

# DDAS Accident Report

## Accident details

<b>Report date:</b> 12/07/2013	<b>Accident number:</b> 796
<b>Accident time:</b> 10:02	<b>Accident Date:</b> 04/12/2011
<b>Where it occurred:</b> Henaya Military Compound. 9km from Adjabiya	<b>Country:</b> Libya
<b>Primary cause:</b> Victim inattention (?)	<b>Secondary cause:</b> Management/control inadequacy (?)
<b>Class:</b> Handling accident	<b>Date of main report:</b> 05/12/2011
<b>ID original source:</b> None	<b>Name of source:</b> Demining group
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> Fuze	<b>Ground condition:</b> demolition site (explosives)
<b>Date record created:</b>	<b>Date last modified:</b> 12/07/2013
<b>No of victims:</b> 3	<b>No of documents:</b> 1

## Map details

<b>Longitude:</b>	<b>Latitude:</b>
<b>Alt. coord. system:</b> MGRS-WJS 84 34R 0424349 3396260	<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 investigation (?)  
no independent investigation available (?)  
protective equipment not worn (?)  
visor not worn or worn raised (?)

## Accident report

Access to the report of the internal report of this accident was granted by the demining group involved when in 2012. It is reproduced below, edited for anonymity.

### Internal Demining Group Accident Report

BAC Task N° 01/11/2011. AJDABIYA/ Henaya Military Compound

Date, Time of accident: 4th DEC 2011- 10.02 AM hrs  
Date of the initial report: 4th DEC 2011  
Date of the complete accident report: 5th DEC 2011  
Name of accident investigator: TFM [Name removed].

Name of casualties:  
[Victim No.1 (ISS)  
[Victim No.2] (SEARCHER)  
[Victim No.3] (SEARCHER)

Date and Time. 4th December 2011 at 10.02 AM  
Ground conditions. The soil is sandy soil  
Weather conditions. The recent weather has been sunny and the sand was dry at the time of the incident.  
Location. The accident occurred: in a cleared area (road often used and no evidence of ERW). [Sic: the accident occurred in a demolition pit.]

#### **Sub team details.**

The sub team is a WRA and DFIT granted one. The team was preparing a demolition for the 5th December. This task was planned, NOTAM and authorization from JMACT and NTC.

- This sub team was composed as per: 1 ISS (EOD 3), 2 Paramedic, 1 ambulance driver and 3 searchers.
- The number of PARAMEDIC (2) dedicated to this task is due to the danger of this task: Removal of ERW.
- The sub team was dedicated on demolition pit preparation by one TFM. Most of the ERW are damaged and need a particular attention.
- The ISS is qualified as level 3 EOD.

#### **Team Leader and Supervisor Details.**

ISS [Victim No.1] is EOD level 3 qualified. He is working [Demining Group] sine 1999 starting as basic deminer. ISS [Victim No.1] is a three year experience international supervisor & instructor in [Demining Group] Lebanon and [Demining Group] Iraq

#### **Method of clearance.**

The accident did not happen during a clearance task but during the preparation of one of the demolition pits.

The Sub team dedicated in this task was closely managed by the ISS.

The ISS was in charge of implementing fuses in a particular pit dedicated for this demolition. ERW to be transferred from the top of the crater to the demolition pit by hand.

Minimum personal required was present close to the pit.

#### **Original Initial Accident Report**

The initial accident report as been done less than 30 minutes after the accident by phone to the TFM [Name removed].

It was impossible to reach the TOM or the country director.

JMACT and NTC have been informed about the accident by phone.

The TOM sent later in the day the e-copy of the initial accident report to: JMACT ([Names removed], TOM [Name removed], and [Demining Group] HQ.

#### **Description of events:**

##### **Short history of the minefield.**

The area concerned is in [Demining Group] CDS, 3km from a Libyan Army Ammunition Supply Point that had also been used to store a large quantity of "ready for use" munitions. This place is called HNYA. This CDS is accredited by JMACT and NTC since June 2010.

The control point is sited on a cleared area (1000 m from the demolition pits). This area has been cleared by the WRA team deployed under TFM [Name removed] management.

**Procedure carried out that day.**

The ISS briefed to the sub team on CASEVAC procedure, then on rules for this site preparation. MEDIC support with radio communication to stay close in the control point. The ISS and the sub team were in charge to collect and implement ERW from the store point to the demolition point. The demolition was to be carried out on the 5th December 2011 due to NOTAM authorization. The Sub team was currently preparing the fuse pit as per required on the BAC clearance plan.

**Sub team actions that day.**

The concerned sub team was managed by the ISS. They first prepare manually the pit. The transport of the fuses from the store to the pit was done manually using sand cases carried by two searchers. Phase 1: the ISS start implementing 14.7 mm cartridges around the place dedicated to receive the fuses, and to contain properly the detonation for more efficiency. Phase 2: implementation of the fuses in the pit, the ISS receives the fuses from one searcher. Transfer of the sand case (top of the demolition pit) was done by hand. Transfer of fuses to the demolition pit was done by hand. The 2rd searcher was part of the transfer due to the distance from the stored case to the pit.

**Events leading up to the accident.**

At 10.02 AM, During the transfer of the fuses from Searcher [Victim No.2] to ISS [Victim No.1], one fuse fall on the soil and detonate close to the right foot of the ISS. Injures occurred to small metallic parts of the fuse.

The ISS was in the bottom of the crater. His right foot in the demolition place, his left one out of the hole. This position was to ensure a stable position to the ISS.

