leader with assisting searchers arranged guidance for medic to site of incident and medical treatment was initiated.

Medical treatment and Medevac procedure:

DESCRIPTION OF THE INCIDENT (translation from [Name removed] medical statement)

Incident date: 21/6/2007

Location: Al Maalieh

Type of Incident : Shock due to cluster explosion

Time of Incident: 11:02

Patient’s condition: Unconscious

Support medic: [Two names removed]

Patient’s history:

Allergy to drugs: No

Diabetic: No

Cardiac: No

Hypertensive: No

Others: No

Communication procedures:

Radio report:

Internal team radio communication: Adequate

External communication with [Demining group] base and the [Demining group] operations officer: Adequate

The person who contact the hospital: medical coordinator ([Name removed])

Time of [Demining group] operations officer arrival the scene: 12:00

Time of ambulance arrival the scene: 11:04 am

Medical treatment on the site:

Type of treatment: oral airway, Oxygen administration 15l/min, Intra venous infusion Lactated Ringer 1 litre.

Time from incident to initial first aid: 11:02-11:04 am

Time spent at site administering treatment: 11:04-11:19 am

Time from Casevac at site to arrival at hospital (Jabal Amel): 11:19-11:31 am

Discussions:

The medic and his assistant informed by the team leader about the incident, the medic moved directly from the medical site to the casualty site after assuring about the safety and can enter the area.

First, the casualty was unconscious due to shock, He was wearing PPE, removed by the medic and initial and rapid assessment started:

Level of consciousness: Unresponsive

Airway: clear and opened

Breathing: Normal

Circulation: Normal pulse with no external bleeding or any signs or symptoms of internal bleeding.

Collar neck placed for him.

Rapid assessment of head, neck, abdomen, chest, extremities showed normal and intact no external injuries.

Oral airway placed for him because of unconsciousness, then directly the gag reflex of the casualty returned back and started to be conscious with stress state and cramps with

presence of shoulder, thigh and back pain , Oxygen by Ambu bag given for him and intra venous infusion administered, then transported to the ambulance by using spinal board to the nearest hospital (Jabal Amel) for examinations.

On route: Reassessment showed that the casualty is in stable state with normal vital signs and oxygen given for him till arriving the hospital.

The casualty arrived the hospital to the emergency department after 10 min. of evacuation for examination and treatment.

Post incident scene investigation:

Initial scene investigation was conducted 2007-06-21. Done by Act. Operation Manager and a national EOD 2 member of [Demining group], together with MACC SL and NDO representatives.

Additional investigation of detonation pit was conducted 2007-06-22, done by a [Demining group] SV together with Chief of MACC SL QA Department.

The border of searched/not searched areas was well marked. The location of detonation was 1 meter in front of ongoing search, in not searched area. One cone was lying flipped over and was most likely moved by air pressure. One cone is penetrated of several fragmentations.

The normal “working site” or ongoing search is named as RP.

Notifications done on scene after incident:

The detector was laying in good order on 7 meters distance from RP, indicating that the searcher has intentionally put the detector down on the ground.

The visor was laying in good order on 9 meters distance from RP, indicating that the searcher or other person has intentionally put the visor down on the ground without to prevent getting scratch marks.

The protective vest, shoes and trousers was taken of the searcher by medics due to medical body check.

Probable cause of the incident:

There could be several reasons of why the cluster went to detonation, together or independently; strong sun, animal, falling down from the tree. A specific reason can not be identified at this stage.

Conclusion:

If the searcher was searching during detonation, he should have wounds of fragmentation in his legs, since his position should normally be between the cone with fragmentation marks and actual location of detonation.

The searcher confirmed that he was not conducting clearance in his search lane; he was taking a short brake to go for toilet when the detonation occurred.

The cluster was most likely not hanging in the tree; therefore the initiation of CB was not caused by falling down into detonation. The cluster went off into detonation by unknown cause and was most likely not affected by searcher in any means.

The markings was in good order and search procedures by the searcher was most likely following the [Demining group] SOP and was not the reason causing the uncontrolled detonation.

There is a contradiction concerning Visor on or off on the searcher during the incident.

According to what the assisting staff was saying, they did not take the visor off, but the searcher himself says that he was wearing full PPE. The involved assisting staff did not recognize during the verbal hearing the same day that they had touched or moved the visor on the scene.

The Visor position could indicate that the searcher has taken the visor off inside the hazard area during work time. If so, this is a major safety violation and not follows the [Demining group] SOP.

