

DDAS Accident Report

Accident details

Report date: 29/01/2008	Accident number: 535
Accident time: Not recorded	Accident Date: 10/12/2005
Where it occurred: MF14, Bisqua town, Duruqsi District, Togdheer Province	Country: Somaliland
Primary cause: Unavoidable (?)	Secondary cause: Unavoidable (?)
Class: Excavation accident	Date of main report: 12/12/2005
ID original source: None	Name of source: [Name removed]
Organisation: [Name removed]	
Mine/device: P2Mk2 P4Mk1 AP blast	Ground condition: hard route/path
Date record created:	Date last modified: 29/01/2008
No of victims: 1	No of documents: 1

Map details

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

Accident Notes

long handtool may have reduced injury (?)
metal-detector not used (?)
no independent investigation available (?)
non injurious accident (?)
standing to excavate (?)
use of rake (?)

Accident report

The report of this accident was made available in January 2008 as an IMSMA file. 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.

From IMSMA file

Report date: 12th Decemver 2005

Accident date: 10th December 2005

Accident site: MF14, Bisqua town, Duruqsi District, Togdheer Province

GR: E 0552382; N 0982107; GPS

The accident occurred on pasture land that was "compact ground".

Equipment to the value of US\$6 was damaged.

Accident description:

- Antipersonnel mine model P4 exploded during mine-clearance in minefield MF 014, Bisqua.
- Explosion occurred when deminer [the Victim] was carrying out clearance using the raking method.
- Through the investigation it was deemed that the A/P mine was approximately 2-5cm deep (from top cover)
- The deminer received no injuries from the mine blast.
- The deminer's rake received damage from the mine blast. (See photo Attached)

On the 10th December 2005 deminer [the Victim] was carrying out clearance in Minefield 14 Bisqua using the raking method. Whilst raking the earth in the front of his lane a P-4 mine detonated.



[The mine detonated top right as the Deminer reached forward to start raking the next area.]

All work ceased on the minefield until members from SMAC and [Demining group] arrive on site the following morning to carry out an investigation.

The area where the mine detonated was on an old road which went through that part of the mine field and this meant that the ground is much more compact than would have normally been expected.



[The damaged four-tine rake head is shown above. Its design impedes the escape of the blast wave and so is more likely to break up than a two-tine rake. The use of a metal pipe as a handle could also have added to the tool's weight, so making it easier to "hack" the ground roughly.]

The Deminer explained that he would normally use the prodding method when he came to hard ground but as he had just come to the road he thought it best to see how the rake would manage and on the second pull of the rake a P-4 AP mine detonated.

We believe that error of judgment by the Deminer may have caused the accident and that he probably should have used the prodding method as soon as he reached the road, but this can be disputed.

Due to the fact that [the Victim] is an exceptional Deminer with 6 years experience we have put this down to a lesson learnt for all and for the Deminers to think what method to use when they come across areas like this.

Due to procedure's all Deminers from MF 14 will carry out remedial training on the 11th of December 2005.

No disciplinary action will be taken against [the Victim].

Victim Report

Victim number: 707	Name: [Name removed]
Age:	Gender: Male
Status: deminer	Fit for work: yes
Compensation: Not appropriate	Time to hospital: Not appropriate
Protection issued: Frontal apron Long visor	Protection used: Frontal apron, Long visor

Summary of injuries:

COMMENT: Non-injurious accident.

Analysis

The primary and secondary causes of this accident are listed as “Unavoidable” because the investigators found that the Victim was probably working as trained and that the ground was unusually hard in that place. The photographs show no obvious visual clue that the old road ran across the working area at this place.

The demining group had put in place the use of a long tool (rake) that kept the Victim far enough away from a blast to avoid injury, and his PPE was effective at protecting him from any risk remaining at that distance. Had he been using conventional short hand-tools, some injury would have been expected.

Stand-off (distance from the detonation) is the most effective PPE and the Rake Excavation system makes use of this. It is possible that the extreme length of the tool makes initiation of small AP blast mines with the Heavy rake more likely, but any increased risk of initiation is generally offset by the reduced chance of that initiation resulting in injury. If the rake is unnecessarily heavy and its design may break up in a blast (so turning a blast mine into a fragmentation mine) the tool should be redesigned urgently. This accident is a good example of balancing an effective demining process and PPE to result in a very low risk of injury.