DDAS Accident Report

Accident details

Report date: 05/08/2005 Accident number: 422

Accident time: 10:15 Accident Date: 24/05/2004

Where it occurred: Demining group Country: Albania

Office/Training classroom, Kukes

Primary cause: Inadequate training (?) **Secondary cause:** Management/control

inadequacy (?)

Class: Handling accident Date of main report: 30/06/2004

ID original source: FB Name of source: FB

Organisation: Name removed

Mine/device: KB1 submunition Ground condition: not applicable

Date record created: 05/08/2005 Date last modified: 05/08/2005

No of victims: 4 No of documents: 2

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 training (?)

Accident report

The Bol report of this accident was made available in May 2005. It is reproduced below, edited for anonymity

Preamble

To deal with the remnants of war is a dangerous job. The International Mine Action community worldwide, unfortunately, has to accept that accidents in Mine Action will happen and that such accidents will have a human and material cost. Even though Mine Action has developed regulations, guidelines and procedures (e.g.: the International Mine Action Standards (IMAS), the human factor is always present and can never be fully eliminated.

On 24 May 2004, at approximately 10:15 hours, a KB1 bomblet exploded in the training classroom of the [Demining group] Office at Kukes, Republic of Albania.

The BOI is very aware of the tragedy that this accident has brought to the families and relatives of the deceased and to the causalities themselves, and wishes to express its deep regret and condolences to all of the persons and families involved.

The event points out the terrible effect that such sub munitions can have, and the BOI underlines the fact that in the Northeast of Albania, there are still thousands of such submunitions, along with other UXO and landmines lying in the fields and waiting for victims. This accident has created considerable delay in the implementation of planned activities to reduce this threat to the Albanian people. The BOI hopes that this report and its recommendations will contribute to the renewal of conditions where mine/UXO clearance in Albania can be rapidly restored. The BOI agrees that the population in Albania does not deserve any further delay in clearance of the remnants of war which pollute their environment and which have caused almost 250 recorded deaths and casualties.

The BOI has concluded that the terrible event of 24 May was an accident that was ultimately preventable as it was the result of an error of procedure. The accident is highly regrettable and certainly tragic, but for the BOI an error of procedure does not constitute an act of criminal negligence. The BOI expresses its hope that current criminal investigations involving two [Demining group] personnel will shortly come to the same conclusion, and that criminal prosecution against them will be dropped.

In this case, the accident happened to [Demining group], but the members of the BOI are also aware that similar events have taken place elsewhere. The BOI would also not be surprised to find that the potential conditions for this type of accident are present in a significant number of places where Mine Action is taking place today. For that reason, the BOI has made a number of recommendations, not only for the agencies involved directly in this accident, but also for the governments around the world which have created similar projects and programmes within their borders, and for the international agencies and organisations, such as UNMAS and UNDP, which play key roles in encouraging and sustaining the quality of humanitarian Mine Action.

1 Methodology

The Board of Inquiry convened at 0900 hours on Tuesday, 21 June 2004 in the Gjallica Hotel in Kukes. The BOI adjourned on Tuesday, 29 June 2004 at approximately 1830 hours. The Board members are listed in the ToR of the BOI which is included in the Annexes to this report. In total, six working days were dedicated to intensive group work, interviews and discussion; while two weekend days (26 and 27 June) were used to by the members of the board to consider the various elements of the investigation individually. Background documentation was collected from [Demining group] and other sources. This documentation served as a starting point and foundation for the investigations which were principally carried out via interviews with personnel involved in the project and in the accident, and by both closed (no notes) and open (notes taken) discussions of the implications of various events. Five [Demining group] personnel and five national trainees were interviewed based on guideline questionnaires developed by the BOI members. One person from the AMAE was also interviewed. The scope of the investigation was the immediate activities prior to the accident, the accident itself and the actions of the persons involved at that time and in the immediate aftermath of the event. Concrete evidence on other events, especially those prior to or later than that period, was insufficient to allow reasonable analysis and investigation.