The ISS was injured on several parts of the body (front of the right leg, back of the left one, and face) the most important injury is the right foot.

Searcher [Victim No.2] was injured on the right eye. Searcher [Victim No.2] was close to the ISS providing him the fuses manually.

Searcher [Victim No.3] was injured on the left hand and right leg, He was at that time 1/2 way from the top of the crater. In charge of providing manually fuses to the ISS.

Immediate first aid was applied to the wounds sustained by the on- site medic and the casualties was transported to the local hospital in Hajdabiya (10.45 AM). X-rays indicate several small metal fragments entered in the bodies (see injuries). It was deemed necessary by the doctors to surgically remove the fragments and [Victim No.2] was released shortly thereafter.

ISS [Victim No.1] and searcher [Victim No.3] has been transferred to Bengasi hospital for more surgically remove. (02.40 PM).

It is suspected that the accident was caused by some flash/spit fuse probably from an artillery projectile, as to how it was activated is probably due to the following:

During the transfer from the searcher to the ISS, the fuse fell down close to his right foot for an unknown reason.

The fuse detonates causing the most important injuries to the ISS. And shrapnel hit the closer searcher in the right eye. Others fragments hit the second searcher in left hand and right leg.

TFM [Name removed] in charge with the current BAC 3000 m away from the CDS, reports immediately to another TFM [Name removed] for support on reporting to the CD. He suspends immediately his own task to start the accident investigation.

**Details of last visit by a TFM to the site.**

The TFM in charge of this task (ASP clearance and ERW demolition) is daily deployed in the ASSP. He is monitoring the team during working hours. He was at the accident time. He was approximately 300m far from the control point monitoring the BAC. The site and infrastructures do not permit to the TFM to have a look on the Control Point. He is connected to the medical support using a radio communication system.

**Personnel interviewed.**

[All three victims.]

- The casualties received the basic EOD training few weeks ago.
- ISS [Victim No.1 provides a briefing to the sub team and to the medical support before starting the demolition pit set up.
- The accident happened at 10.02 AM during the working hours of the sub team.
- This accident happens after one hour work in this place.

[A section is omitted because it had been unchanged from a previous accident report and so was out of place.]

The task was ongoing since one hour.

The site is in accordance with [Demining Group] exigencies.

All personal as been briefed correctly at the beginning of the work by the ISS.

**Observations, Conclusions and Recommendations.**

There is no fault from any [Demining Group]'s employees involved in this accident.

**Pictures and comments:**

Demolition pit in HYNA area, 9 km East from Ajdabiya





Detonation point  
 Sand bag damaged by the detonation

14,5 mm and parts of ERW kicked and removed out the sand bag by the detonation



Right shoe. No evidence of a detonation under the shoe. Evidence of fragmentation hitting this part of the foot.

A brief "initial report" listed the Victims' injuries as:  
 (1): Right feet, Right knee, Back of left leg, Stomach, Face  
 (2): Face and left eye  
 (3): Right Hand right leg

### Victim Report

<b>Victim number:</b> 987	<b>Name:</b> [Name removed]
<b>Age:</b>	<b>Gender:</b> Male
<b>Status:</b> supervisory	<b>Fit for work:</b> yes
<b>Compensation:</b> Not made available	<b>Time to hospital:</b> Not recorded
<b>Protection issued:</b> Not recorded	<b>Protection used:</b> None

**Summary of injuries:**

INJURIES: minor Body; minor Face; minor Leg; severe Foot; severe Leg

COMMENT: No Medical report was made available

**Victim Report**

<b>Victim number:</b> 988	<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> Not made available	<b>Time to hospital:</b> Not recorded
<b>Protection issued:</b> Not recorded	<b>Protection used:</b> None

**Summary of injuries:**

INJURIES: minor Face; severe Eye

COMMENT: No Medical report was made available.

**Victim Report**

<b>Victim number:</b> 989	<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> Not made available	<b>Time to hospital:</b> Not recorded
<b>Protection issued:</b> Not recorded	<b>Protection used:</b> None

**Summary of injuries:**

INJURIES: minor Hand; minor Leg

COMMENT: No Medical report was made available

**Analysis**

The primary cause of the accident is listed as “Victim inattention” because the Victims dropped a fuze while transferring it from hand to hand. The secondary cause is listed as a “Management Control Inadequacy” because there were three people inside a partly loaded demolitions pit, all wearing no PPE, and this appears to have been acceptable to the group’s management. The IMAS are clear about the minimum PPE requirement and also about the maintenance of safety and working distances. The Demining group’s management failed to provide PPE or impose procedures that limited those at risk at any one time. Had Victim No.2 been issued with eye protection, his injury could have been avoided. Had Victim No.1 been issued with frontal body armour and face protection, most of his injuries could have been avoided. The Demining Group’s acceptance that three people should be inside the pit at any one time is strange and would have been in breach of many authorized Operating Procedures. However, BAC and demolitions are often not controlled with the same rigour as demining. It may be that by calling the Deminers “Searchers”, the rules applied to Deminers could be varied without technically breaching the groups approved SOPs.

The accident record shows that the most common accident with mixed ordnance is with fuzes and that severe eye injury often ensues. The wearing of eye protection while moving ordnance should be a minimum requirement for any responsible demining group concerned to maintain their Duty of care for their employees.

The failure of the self appointed authority in Libya at the time, UNMAS / JMACT to investigate this accident is strange. This record will be revised if an UNMAS report is ever made available.