

# DDAS Accident Report

## Accident details

<b>Report date:</b> 29/01/2008	<b>Accident number:</b> 533
<b>Accident time:</b> 09:10	<b>Accident Date:</b> 22/09/2004
<b>Where it occurred:</b> MF011, Salahley Municipality, Nr Ina Guuxaa, Salahley District, Galbeed Province	<b>Country:</b> Somaliland
<b>Primary cause:</b> Field control inadequacy (?)	<b>Secondary cause:</b> Victim inattention (?)
<b>Class:</b> Excavation accident	<b>Date of main report:</b> 22/09/2004
<b>ID original source:</b> None	<b>Name of source:</b> [Name removed]
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> P2Mk2 P4Mk1 AP blast	<b>Ground condition:</b> dry/dusty hard
<b>Date record created:</b>	<b>Date last modified:</b> 29/01/2008
<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>	<b>Coordinates fixed by:</b> GPS
<b>Map east:</b> E 0414941	<b>Map north:</b> N 0987816
<b>Map scale:</b>	<b>Map series:</b>
<b>Map edition:</b>	<b>Map sheet:</b>
<b>Map name:</b>	

## Accident Notes

disciplinary action against victim (?)  
inadequate equipment (?)  
long handtool may have reduced injury (?)  
metal-detector not used (?)  
no independent investigation available (?)  
non injurious accident (?)  
squatting/kneeling to excavate (?)  
use of shovel (?)

## **Accident report**

The report of this accident was made available in January 2008 as an IMSMA report two pages long. In extracting the data, the original formatting has been lost. The substance of the report is reproduced below, edited for anonymity. The original file is held on record. Text in [ ] is editorial. This record will be expanded if further information becomes available.

At 09.10hrs on the 22nd of September 2004, deminer [the Victim] was carrying out manual clearance using the prodding method on the northern side of Minefield 0011 at Ina Guuxaa.

Whilst excavating earth at the front of his lane, he inadvertently detonated what is suspected to have been a P-4 anti personnel mine.

Approximately 35 minutes after the accident, The [Demining group] Programme Manager [Name removed], Technical Advisor [Name removed], Operations Manager [Name removed] and visiting [Demining group] Senior Technical Advisor [Name removed] arrived at the site and investigated the incident.

This team was assisted by Demining Team Supervisor [Name removed], Assistant Section Leader [Name removed], and the deminer himself.

The following factors are relevant;

- The detonation occurred when de-miner [the Victim] was working with an excavating tool (folding shovel) at the front of his lane. He explained that he was using this in the manner described within [Demining group] SOPs in order to remove loose earth from the front of his lane.
- The AP mine (probably P-4) was buried approximately 2-5cm deep (from the top of the pressure plate to soil surface)
- The deminer received no injuries from the mine blast.
- The deminer's PPE and Visor show slight signs of blast burns [See below: damage but not "burns"]. The visor appears to have been struck in two places by larger fragments. This is consistent with metal missing from the blade of the shovel.
- There is no evidence to suggest that the mine was abnormally oriented (tilted), nor had any anti lift device fitted which might have caused it to detonate when disturbed by the deminers tools.

### **In Conclusion;**

The prodding procedure used was inadequate and contravened [Demining group] demining SOPs.

- The use of the excavation tool was inappropriate and probably contravened [Demining group] demining SOPs.
- In combination, this resulted in the deminer failing to locate the mine with his prodder, and subsequently, for it to be detonated through use of the excavation tool with excessive force and in all probability, in a downwards rather than horizontal manner.

The investigation team was thus left in no doubt that this incident occurred due to poor working practices by Deminer [the Victim] in direct contravention of [Demining group] demining SOPs.

Due to the seriousness of this incident all deminers from MF011 will carry out remedial training on the 23rd of September 2004. [The Victim] will be disciplined accordingly by [Demining group].

### **From IMSMA forms**

[Data derived from forms with identifiers removed.]

Date of report: 22-9-2004

Date of accident: 22-9-2004

Accident area: MF 0011 at Ina Guxaa

One person involved. No injuries.

Place of accident: MF011, Salahley Municipality, Nr Ina Guuxaa, Salahley District, Galbeed Province.

GR: E 0414941; N 0987816; GPS.

The accident occurred on the northern side of the minefield, close to the trench line which marked the inner safe boundary of the suspect area. The coordinates of the accident itself were fixed by GPS, as no prominent landmarks exist close to the point of detonation.

The area was pasture land less than 500m North of the nearest town.

Cause of accident: Incorrect procedure

Equipment damage, [to mattock] \$25



[The damaged shovel is shown above beside the crater.]



[The Victim's visor, marked by the impact of the shovel or parts of the shovel, is shown above. There was some light fragmentation marking on the right shoulder of the frontal apron.]

### Victim Report

<b>Victim number:</b> 705	<b>Name:</b> [Name removed]
<b>Age:</b>	<b>Gender:</b> Male
<b>Status:</b> deminer	<b>Fit for work:</b> yes
<b>Compensation:</b> Not appropriate	<b>Time to hospital:</b> Not appropriate
<b>Protection issued:</b> Frontal apron Long visor	<b>Protection used:</b> Frontal apron, Long visor

#### Summary of injuries:

COMMENT: Non-injurious accident.

#### Analysis

The primary cause of this accident is listed as a "Field control inadequacy" because the investigators found that the deminer was working in breach of SOPs and his errors were not corrected.

The secondary cause is listed as "Victim inattention" because it seems that the deminer was shovelling away soil beyond the area he had already investigated with another tool.

The tools available to the deminer are shown in the picture below and were inappropriate. They are not blast resistant or designed for purpose. The folding shovel has the same faults and does not meet the recommendations within the IMAS.



Although the probe is long it has a hard and brittle handle. The trowel is too short and made using thin mild steel pressed into shape. Examples have broken up and entire trowel heads have been found inside deminers after blasts. The need for an axe is unexplained.

The P4 is a very small mine (30g Tetryl), which is probably why the Victim escaped without injury. The shovel was damaged and pieces broke off which could have penetrated the visor had the mine been larger. But the fact of using a tool with a long handle may have prevented hand injury even though the tool was not designed to stay in one piece.

The punishment of the Victim without disciplining the Field Supervisors is strange.