It is important to note that the context and environment of this investigation was unusual in two ways. Both contributed to a rather long delay in undertaking a technical inquiry on the accident.

First, in the immediate aftermath of the accident, a criminal investigation was launched by the Kukes Police and Prosecutor's Office. Although an attempt was made by [Demining group] and AMAE staff to conduct an immediate preliminary accident investigation, the local police investigation took precedence and quickly blocked any attempt to undertake it. Access to the scene itself, at first allowed, was as quickly disallowed once the criminal investigation began

in earnest. Physical evidence and the statements of participants, victims and witnesses were and are still held by the police and the Prosecutor's Office. The BOI regrets that it has not been allowed access to this perhaps useful body of information and evidence. In addition, by the early evening on the day of the accident, the [Demining group] PM and [Demining group] ATA, were remanded to Kukes jail, where they were held essentially incommunicado for several days. Even once they could be visited at the jail, approximately five days after the accident, conditions of visit did not allow for reasonable interviews. The two [Demining group] personnel were released on bail (provided by [Demining group]) approximately three weeks after the accident. They are currently at liberty, but at the time of writing this report, they are still under official investigation and required to hold themselves available to the Kukes Prosecutor on 24 hour's notice.

Second, the catastrophic character of the accident in terms of the number of victims, and the rather complex local situation disallowed an immediate convening of a Mine Action inquiry. The victims, in varying states of distress and danger from their wounds, had to be followed up in three different hospitals in two different countries. Local distress at the accident, particularly in the case of the families of the two fatalities, created a tense atmosphere for some time in and around Kukes town which also made local follow up difficult for all involved.

This report follows a general outline for the report of the Board of Inquiry as set out in the ToR for the investigation issued by the Director, AMAE, on 16 June 2004.

2 Investigation

2.1 When, where and how the accident happened.

The accident happened at approximately 1015 hours at the [Demining group] Training classroom in Kukes. A KB1 bomblet, presumed to be FFE or inert, and that was in use as a training aid, exploded while being passed hand to hand among the students in the class.

2.2 The cause, nature and extent of damage to the mine action programme in Albania or to private property.

Damage to the Albanian Mine Action Programme

There was no damage to material or equipment belonging to UNDP or to the MAP Albania.

The accident has, of course, suspended the current project for over one month as of the date of this report. This has created a delay in the implementation schedule for the Technical Survey in Northeast Albania. This will have cost implications for the project as well as for the overall programme. There will also be costs to the project for expenditures for certain running costs during its suspension, and certain expenses in dealing with the aftermath of the accident.

Damage to Private Property

Private Property damage was confined to the premises in which the accident took place. Such damage included several broken light fixtures, several panes of glass in a window and in a skylight, fragmentation damage to the walls, and a broken tile and hole in the concrete underfloor at the seat of the explosion. This damage was repaired before the BOI was able to investigate the premises. The cost of these repairs, set by the owner, was approximately USD 75, which has already been paid by [the Demining group].

2.3 The cause, nature and extent of injuries caused as a result of the accident.

Two persons were killed. Fifteen others were injured sufficiently to spend some period of time in the hospital. Several others treated for minor wounds and immediately released.

One person was wounded severely enough to be evacuated to an Italian hospital at Brindisi under a standing agreement between the Albanian and Italian governments for severe emergency cases. At the date of this report, this person has recovered and is returning to

Albania in the next days. At the time of this report, only one person is still in hospital at the Military Hospital in Tirana, while several others are still on close out-patient treatment.

2.4 The level of training and experience of the people involved in the accident.

2.4.1 Albanian personnel

Thirty-four Albanian trainees were in the classroom at the moment of the accident. Of these, the level of training and experience varied. A number had already been trained and had gained experience in BAC/EOD and demining in the Albanian Army and in other agencies formerly engaged in mine survey and clearance operations in Albania.

