

# DDAS Accident Report

## Accident details

<b>Report date:</b> 07/02/2008	<b>Accident number:</b> 561
<b>Accident time:</b> 14:30	<b>Accident Date:</b> 02/07/2007
<b>Where it occurred:</b> TASK CBU- 771, Area 3, Majdel Selem	<b>Country:</b> Lebanon
<b>Primary cause:</b> Field control inadequacy (?)	<b>Secondary cause:</b> Management/control inadequacy (?)
<b>Class:</b> Missed-mine accident	<b>Date of main report:</b> 01/08/2007
<b>ID original source:</b> 011/07	<b>Name of source:</b> UNMAS
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> DPICM M77 & M42 submunitions	<b>Ground condition:</b> agricultural (recent) leaf litter soft
<b>Date record created:</b>	<b>Date last modified:</b> 07/02/2008
<b>No of victims:</b> 0	<b>No of documents:</b> 1

## Map details

<b>Longitude:</b>	<b>Latitude:</b>
<b>Alt. coord. system:</b> UTM: 729637/3679063	<b>Coordinates fixed by:</b>
<b>Map east:</b>	<b>Map north:</b>
<b>Map scale:</b>	<b>Map series:</b>
<b>Map edition:</b>	<b>Map sheet:</b>
<b>Map name:</b>	

## Accident Notes

mine/device found in "cleared" area (?)

## Accident report

The report of this event was made available in February 2008 as a collection of files and pictures. Its conversion to a DDAS file means that some of the original formatting has been lost. The substance of the report is reproduced below, edited for anonymity. The original files are held on record. Text in [ ] is editorial. This was not an "accident" because the missed devices were found – but are included because they were a potential accident, and because the investigation includes details that may help prevent similar events.

## INDEPENDENT INVESTIGATION REPORT 011/07

FOR [International commercial company] DEMINING INCIDENT  
AT TASK CBU- 771 2nd July 2007

## 1. BACKGROUND

Date: 2nd July 2007

Time of Incident: 1430hrs approx.

Location: Area 3, Majdel Selem, Lebanon

Task: CBU-771, Task Dossier 3-008

UTM of Task: 729637/3679063

Task Start / Finish Date: 05th Feb/ not completed (initial completion date 20th Mar 07 and 22nd Jun 07 but task was extended due to additional information and items located during internal completion QA).

Organisation Involved: [International commercial company]

Unit: [International commercial company] BAC Team 4

Supervisor: [Name removed] – BAC Team 4

Reported by: [Name removed], PM, [International commercial company]

Reported to: [Name removed], CQA, MACC SL.

Time of Incident report to MACC QA: 1300hrs approx.

Organisation POC: [Name removed], PM, [International commercial company].

Investigation Date/Time: 2nd/29th/30th July 07.

Investigation Location: Task CBU-771

Investigation Team: Capt. [Name removed] (LAF Operations Officer), Capt [Name removed], LAF QA Officer, [Name removed] (MACC SL C of QA).

ERW Type: US M42 and M77 sub-munition

Accreditation Details: Provincial Accreditation – 6 Nov - 5 Dec 2006; Full Accreditation – 6 Dec 2006 – 31 Dec 2007

## 2. DETAILS OF INCIDENT

On 2nd Jul 2007, two sub-munitions (1x M77 & 1xM42) were reported as found by the [International commercial company] completions team during a final inspection of CBU 771, before handover to the MACC SL. These items were located by the local land owner (woman) while harvesting her wheat crop. They were located in an area immediately adjacent to her house (within the task site) which had been reported as cleared by [International commercial company] sub-surface. The items were located on the surface. The owner reported the find to [International commercial company] completions team during and internal completion QA.

After receiving information from the [International commercial company] completions team, [Name removed], [International commercial company] PM, went to the CBU-771, along with [Name removed], Capt [Name removed] and [Name removed] to conduct an investigation.

