

# DDAS Accident Report

## Accident details

<b>Report date:</b> 15/03/2004	<b>Accident number:</b> 51
<b>Accident time:</b> 07:30	<b>Accident Date:</b> 08/07/1998
<b>Where it occurred:</b> Cap Agua (reservoir), Uige	<b>Country:</b> Angola
<b>Primary cause:</b> Field control inadequacy (?)	<b>Secondary cause:</b> Management/control inadequacy (?)
<b>Class:</b> Missed-mine accident	<b>Date of main report:</b> [No date recorded]
<b>ID original source:</b> TH/MB/GP undated	<b>Name of source:</b> INAROOE
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> PPM-2 AP blast	<b>Ground condition:</b> sandy
<b>Date record created:</b> 23/01/2004	<b>Date last modified:</b> 23/01/2004
<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>
<b>Map east:</b>	<b>Map north:</b>
<b>Map scale:</b> not recorded	<b>Map series:</b>
<b>Map edition:</b>	<b>Map sheet:</b>
<b>Map name:</b>	

## Accident Notes

inadequate equipment (?)  
visor not worn or worn raised (?)  
no independent investigation available (?)  
inadequate area marking (?)

## Accident report

An undated accident report was on file at the Angolan MAC. Written in Portuguese by a team including an ex-pat Training Officer assigned to the group involved in the accident, the following summarises its content.

The report stated that the accident area was mined with PPM-2s laid in defence of water tanks, and its perimeter was fenced with barbed wire. The Board of Inquiry visited the site on 15<sup>th</sup> and 16<sup>th</sup> of July [text actually recorded "June"] 1998. Demining had ceased after the

accident. The ground was flat with sparse vegetation and the soil was sandy and compact allowing the use of a mine detector. However, the extent of metal contamination made detecting unfeasible for the type of mines already encountered. The deminers were clearing exploratory lanes to find the direction and density of the minefield. It was found that type PPM-2 AP mines had been laid 2m apart and in the pattern of a semi-circle.

At 07:30, [or 08:15 elsewhere] having only cleared a meter, the victim noticed that the marking stakes ahead of him were out of alignment so went into the adjoining exploratory lane to reposition them. He pushed a stake onto a mine that was on the border of the lane. He suffered light injuries on both arms. A quantity of earth was thrown up into his eyes, the skin of his face was lacerated and his right hand became inflamed. He was not wearing a visor. No one else was injured.

The paramedics attended the victim before he was taken to hospital in Uige where he was "put on a drip". The local hospital did not have medication suitable for the treatment of the victim's injuries. Later that day he was "flown" to Luanda Military Hospital. At the time of the report the victim had already recovered his sight.

### **Conclusion**

The investigators concluded that the victim was negligent because he did not inspect the lane before starting work. They found no weaknesses in the training of the persons involved but observed that the marking of the minefield prevented adequate control and that the base lane was 1m wide instead of 2m wide. They also noted that a number of openings into the minefield were not marked and concluded that there were failings in the system of command and control by the Section Chief.

A separate conclusion was that a delay in receipt of salaries had affected the morale of the deminers.

### **Recommendations**

The investigators did not think it necessary to modify training or SOPs. They recommended that other excavation equipment be used because deminers reported their current trowel was too heavy, and on hard ground they preferred to use bayonets. They further recommended that mined area markings be corrected and that the base lane should be completed to a width of 2m before demining was resumed.

## **Victim Report**

<b>Victim number:</b> 70	<b>Name:</b> [Name removed]
<b>Age:</b>	<b>Gender:</b> Male
<b>Status:</b> deminer	<b>Fit for work:</b> presumed
<b>Compensation:</b> not made available	<b>Time to hospital:</b> not recorded
<b>Protection issued:</b> Frontal apron Long visor	<b>Protection used:</b> Frontal apron

### **Summary of injuries:**

INJURIES

minor Arms

minor Eyes

minor Face

minor Hand

COMMENT

No medical report was made available.

## **Analysis**

The primary cause of this accident is listed as a "*Field control inadequacy*" because the victim was operating in breach of SOPs but went uncorrected.

Unusually, the accident investigators identified their own primary causes of the accident. They blamed the failure of demining group managers to ensure that the deminers were paid and the issue of inappropriate excavation tools. Accordingly, the secondary cause is listed as a "*Management/control inadequacy*".

The failure to clear to the edge of the lane and an overlap was not identified by the investigators.