2.4.2 [Demining group] personnel

PM – (International – UK)

Twenty-five years in UK Army as EOD and mine expert. Former head of the an EOD training unit. Wide range of field and training experience.

ATA – (International – BiH)

Former member of Bosnian Army. Training in BiH army. Training by [Demining group] in BiH in 1996-7. Work with [Demining group] 1996-1999 in BiH (Bihac). In Kosovo as ATA with [Demining group] 1999-2001. Has also worked for [Demining group] in Iraq in 2003 (Team Leader/TA) and in Macedonia 2002-3 as STA. Worked also with ELS in Iraq.

[Demining group] Supervisors (International - Kosovo)

Training and experience in posts of increasing responsibility by [Demining group] since 1999 in Kosovo. Training and experience by [Demining group] also in all aspects of EOD, Technical Survey, demining, BAC in Kosovo.

2.5 The work timings for the period leading up to the accident.

Operations had not yet begun. The teams were beginning the last week of a six week course. Work was training in both classroom and field. The schedule of classes throughout the training period had been accelerated to make up for previous delays in the early implementation of the project because of contract difficulties and difficulties in procurement and delivery of some essential materials and equipment.

2.6 The dates of the last monitoring period (internal, external) until the accident happened and the results of this monitoring.

<u>Internal</u>

[Demining group] Weekly reports are available at annex. [Not made available.]

External

AMAE Kukes reports available at annex. [Not made available.]

2.7 The dates of the last revision training of the [Demining group] supervisors and monitors.

Revision training for the [Demining group] Kosovar supervisors and monitors was held from 13 – 16 April 2004 by [Demining group] in Kosovo specifically in preparation for their roles as Trainers/Supervisors in the Albanian Technical Survey project.

2.8 Whether medical treatment and evacuation were adequate or in anyway contributed to the injuries or death.

According to witnesses and participants, all personnel were cleared from the accident scene and all injured were at the Kukes hospital, located just several minutes by vehicle from the accident scene, within 10 to 15 minutes of the accident.

Reactivity of the medical and support staff of the hospital at Kukes was effective, rapid, and professional.

Once notified, the Albanian Ministry of Health dispatched helicopters to Kukes for the evacuation of the more severely wounded. This service was also prompt and efficient. Most of those evacuated, already stabilized at the Kukes Hospital, arrived at the Military Hospital in Tirana within a few hours of the accident.

2.9 Whether the death, injury or damage was contributed or caused by:

2.9.1 Neglect, carelessness, or misconduct by the members or other persons involved the use of drugs, alcohol or medication.

There is no evidence of abuse of drugs alcohol or medication among any of the [Demining group] personnel involved, nor among the student deminers.

There is no evidence of misconduct which contributed to the accident.

Evidence strongly suggests that no person, whether student, trainer or manager, involved in the handling of the device before it exploded was aware that it was live. It was handled on numerous occasions, sometimes by students, more often by the instructors, in a manner that, had they known it was live, would have been inconsistent with their training and experience, as well as with their simple sense of self-preservation. In particular, the instructors, both international and Kosovar, handled and showed the KB1 to the class on at least two occasions where their handling of the item was completely consistent with the belief that it was inert or FFE. There is no evidence of conscious neglect or carelessness in any aspect of the use of the KB1 or, indeed, in any aspect of the use of any other of the FFE objects used in the training.

2.9.2 Any non-compliance with orders, instructions or safety procedures.

IMAS 10.50, in particular its Annex H, provides clear guidelines for maintaining control and consistent documentation of inert or FFE items which are to be used for any purpose. The collection of FFE training items which [Demining group] has used in multiple training courses over the past several years in Kosovo were provided originally to [Demining group] via UNMIK (or earlier UNMACC Kosovo) and the documentation on these items (origin: KFOR) is consistent with commonly accepted practice. The BOI notes that the KB1 that was the cause of the accident was not included in this list.