After meeting the [Name removed] [International commercial company] Team 4 supervisor at the site and confirming the information, the items were marked and photographs taken.

[Name removed] reported the incident to [Name removed], MACC SL C of QA. [Name removed] was informed that local land owner was harvesting at the time and that the items were located during this process.

At approx. 1300hrs on 2<sup>nd</sup> July 2007, the MACC SL investigation team, comprising Capt [Name removed], and [Name removed], departed for CBU 771. After arriving at the CBU 771 the MACC SL investigation team was briefed by UN Ops, [Name removed] and [Name removed] and examined the site.

### **Evidence**

The ground was flat, comprising hard soil and the area had been covered with wheat. A significant area where the items were located had been harvested by the land owner. This had been piled for removal. See photographs at Annex E. The local land owner was harvesting the wheat and located the sub-munitions.



[The accident site is shown above.]

The items had not been removed; the location had been marked with pickets and stones. The items were clearly visible on the surface but would be difficult to see but not detect during sub surface clearance. The area where the items were located was identified and confirmed as part of the CBU that had been cleared sub surface. The items were situated in the middle of the area cleared sub surface approx. 10-15m apart.



[The munitions are shown above – easy to locate with any metal-detector search.]

#### **Interview with [International commercial company] Team 4 Searchers**

See Annex D for a summary of the statements taken from all [International commercial company] team four (4) searchers on the 30th Jul 2007. [Annex not made available.] In attendance was [Name removed], [International commercial company] Ops Manager, Capt [Name removed] and [Name removed] C of QA. In summary there was some confusion amongst the searchers as to what type of clearance occurred on this specific area. Indications from the searchers of what clearance was conducted at this area of the site are: no clearance to sub-surface clearance occurred in this area. At the request of [Name removed] all personnel [International commercial company] team 4, [Name removed] and the BOI deployed to the site for a final assessment to confirm what occurred.

During this site visit all searchers were interview separately at the area in question. All searchers confirmed that the area was cleared in approx. 30-90 minutes, this included site marking and sub surface search of the area. In addition that [Name removed] was in a hurry to leave the site and they had been told to search the area very quickly. This was confirmed by a review of the daily work sheets. See Annex D for full details of the daily work sheets.

#### **Interview with [Name removed, Field supervisor]**

[Name removed] was interviewed on the 30/31 Jul 2007. During the interview on the 30<sup>th</sup> Jul 07, it was confirm by [Name removed] that area had been cleared sub surface by [International commercial company] team 4 and that he could not explain why they had missed the two items. A follow up interview was conducted on the 31<sup>st</sup> Jul, additional personnel, [Name removed] and Lt Col [Name removed], LAF, LMAC were in attendance.

During this interview [Name removed] confirmed that although the area was sub surface searched, the procedure and clearance method were not in accordance with [International commercial company] SOPs and further he was in a hurry to vacate the site as he had worked in this area for 6 months or more. He also confirmed he spent no more than 1-3 hours clearing this portion of the site.

### **Interview with [Name removed], UN MACC SL Ops**

[Name removed] confirmed that he had visited the site on a number of occasions and that during these visits discussion, with [Name removed] had occurred regarding the clearance of the site, and the need to clear this particular area of the site. The area in question had not been cleared as had been directed by [Name removed]. During a final operational visit which was requested by [Name removed] the need to clear this area to fade was again stressed and the area was then programmed for clearance.

### **Background**

CBU 771 is located within a mixture of residential houses and agriculture land, the land being farmed for wheat. The CBU is located near Majdal Selim.

[International commercial company] commenced BAC operations at CBU 771 on 5<sup>th</sup> Feb 07 and between this date and the 20<sup>th</sup> Mar 07, surface and sub surface clearance was conducted. The task was internal suspend from the 6<sup>th</sup> Feb until the 13<sup>th</sup> Mar 07 when it was restarted and again thought completed on the 20<sup>th</sup> Mar 07. However due to additional information on the extent of the strike area, additional clearance was required at the site and this commenced 13<sup>th</sup> Jun 07 and was completed on the 22<sup>nd</sup> Jun 07. See daily work sheets for details at Annex B

## **3. CHRONOLOGY OF EVENTS**

2 July

1300: [Name removed] reported to the MACC SL two items were located on CBU 771 during an [International commercial company] completions visit.

