

# DDAS Accident Report

## Accident details

<b>Report date:</b> 05/03/2011	<b>Accident number:</b> 650
<b>Accident time:</b> 23:00	<b>Accident Date:</b> 13/08/2010
<b>Where it occurred:</b> Kassala, Al Lafa	<b>Country:</b> Sudan
<b>Primary cause:</b> Management/control inadequacy (?)	<b>Secondary cause:</b> Management/control inadequacy (?)
<b>Class:</b> Missed-mine accident	<b>Date of main report:</b> 23/11/2010
<b>ID original source:</b> Bol 2010/03	<b>Name of source:</b> UNMAO
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> PRB M3 AT blast	<b>Ground condition:</b> agricultural (abandoned)
<b>Date record created:</b>	<b>Date last modified:</b> 05/03/2011
<b>No of victims:</b> 1	<b>No of documents:</b> 1

## Map details

<b>Longitude:</b>	<b>Latitude:</b>
<b>Alt. coord. system:</b> Not recorded	<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 (?)  
inadequate area marking (?)  
inadequate metal-detector (?)

## Accident report

The only report of this accident available in February 2011 was found in a "summary of Bol recommendations" received in January 2011. Text in square brackets [ ] is editorial. This record will be revised as more information becomes available.

### Bol summary:

On the 13<sup>th</sup> of August 2010 a farmer in the Kassala locality of Al Lafa whilst ploughing his field by tractor detonated an anti tank mine in what was determined to be a previously cleared area. Luckily the farmer only sustained minor injuries while the tractor took the brunt of the

explosion. During the preliminary investigation an additional 3x AT and 1x AP mines were located in close proximity to the seat of the explosion within the previously cleared area. For additional information regarding this BOI and full report see reference F. {Annex not made available.]

BoI recommendations 23/10/10

## BOI 2010/03 INVESTIGATION INTO MISSED MINE AT AL Lafa RECOMMENDATIONS

### **Background**

On 13th August 2010 an Al Lafa, Kassala farmer was ploughing his field by tractor at approximately 2300hrs, when he detonated an antitank mine. The left rear tyre was destroyed, luckily he survived with surprisingly minor injuries. After some initial confusion as to whether the mine was or was not in a cleared area (perhaps a data reading error) and a preliminary investigation, it was established that the site had been previously cleared. BOI 2010/03 was initiated to determine the facts and make recommendations to the mineaction community.

The initial investigation team moved to the site without clearing any form of safe lane and located another two PRB M3 Anti Tank (AT) mines which had been ploughed to the surface. Subsequent clearance by military engineers out to a radius of 20 meters around the accident site located another PRB M3 AT mine and a PRB M35 Anti Personnel (AP) mine.

A trial was conducted to determine if the MineLab F3 detector (used by the company during this manual clearance task) could detect PRB M35 AP mines (minimum metal) to a depth of 13 cm. It was determined that it could. Interestingly, an Ebinger 421 Ground Compensating (GC) detector was also trialed, it failed to meet the 13cm minimum depth against the PRB M35 AP mine

During the BOI investigation it was found that the on site documentation handed over to the sub-office at the completion of the task was very poor. This made it very difficult for the BOI team to determine the extent of the cleared area, mine lines worked on, technical survey completed to "fade out" the task, etc. were not evident. There was also no daily work sheets, daily work completed, detector testing, site map, visitors log, etc Note: the Mine Action office accepted this at the completion and hand-over of the task

The paperwork on behalf of the sub-office was also poor. The lack of on site visits and quality assurance (QA) checks contributed to the poor paperwork of the clearance organisation. The BOI team was not willing to walk in the area to conduct an on site check. With no fixed Bench Mark, errors apparent in the completion report — several turning points were more than 100m apart, one at 212m apart, it was impossible to locate a metal peg in the ground at those distances.

We would all admit that we have made errors with documentation in the past. All contractors, NGOs and the LTNMAO as the coordinating agency should be aware that this is unacceptable. It is all very well to pull mines out of the ground, but if the documentation is not there to support it, we are wasting our time. Make a commitment now to place a greater emphasis on accurate reporting and procedures.

### **Recommendations of the BOI**

The board made the following recommendations:

- Clearance Organisation

1. Greater supervision and/or training is provided to ensure that an adequate level of record-keeping and completion documentation is maintained in accordance with Sudan National Technical Standards and Guidelines (NTSG) in the future.
2. The following documentation is added to the clearance organisation SOP
  - Visitors log
  - Detector running log
  - Stores and equipment register
  - CDS Standing orders
  - Demolition plans and safety brief
3. Internal training should be conducted with all team leaders and supervisors in order to improve the standard of report writing, particularly completion reports.
4. Missed mine drills are to be increased to a five meter box around any area where a mine is not found in a mine row.
5. Internal QA should be conducted in accordance with NTSG
6. Revert to completing the UNMAO daily report, not the old IMSMA weekly report.

#### UNMAO

1. Kassala sub-office should carry out a review of all QA practices. If training is needed, support should be given.
2. Kassala sub-office should carry out a review of all contractors/NCO task documentation in relation to quality of recording.
3. Kassala Operations Officer to assist the process by conducting QA checks and to take a more proactive approach to the events in his AOR
4. NRMAO to issue an immediate safety notice to all contractors and sub-offices on the requirement to create a safe working lane to sites where accidents or detonations have taken place before any movement to investigate the situation.
5. A detector trial has highlighted that the Ebinger 421 GC detector will not detect minimum metal mines such as the PRB M35 AP mine at the required depth. All companies must be warned and a review undertaken by UNMAO in relation to allowing this detector to be used against these mines.

Would you please disseminate to all implementing partners.

Signed: [Name removed], Deputy Chief of Ops UNMAO, 23/11/2010

### **Victim Report**

<b>Victim number:</b> 833	<b>Name:</b> [Name removed]
<b>Age:</b>	<b>Gender:</b> Male
<b>Status:</b> driver civilian	<b>Fit for work:</b> presumed
<b>Compensation:</b> Not made available	<b>Time to hospital:</b> Not made available
<b>Protection issued:</b> None	<b>Protection used:</b> None

**Summary of injuries:**

COMMENT: Minor injuries. No Medical report was made available.

## **Analysis**

The primary and secondary causes of this accident are listed as “*Management Control Inadequacy*” because the UN authority that contracted the clearance work at the Task clearly did not ensure that work was conducted appropriately or insist of receipt of clear records of the work that had been done, or precisely where it had been conducted. Several other missed mines were found during the investigation.

The investigator identified the management control inadequacies in a professional and refreshingly objective manner. It is regrettable that the full report has not been made available. Despite the failings implying an inexcusably amateur management, this investigation provides evidence of a commitment to learn from the lessons that it highlights.