2.9.3 Any shortfall in training of members involved.

All members of the [Demining group] staff had proper, appropriate and sufficient training to carry out their duties at their level of responsibility and have been Level 2 EOD qualified within the commonly accepted parameters for national staff in Kosovo. All are experienced in the conduct of EOD/BAC operations and had worked with and were familiar with various types of sub munitions loosely grouped in the same "family" of UXO as the KB1 (e.g. BLU97, BL755). It should be noted however, that due to the fact that the KB1 is not found in Kosovo, where the [Demining group] Supervisors had received their training and had gained their experience, their knowledge in regard to the KB1 was more theoretical than practical. In the end, this simple fact may have contributed somewhat to the conditions that led to the accident.

2.9.4 Any weakness in the method of command and control.

The events in the immediate aftermath of the accident showed that command and control by [Demining group] personnel during this period was not decisive. Although all participated in various aspects of controlling the situation, including providing first aid to the wounded, transport of the wounded and of the dead, securing the accident site, and informing appropriate authorities of the accident, the overall character of the evacuation operation was chaotic and inconsistent with SOP. It should be noted however, that all [Demining group]

personnel in Kukes at the time of the accident (the ATA and three supervisors) were in the classroom at the time of the explosion of the KB1 and no doubt suffered the same extreme shock, confusion and distress as the national personnel. All were also held by Police at the station for questioning for much of the afternoon and evening following the accident.

The [Demining group] Project Manager (PM), senior [Demining group] representative on the project, was in fact in Djakova, Kosovo attending to project business there when the accident occurred. He did not arrive in Kukes until over an hour after the accident and, in general, his actions were constrained by police questioning immediately upon arrival, re-questioning later in the afternoon at the Police Station, and his arrest and detention (with the [Demining group] ATA) early the same evening. During the short period when he was not under police control, photographs taken by the PM at the scene were the only ones available to the BOI during its investigation.

Other international staff of [Demining group] were also in Kosovo. However, at the time of the accident, most were in the field in support of the [Demining group] project there. The PM for the [Demining group] Kosovo Programme was on leave in the UK at the time of the accident and was able to return only several days later.

The [Demining group] Director for its Regional Programme in Southeast Europe (DPSEERMAP) is based in Pristina, Kosovo. His actions on the first day were essentially administrative (notification of HQ in France and updates, insurance notification, and related issues). The DPSEERMAP was therefore not able to reach Kukes until the day following the accident.

In the longer term aftermath of the accident, the issue of the incarceration of the two [Demining group] staff and their being held incommunicado for several days added an unexpected and disturbing dimension to the [Demining group] follow-up.

The [Demining group] project was in the final week of a six week training course when the accident occurred. Final accreditation of [Demining group] from AMAE, which in itself required completion of the training, was expected by the end of that week, and field operations were scheduled to begin in the following week. The project, and therefore [Demining group], was therefore not yet officially accredited to AMAE. The project was also not yet considered to be operational. In this final week of the project, there remained a number of operational details still to be finalised. These aspects, linked to the timing of the accident within the period of final build-up to operations, may eventually have had an effect on the ability of [Demining group] and its personnel to be more responsive in the immediate term.

Since the training, particularly in the classroom, was not considered as operational, no ambulance was available at the scene. A safety vehicle, i.e. by definition one that carried a full medical kit was, however, present. Nevertheless, the three [Demining group] vehicles present had neither stand-by drivers on hand, nor was any plan in place for the use of the vehicles in emergency. In the confusion after the accident, keys for the vehicles were not readily available and the vehicles were in fact little used in the evacuation of personnel from the [Demining group] classroom to the hospital. In the event, local vehicles passing by were stopped and commandeered for this task. (The drivers of these vehicles were in the end perhaps more in condition to drive than any [Demining group] personnel or students still in shock from the accident.) During the aftermath of the accident it was confirmed, as already known, that the network coverage for the mobile telephones carried by the [Demining group] team members was spotty and inadequate. There were also problems with radio communications with [Demining group] base Diakova once this method of communication was brought into play. Indeed, however, since the training and classroom instruction was not considered by [Demining group] to be an operational exercise, no pre-checks on comms had been carried out prior to the start of the day's activities. There was no stand-by medic as such although five of the six national medics for the project were in the classroom (at least one being among the more severely wounded).

