

# DDAS Accident Report

## Accident details

<b>Report date:</b> 15/05/2006	<b>Accident number:</b> 224
<b>Accident time:</b> not recorded	<b>Accident Date:</b> 23/09/1997
<b>Where it occurred:</b> Village 14km from Teslic	<b>Country:</b> Bosnia Herzegovina
<b>Primary cause:</b> Unavoidable (?)	<b>Secondary cause:</b> Inadequate equipment (?)
<b>Class:</b> Missed-mine accident	<b>Date of main report:</b> 01/10/1997
<b>ID original source:</b> JD/MG/EB/LD	<b>Name of source:</b> BiH MAC
<b>Organisation:</b> Name removed	
<b>Mine/device:</b> PMA-3 AP blast	<b>Ground condition:</b> route/path
<b>Date record created:</b> 17/02/2004	<b>Date last modified:</b> 17/02/2004
<b>No of victims:</b> 1	<b>No of documents:</b> 2

## Map details

<b>Longitude:</b>	<b>Latitude:</b>
<b>Alt. coord. system:</b> GR: YY 205 225	<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

inadequate metal-detector (?)  
mine/device found in "cleared" area (?)  
inadequate area marking (?)  
inadequate investigation (?)  
no independent investigation available (?)

## Accident report

There was no record of this accident in the country MAC files or in their accident summary sheet. The following is taken from an interview with the victim in Harare, Zimbabwe, on 27<sup>th</sup> November 1998. The circumstances were confirmed by a representative of the demining company and an ex-pat Technical Advisor who was in Bosnia at the time.

The victim was part of a team who were clearing a road, using EBEX 420 detectors and prodders to locate mines, which were then disarmed. The standard practice was to mark a find with a stake and return to it later. On that particular road a total of 38 TMRP-6 (AT), PMA-3 and POMZ mines had been discovered previously.

The team were finishing their shift for the day and the victim was asked to mark the edge of the area that had been surveyed that day. As he walked to that point he trod on an undetected PMA-3. The victim was later told that the mine had been laid too deep for the detectors to locate. The victim was wearing military boots, leggings, a frag-jacket, and a helmet & visor.

The victim lost the outside part of his right foot and ankle, which was still in the process of healing when he was interviewed. He received no other injuries.

The victim was given first aid and then evacuated by road. On arrival at Teslic it was found that there were no trained staff to deal with an injury of this nature and he was driven on to Dobo, an additional 90 minute journey. He stayed there one night, when it was decided that amputation of his foot was not necessary, and then went to Tusla airport to be evacuated to Innsbruck Hospital in Austria. He stayed there for three weeks while undergoing operations to graft skin onto his foot. On October 14th he returned to Harare, Zimbabwe where he received further treatment.

His foot and ankle had been rebuilt and he was able to walk on it. However it was still very swollen, bandaged in places and soon became painful if he walked for any distance. He could not carry weights.

The victim received a one-off lump sum payment of Zimbabwe \$100,000. He claimed not to have ever seen a copy of the insurance policy that covered him but said he had been told he was covered to a maximum of DM300,000 [which was correct, for death].

The victim stated that he had not been offered another position with the demining company, and had found no other work since. [The demining company stated that he had been found other positions but had been too frequently sick (unrelated to his injury) to hold down work. He had refused their offer of employment as a security guard.]

In December 1999 one of the demining group managers reported that the victim had been re-employed in the field, see Related papers.

## Victim Report

<b>Victim number:</b> 289	<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> Z\$100,000 about US\$2,860	<b>Time to hospital:</b> not recorded
<b>Protection issued:</b> Frag jacket Long visor Trousers/leggings	<b>Protection used:</b> Frag jacket, Long visor, Leggings

### Summary of injuries:

INJURIES

severe Foot

COMMENT

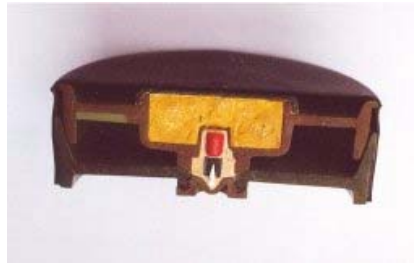
No medical report was made available.

## Analysis

The primary cause of this accident is listed as "*Unavoidable*" because the detectors were unable to locate the mine at the assessed depth and so everyone was apparently working appropriately prior to the accident. The secondary cause is listed as "*Inadequate equipment*".

Some blame may accrue to the commercial company's management for demining with a method that was not appropriate, but it is hard to think of any method that would be (trenching over wide areas to 20cm is simply not done, despite claims to the contrary). The level of protection the management provided was unusually high - presumably because they knew there was a risk of this kind of accident.

The injuries resulting from stepping on a PMA-3 vary from bruising to traumatic amputations. The picture below shows why this happens. It shows a cut-away section through a PMA-3. The 35g Tetryl is in the top and centre of the mine. The area of pressure-plate surrounding the HE is actually larger than the area of pressure-plate over it. If a victim is fortunate, they step on the pressure plate but the explosive charge is not beneath their foot.



## Related papers

A Technical Advisor with another demining group reported that the victim's boot "vented" with the upper split from the thick rubber sole. He was wearing leggings which protected his left foot and saved his left leg from fragmentation. The right legging was damaged. [This was South African made "Armadillo" body armour.] The crater was 20cm deep, from which it was inferred that the mine was around 17cm (under 7") below the surface.

The victim was covered by an insurance that limited disability definitions to the loss of limbs or specified functions. The fact that his foot was saved but that he still got compensation is in some contrast to the situation with two other deminers (working for the same company) injured in separate incidents on 19<sup>th</sup> July 1997. The demining company was not at fault over this - it having provided the insurance dictated by the funder.

In an interview in December 1999, the demining company stressed that all of the Victim's medical costs were met by the insurance required by the funder. He received compensation as a result of the statutory "workmen's compensation" insurance and other cover carried by the demining company in their home country. They added that the Victim had recovered and had only a "slight limp". He was on the payroll as a deminer again.