

DDAS Accident Report

Accident details

Report date: 29/01/2008	Accident number: 534
Accident time: Not recorded	Accident Date: 25/08/2005
Where it occurred: MF 14, Duruqsi Municipality, Nr Bisqua, Duruqsi District, Togdheer Province.	Country: Somaliland
Primary cause: Unavoidable (?)	Secondary cause: Unavoidable (?)
Class: Excavation accident	Date of main report: 26/08/2005
ID original source: None	Name of source: [Name removed]
Organisation: [Name removed]	
Mine/device: P2Mk2 P4Mk1 AP blast	Ground condition: bushes/scrub hidden root mat soft
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: GPS
Map east: E 0552637	Map north: N 0963181
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.

Data from IMSMA report

Date: 26-08-2005

Date of accident: 25-08-2005

Place of accident: Duruqsi Municipality, Nr Bisqua, Duruqsi District, Togdheer Province.

GR: E 0552637; N 0963181; GPS

Accident coordinates: 38P UTM

Accident occurred on pasture land between 500m and 5 km from the nearest town.

Equipment worth US\$6 was damaged.

A thorough investigation was carried out by [Demining group] Operation Manager [Name removed] and Somaliland Mine Action Centre's QC Officer [Name removed].

The incident occurred whilst Deminer [the Victim] was carrying out clearance using the raking method in Lane 9, MF 14, Bisqua.

The Investigation team came to the conclusion that the AP mine was disturbed previously by the roots of a tree which is situated approximately 1 meter away from the point of detonation.

The root can clearly be seen by the investigators at the point of where the detonation occurred and it is believed the AP mine was tilted away from the Deminer as he was raking.



[The Victim's lane is shown above.]



[Roots shown in a close-up are very thin.]

There were no injuries to the Deminer although the rake itself was damaged by the impact.

The Investigation team decided to do a day's training under their supervision before the deminers could commence work.

SMAC and [Demining group] are satisfied that the standard safety procedure was not compromised by Deminer [the Victim] and no further action will be taken against him.

Deminer [the Victim] was carrying out clearance using the rake method in box 9. Whilst pulling the rake towards himself a detonation occurred resulting in no harm to himself but damage to his rake.

[Name removed] (Minefield Supervisor) immediately stopped all deminers working and sent them to the admin area.

[Name removed] then called [Demining group] HQ to inform the Operations Manager [Name removed] who informed [Name removed] to cease all work and wait for the investigation team to arrive.

After the investigation a day's training took place and then operations commenced.



[The victim's four tine rake head is shown above. Its damage from such a small mine is significant when compared to the damage seen with two tine rakes with the same or larger mines. The risk of parts breaking away and hitting the deminer is real. Some also think that the four tine rake favoured by this demining group is more likely to initiate mines because of the additional force needed to drag it through the ground.]

Victim Report

Victim number: 706	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 mine had been moved into an unusual position by the roots of vegetation.

It is possible that the roots were being broken by simply tugging the rake head (a common practice) and that this caused the accident. Excess force may be more likely to be necessary with a four tine rake than with a two tine rake.

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 offset by the reduced chance of that initiation resulting in injury. The accident is a good example of balancing an effective demining process and PPE to result in a very low risk of injury.