

DDAS Accident Report

Accident details

Report date: 24/06/2008	Accident number: 582
Accident time: Not recorded	Accident Date: 03/08/1999
Where it occurred: Chinandega Region	Country: Nicaragua
Primary cause: Inadequate equipment (?)	Secondary cause: Inadequate training (?)
Class: Excavation accident	Date of main report: None
ID original source: RG	Name of source: Printed report
Organisation: [Name removed]	
Mine/device: PMN AP blast	Ground condition: steep slope
Date record created:	Date last modified: 24/06/2008
No of victims: 1	No of documents: 1

Map details

Longitude:	Latitude:
Alt. coord. system: Not recorded	Coordinates fixed by:
Map east:	Map north:
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

inadequate equipment (?)
inadequate investigation (?)
no independent investigation available (?)
inadequate training (?)
squatting/kneeling to excavate (?)

Accident report

The details of this accident are taken from the publication "Minas Antipersonal y Desminado en Nicaragua, Avances y Limitaciones" (Antipersonnel mines and demining in Nicaragua, Advances and Limitations) published by Centro de Estudios Internacionales (CEI), Managua, March 1999. Those details are augmented by an interview with the medic involved. An internal army Board of Inquiry report was not made available. This record will be revised if more information becomes available.

The Medic is a qualified doctor with two years experience in emergency medicine in a regional hospital in Rivas, Southern Nicaragua and five years in a major hospital in Managua. He applied for the demining work because it had better conditions and pay than the national health system. He joined the demining programme on 1 March 1999. US Army advisors and trainers were involved.

All demining in Nicaragua is officially done by the army, with OEA observers present.

"According to military records, by January 1999 there had been 12 deaths of military personnel and another 78 had suffered injuries during demining activities. " [Page 15.]

According to the Medic many accidents occurred while moving concrete fence posts and fence wires that marked the boundaries of the mined areas and had fallen or been pushed on to the mines, Many other accidents occurred while prodding.

The hospitals which specialise in attending mine victims are Aldo Chavarria [Rehabilitation Hospital] and Davila Bolanos Hospital (both in Managua) and the Red Cross.

The demining teams have an ambulance and medic (fully qualified doctor) and have helicopter transport available for transport to hospital. The helicopter is not on standby but is a military helicopter that is made available for hospital transport. As is a small country it is unlikely that flight time would be more than 30 minutes each way.

The Medic interviewed had attended two accidents [See also DDASaccident583].

On 3rd August 1999 demining was being conducted in the Chinandega Region of Nicaragua 1400 m above sea level in the mountains. Mines had been placed in dense protective strips by Sandinista forces. Almost all mines found were PMN AP blast mines.

A deminer detonated a mine while about to undertake prodding/excavation of a metal-detector indication. It is thought that the light plastic cross used as a marker for the metal-detector indication got moved by the wind and he knelt directly onto the mine.

The Victim suffered an above knee amputation, his arm suffered multiple fractures and he lost several fingertips. He was evacuated successfully by helicopter and was later sent to Cuba for Orthopedic surgery. His arm was subsequently saved by surgery in Cuba.

The Victim was wearing padded over-trousers which were intended to provide protection. The Doctor reported that he had seen three accidents where the trousers simply didn't work and got blown apart. The trousers were blown apart in this accident.

[No further information about PPE was made available.]

Victim Report

Victim number: 758	Name: [Name removed]
Age:	Gender: Male
Status: deminer	Fit for work: not known
Compensation: Not made available	Time to hospital: Not recorded
Protection issued: Trousers/leggings Not recorded	Protection used: Trousers/leggings, other not recorded

Summary of injuries:

severe Arm

severe Hand

AMPUTATION/LOSS: Leg Above knee; Fingers

COMMENT: No Medical report was made available.

Analysis

The primary cause of this accident is listed as “Inadequate equipment” because it seems that the lightweight signal-indication marker was moved in high wind. The secondary cause is listed as “Inadequate training” because it is possible that the deminer failed to centre his detector reading properly. The presence of high wind on a mountain top might have been anticipated and the use of marking that was moved by the wind should have been corrected by the field managers.

The failure of the deminer’s protective trousers when kneeling on a mine is to be expected. These may have been similar to the trousers issued by US advisors in Southern Africa. These were bomb-suit trousers with a Kevlar inner. Effective against fragmentation, the material may have added to the blast injury by adding hot nylon (Kevlar is a nylon) to the wounds.

The metal-detector given by the US advisors was probably a long-handled model with the battery box worn on the belt (it was in other places). This means that a deminer has to stand up and remove his detector before starting to excavate a metal-detector reading. This may explain why he did not remember where he had placed his marker and returned to kneel on top of the detector reading – especially if a base-stick was not used at the end of the lane.

The very large number of accidents suffered by this demining group raises questions about the quality of their Advisors and training.

This accident record will be revised if more information becomes available.