Intended follow-up actions and recommendations:

[Demining group] had initial briefing with the teams the same day, informing them about medical status then next morning a additional brief/update was given. Some individuals on BAC teams needed extra time to talk through the incident and an organized debrief was carried out by Supervisor.

An After-Action review will be carried out, with the intentions of finding out individuals action towards SOP and organization set up in general.

A Dictaphone is implemented at [Demining group] OPS/Radio room, helping to memorize communications in future Casevac drills.

Recommendations:

The Team leader has to visit the searchers more frequently due to different needs, improve markings etc. of working searcher.

The SVs and Team leaders has to maintain the focus of searching staff on potential clusters still hanging in trees, even if this incident most likely was not a case as such.

The SVs and Team leaders has to make sure that searchers follows and understand given instructions concerning [Demining group] SOP.

Victim Report

Victim number:	913	**Name:**	[Name removed]
Age:		**Gender:**	Male
Status:	deminer	**Fit for work:**	yes
Compensation:	Not made available	**Time to hospital:**	29 minutes
Protection issued:	Frontal apron Long visor	**Protection used:**	Frontal apron

Summary of injuries:

COMMENT: Shock. Details from the Medical report are included in the main accident report.

Statements

REPORT BY [Name removed] (SEARCHER)

I was the nearest person to the casualty [the Victim] , when I heard the bomb sound I went directly to the site to help him, there were many fragmentation around , I wait for a moment then I entered for helping, I was ambitious and ready for help him , so I did the first aid procedures, he was unconscious but he was breathing with presence of pulse, at this time the team leader arrived to the site for investigation and assisting me till the medic arrived.

This incident is a good experience for me, it helped me to be stronger of how to deal with these situations.

REPORT BY [Name removed] (TEAM LEADER)

While I was making QA on the girls I heard a sound of a cluster I run down where the other section were working they told me that we has a detonation where [the Victim] was working I enter the field I saw [the Victim] was lying on the ground and I left all the equipment in its place and in my opinion that [the Victim] was working and the cluster go and he have a shock and he runs he lied on the ground and the equipment fall from his hands.

REPORT BY [Name removed] (SEARCHER)

When the accident occurred I shouted in a loud voice but nobody heard me so I ran toward the casualty and I saw him lying down on unconscious state.

REPORT BY [Name removed] (SEARCHER)

When I entered the incident site I noticed many things: first the casualty was lying down 12 m far away from the site of accident and the detonator was far away from the accident site and the helmet was off because the casualty has eye injury as the medic said this means that the casualty was not wearing PPE and the detector was placed by hand not threw on the ground due to explosion and not destroyed, this lead to a conclusion that the casualty was in a resting period may for eat or drink and he was far away from the cluster for that reason he has no injury.

Finally, I think that the cluster did not fall down from the tree because there was no winds but may be one searcher who was working closer to him threw it (this is my opinion).

REPORT BY [Name removed] (the casualty)

While I was working in my lane, I stopped when I passed the half of it and closed my lane in a base stick because I want to go to bathroom, I placed my detector in a safe place and I walked about 2 to 3 meters when the cluster exploded, it was in unsafe area. I fell down 9 to 10 meters far away from the cluster and I was in unconscious state.

Note: I was wearing PPE and Helmet during the accident.

REPORT BY [Name removed] (SUPERVISOR)

Date: 21/06/2007, Time: 11:02 am

Location: CBU 71 (Maalieh)

I was in Rest Area working as a SV when I heard DTL [Name removed] calling for medic and then I noticed that a cluster go off and one searcher [the Victim] is injured. Then the medic arrived to the scene and took [the Victim] to Jabal Amel hospital.

During the accident me and [Name removed] (TL) we noticed that [the Victim] was only unconscious and wasn’t talking. In my opinion I think that the searcher was taking a break and he wasn’t wearing the visor.

Analysis

The primary case of this incident is listed as *Unavoidable* because it is possible that the device detonated spontaneously. The secondary cause is listed as *Other* because the investigators could find no evidence that the device fell from a tree and one statement suggested that the device was thrown as a “joke” by another deminer.

The Victim was not wearing a visor at the time and one witness reports an eye injury but the detailed medical report does not mention this so it is ignored.

The quality of this internal report is far higher than others conducted in this theatre at this time. However, the investigators did fail to record the specific device involved, and did photograph themselves conducting the investigation without wearing PPE, so setting a bad example to others.