

DDAS Accident Report

Accident details

Report date: 19/05/2006	Accident number: 384
Accident time: 13:20	Accident Date: 18/04/2002
Where it occurred: Kareza village, Mawat, Sharbazhier, Suleimanyah governorate	Country: Iraq
Primary cause: Unavoidable (?)	Secondary cause: Inadequate equipment (?)
Class: Excavation accident	Date of main report: 18/09/2002
ID original source: NPA/MAP/Adm/04-02	Name of source: ET:NPA
Organisation: Name removed	
Mine/device: Type 72 AP blast	Ground condition: grass/grazing area metal fragments
Date record created: 22/02/2004	Date last modified: 29/02/2004
No of victims: 1	No of documents: 1

Map details

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

Accident Notes

handtool may have increased injury (?)
inadequate investigation (?)
inadequate metal-detector (?)
inadequate equipment (?)
no independent investigation available (?)

Accident report

A summarised internal demining NGO report was made available in 2002. It is reproduced below, edited for anonymity.

Weather condition	Sunny day, temperate weather
Kind of accident	Mine explosion
Type of task	Manual demining in Markazaka minefield
Type of mine	AP blast Chinese T72-A
Tool & technique used:	Bayonet of Russian rifle AKM 7.62mm. Manual drill (excavation).

Victim:

Age	27 years
Marital state	Married
Position	Deminer

Type of injury: Superficial wounds on anterior aspect of both legs, right upper arm and thumb of left hand.

Board of inquiry comprised: Program Manager; Deputy Program Manager, Operations Officer; Medical Coordinator)

Summary

On 18th Apr 2002 one of our deminers activated a small AP mine while he was excavating the ground. The field in which the accident happened is high metal contaminated. Clearance is therefore conducted in such a way that once 15cm soil is removed, the detector is applied for verifying that no metal left. The deminer had excavated almost half of the lane along the base stick when the explosion happened. The deminer fell on the ground into the cleared area on his right side. He was immediately evacuated to the resting area where received first aid treatment by the team medic after which transported to the Emergency hospital in Suleimanya for further treatment.



[The picture above shows the site of the accident.]

Witnesses

Team leader: At 1:20 hrs, while I was monitoring the work on the right part of the field, happened an explosion and black smoke raised up from one of the lanes. I was at 20m distances from the accident. The deminers soon arrived the victim and evacuated him to the resting area within two minutes. The medic in the resting area did all necessary treatment then the victim was transported to Suli hospital at 1:40hrs.

Section leader: I was about 20m far from the explosion lane. The explosion happened and I just saw [the Victim] inside the smoke fall back. I shouted for help and I run toward him while informing the medic about the accident with my radio handset. The deminer [name excised] reached [the Victim] before me and he was trying to take off his vest. [The Victim] was conscious and he was talking. Only his right leg was bleeding. With a handkerchief I pressed the wound strongly. Soon others arrived at the scene then we put [the Victim] on the stretcher and evacuated him to the resting area.

Medic: I was in resting area when I heard a mine explosion and I saw a white smoke from the field rising into the air. Immediately I prepared my medical equipment awaiting receiving the victim. I received a radio call from the section leader about the accident. In a very short time they transported the victim. I took off all his clothes and boots. After intensive check I figured out that there is no severe injuries. I just done the necessary treatment and we transported him to the town.

Site brief

The lane starts with a slope to plane ground. Green grass, approx 25cm high, covered surface. The ground was wet due to the rain in the day before. All marking system and the clearance tapes were used correctly.

Only black mud and some small plastic pieces of the casing could be found in the explosion pit.

Protective Equipment

The protective equipment used were; British flack jacket, visor, Iraqi military helmet and gloves.

No penetration happened to the vest and the visor. The visor has very well protected the face and eyes.

The pictures below show the Victim's leather faced gardening glove and his helmet and visor.





Injured parts

All wounds were superficial caused by secondary fragmentation that comes from the thrown mud and stones.

Tool used

Bayonet of Russian rifle AKM 7.62mm.

The bayonet was found at a 5m distance from the accident area. A slight bending indicates that the explosion hit the side of the bayonet.

Reasons for the accident

Limited detection ability of the Vallon 1614b of T72-A mines (max 13cm).

The mine situated on side.

Most probably the mine was affected by weather and became more sensitive.

Continuous excavation, this would tire the deminer out and lead to less concentration.

Using right hand and excavating from the left to right of the base stick, this would likely allow generating pressure to uncleared area.

Conclusions

The mine was buried deeper than 10cm and positioned on side which led the Vallon not to detect it.

The bayonet didn't hit the mine directly, it pushed the earth and the earth disturbed the mine.

The visor was perpendicular to the explosion pit. That didn't allow the pressure to lift up the visor and consequently the face and both eyes were kept safe.

Mine/UXO incident/accident could happen to whoever deals with them. Profession could reduce the risk to minimum but never to zero.



Handling the bayonet was as illustrated.

Recommendations

1-2 days refreshment for all the deminers and the field leaders as to manual drill and tools applying in excavation.

Revising the drill with bayonet.

Emphasis on wearing the safety equipment properly, visor in particular.

Victim Report

Victim number: 501	Name: Name removed
Age: 27	Gender: Male
Status: deminer	Fit for work: yes
Compensation: Not made available	Time to hospital: Not recorded
Protection issued: Frag jacket Long visor Helmet	Protection used: Frag jacket; Helmet; Long visor

Summary of injuries:

INJURIES

minor Arms

minor Hand

minor Legs

COMMENT

No medical report was made available. The victim returned to work "very quickly".

Analysis

The primary cause of this accident is listed as "Unavoidable" because it seems that the Victim was working properly in accordance with widely used SOPs. The secondary cause is listed as "Inadequate equipment" because the investigators found that the Vallon detector had "limited" ability. The short bayonet may also have been an inadequate tool.

This accident is listed as having had an "inadequate investigation" in the Notes because the investigation was "internal" and, while being fairly thorough, it does not include all of the recommended features of an IMAS compliant accident investigation.