1430: Site visit by investigation team

1530: Investigation team departs site.

7 July: [International commercial company] internal investigation received at the MACC SL, see Annex A.

27th Jul: Additional information regarding the incident was received by MACC SL regarding the clearance of the area where the items were located.

30th Jul: 0700-1500: [International commercial company] BAC Team 4 was interviewed regarding the site clearance, including Team Supervisor at [International commercial company] HQ. This was followed by a site visit to the CBU location.

31st Jul: 1030-1300: Follow up interview with PM [International commercial company] and Team 4 Supervisor at [International commercial company] HQ.

### 3. CONCLUSIONS

On 2<sup>nd</sup> Jul the [International commercial company] completed team reported that two items (M77 and M42) had been located in a sub surface cleared area during a final [International commercial company] completions visit before handing the site to the MACC. The items were located during the harvesting of a wheat crop by the local land owner.

The area was clearly recorded as being cleared sub surface.

The items were located on the surface.

The area was not cleared sub-surface in accordance with the [International commercial company] SOPs or the NTSGs.

The incident is therefore, considered as Preventable.

### 5. RECOMMENDATIONS AND FURTHER ACTIONS

The MACC SL investigation team agrees with the [International commercial company] internal investigation report 'Para a' of the recommendations only and further recommends the following additional requirements are implemented with effect receipt this report:

a. [Name removed]'s "Operational Accreditation" to conduct BAC operations in South Lebanon is suspended, with immediate effect. In addition, due to the serious nature of the incident it is also recommended that [International commercial company] consider taking appropriate disciplinary action against [Name removed].

Operational Accreditation to conduct BAC for [Name removed] in South Lebanon is suspended until an appropriate level of revision and re-training in clearance requirements has been completed. This is to included appropriate command and control requirements and the correct methods of conducting BAC clearance operations, in accordance with [International commercial company] SOPs and the NTSGs

b. [International commercial company] BAC Team 4, "Operational Accreditation, to conduct BAC operations in South Lebanon is suspended, with immediate effect.

Operational Accreditation to conduct BAC for [International commercial company] BAC Team 4 in South Lebanon is suspended until an appropriate level of revision and re-training in clearance requirements has been completed.

c. The area in question is to be re-cleared using the appropriate sub-surface clearance procedures, in accordance with [International commercial company] SOPs and the NTSGs, until fade or the MACC Ops Officer confirms not additional clearance is required in this site.

d. There is a further aspect to this incident in that not only did it happen but it was recorded in [International commercial company] daily worksheets without any internal comment such that the entire site was about to be presented for completion. This is considered as significant as the incident itself and that it is a reflection of poor internal management procedures and quality control. MACC SL expects [International commercial company] to take all necessary action to resolve this problem to avoid further similar problems in the future.

Signed: UN MACC SL, Chief of QA; LAF LMAC QA Officer; LAF LMAC Ops Officer

Dated: 1st Aug 2007

Enclosures: [Not made available]

## **Analysis**

The primary cause of this accident is listed as a "Field control inadequacy" because the investigators found that the field controller had pushed the deminers to work at a speed that meant they could not clear the area in the required manner. The Field supervisor apparently recorded what was done in a manner that meant that his managers should have noticed the impossible timings and corrected him. Because they did not notice or correct him, the secondary cause is listed as a "Management control inadequacy".

The independent investigation was thorough and fair, and its recommendations sensible. Many investigation reports in this theatre at this time are unusually good. It is unfortunate that the DDAS did not have access to all background papers. This record will be updated if they are made available later.