

DDAS Accident Report

Accident details

Report date: 11/07/2011	Accident number: 738
Accident time: Not recorded	Accident Date: 14/04/2007
Where it occurred: CBU 19, Area 4-003, Et Taibe, Marjeyoun Province	Country: Lebanon
Primary cause: Field control inadequacy (?)	Secondary cause: Management/control inadequacy (?)
Class: Missed-mine accident	Date of main report: 01/06/2007
ID original source: BOI 007/07	Name of source: UN MACC SL
Organisation: [Name removed]	
Mine/device: M77 submunition	Ground condition: grass/grazing area
Date record created:	Date last modified: 11/07/2011
No of victims: 0	No of documents: 1

Map details

Longitude:	Latitude:
Alt. coord. system: UTM 737410-3684648	Coordinates fixed by:
Map east:	Map north:
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

inadequate investigation (?)
inadequate area marking (?)
inadequate equipment (?)
non injurious accident (?)

Accident report

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

File Reference: BOI 007/07

BAC INCIDENT REPORT 007/2007

Report on Incident that occurred on the 14th April 2007 at CBU 19, Area 4 Et Taibe.

The Incident occurred on the 14th April 2007 in Area 4 on a Completed Site (CBU 19), UTM 737410-3684648, where one M 77 Sub-Munition was located by a farmer.

References:

- Lebanon National Technical Standards and Guidelines (TSGs)
- International Mine Action Standards (IMAS)
- [Demining group] Standard Operating Procedures (SOPs)
- [Demining group] Completion Report CBU 19

Introduction

1. In accordance with the National Technical Standards and Guidelines (TSGs), the MACC SL Programme Manager, Mr. [Name removed] and Lt.Col [Name removed, NDO Representative, issued a Verbal Convening Order on 14th April 2007, for an incident investigation independent inquiry. The MACC SL board members are Capt [Name removed] LAF Operations Officer MACC SL and [Name removed], QA Officer MACC SL.

2. This is a comprehensive report by the Board of Inquiry into the Demining Incident that occurred on the 14th April 2007 which is based on the MACC SL investigation and [Demining group] Incident Report 01/2007.

Date: 14th April 2007

Time of Incident: AM

Location: Ett Taibe, Area 4-003, Lebanon

Task: CBU-19, Task Dossier 4-003

BM UTM: 737410-3684648

Task Start / Finish Date: 19th February to 1st March 07

Reported by: CLO Area 1-5

Reported to: [Demining group] and MACC SL

Time of Incident report to MACC QA: 141200hrs April 2007

MA Organisation POC: [Name removed] [Demining group] Project Manager

Investigation Date/Time: 17th April 07, afternoon

Investigation Location: Task CBU-19

Investigation Team: Capt [Name removed], LAF Operations Officer and [Name removed], MACC SL QA Officer.

Explosive Ordnance Type: US M-77 Sub-Munitions

Background

4. CBU 19 was completed on the 31st March 07, see annex A for the [Demining group] Completion Report. According to the Completion Report the task was a combination of surface and sub-surface clearance in accordance with the operational clearance plan. A

combined total of 56,930m² was cleared. The area where the sub-munition was located is within a visually searched area.

Events leading up to the Incident

5. The CBU was located, and reported to the MACC CLO, on Saturday (14th April) morning by a local farmer.

Events following the Incident

Saturday afternoon contact was established between MACC CLO, AGMA PM and MACC Plans Officer [Name removed]. A decision was made to leave the sub-munition until Monday (16th April 2007) for a formal investigation.



[The discovered submunition inside a ring of marking stones.]

The sub-munition was destroyed and additional sub-surface clearance was conducted between 17th and 18th April 2007. For details see [Demining group] Incident Report 01/2007, attached. [Not made available].

BOI Post Incident Activities and General Observations

7. On the inspection of the incident site on the 17th April 2007 the following general observations were established:

- The sub-munition was clearly visible and showed no signs of being buried earlier.
- The sub-munition was not marked in accordance with [Demining group] SOP.
- The location of the sub-munition was in a visually searched area.

The submunition was destroyed by [Demining group] during the inspection.

Geography and Weather

9. CBU 19 is located in the Province of Marjeyoun, with the nearest Town being Et Taibe.

Conclusions

10. Based on the investigation, the documentation and visit to the site, the investigation concludes the following:

- The sub-munition was left unmarked from Saturday (14th April 2007) until being disposed Tuesday (17)
- It is inconclusive as to whether the sub-munition was not located during the clearance, or if the item has subsequently been delivered to the site after clearance.

Recommendations

11. The following are recommendations based on the BOI conclusions:

- Regardless of when or where a situation like this occurs, the munition must be properly marked as per SOP and disposed of as soon as possible.
- Follow up clearance be conducted around the area of the location of the sub-munition.
- Revise visual clearance drills to confirm [Demining group] procedures.

Signed: [Name removed], QA Officer, MACC SL. Capt [Name removed], LAF Operations Officer, NDO/MACC SL

June 1 2007

Annex:

A. [Demining group] Incident Report 01/20007 [Not made available]

C. CBU site photos

Comments: None

Analysis

The primary cause of this accident is listed as a *Field Control Inadequacy* because the munition was found on the surface and clearly visible, which implies that the work was not conducted appropriately. It is not clear whether the munition had armed, and so was unlikely to have moved there, or was an unarmed example that could conceivably have been placed after the clearance was completed. The secondary cause is listed as a *Management Control Inadequacy* because the number of submunitions missed during clearance in this country at this time indicates that the procedures used were ineffective. Relying on visual clearance presumes that the munitions will all be on the surface and that there will be no undergrowth concealing them. The picture of the munition shows it in grass, and it seems likely that it would have been rather hard to see. A metal-detector or other procedure should have been used if there was a known risk of leaving munitions behind – because partly clearing an area and then releasing it as safe is known to increase the risk that a civilian will be injured.

The *Inadequate investigation* listed under notes refers to the absence of any assessment of how the device was missed.

The demining group marked the device by placing a ring of large stones around it. This is an effective informal marking system that is widely used and prevents people stepping on the item unintentionally. The investigators criticised them for not using the right marking without seeming to realise the purpose that marking serves.

The decision to conduct a superficial visual search was the responsibility of the MACC SL, the same body that investigated the incident, so no independent investigation was made.

The *Inadequate equipment* referenced under Notes refers to the lack of a means of searching sub-surface (metal-detector). No criticism of the demining group is implied – it was carrying out the task as approved by the UN supported MACC.

It may be interesting to note that a commercial demining group missed a device (for whatever reason) and was only required to re-search an unspecified area around that device, which may not have been much of an incentive to ensure that no others were missed in future.