All of the factors above eventually contributed to a less than ideal [Demining group] emergency response immediately post-accident, although many could be considered circumstantial and particular to the moment within the project's overall programme planning.

2.9.5 Health of all persons involved in the accident.

The health of all persons involved whether student or trainer was good. The health of the involved personnel was not a factor in the accident.

2.10 Whether any immediate action is required to prevent recurrence of the accident.

All training items in the possession of [Demining group], regardless of provenance and documentation, have been re-checked by [Demining group] specialists and all documentation has been brought up to date. In addition, a new SOP regarding the use and control of such items has already been drafted. AMAE should instruct all Mine Action agencies working in Albania to immediately control their records regarding any existing and recorded collections of training aids.

2.11 Temporal sequence of action after the accident until the injured were in the care of the hospital.

The explosion of the KB1 took place at approximately 1015 hours on Monday, 24 June 2004. The accident took place in an enclosed area. Literally all of the students and trainers were affected, at least momentarily, by the shock of the blast. Nevertheless, all personnel except the wounded were clear from the classroom almost immediately. All of the wounded were in hospital and receiving medical treatment within approximately 10 to 15 minutes of the explosion. Some are estimated to have arrived at the hospital as quickly as 5-7 minutes after the blast. Under the circumstances this was an extraordinary result. Three facts contributed to this excellent result. First, the distance from the site of the accident to the hospital is not over two kilometres. Second, at that time of the day, there is considerable vehicle traffic in the immediate area of the [Demining group] classroom and office. Third the local population showed no hesitation in assisting in the evacuation of the wounded. Indeed, almost all of the wounded were transported to hospital in private vehicles.

3. Conclusions

The accident from the 24th May 2004 in Kukes was caused by a procedural error in the handling of potentially explosive objects.

The BOI does not believe that the event was the result of any criminal action, sabotage or any other intentional act by the personnel involved.

- 3.1 The key facts contributing to the accident including shortfalls in procedure:
 - The KB1 was never verified to be FFE.
 - The [Demining group] staff assumed that the KB1 was FFE.
 - The KB1 was introduced into the training material.
 - Students did not consider the KB1 to be live.

3.2 Was this accident preventable or non-preventable.

The accident was found to be preventable through the correct application of existing procedures.

4. Recommendations

4.1 Modifications to Training

Training in management of FFE and inert items or a collection of such items should be reinforced across the board using IMAS 10.50 and in particular its Annex H as a guideline. All

personnel using such items whether responsible for their management or not should be fully aware that the conditions for error can exist and that in the case of any suspicion of the item, a question to the proper authority on that item will be welcomed and have a proper response. It is suggested that a full and numbered list of items on display, duly signed by the person responsible for the collection, be posted prominently whenever and wherever such items are on display. Such displays, especially where left in the open, should be regularly confirmed against the posted list to insure that no extraneous items "find their way" into the collection (see also Modifications to SOP below).

4.2 Modifications of Equipment

Equipment capability or fitness for task did not play a role in the accident. No equipment recommendations are therefore in order in the context of this investigation.

4.3 Modifications of SOP

The general circumstances of the accident were widely known quite rapidly both in the immediate region and, through press reports and other means, throughout the mine action community. It would be surprising to find that any reasonable agency or national entity possessing such training items, whether they be replica or (assumed to be) inert or FFE items has not already taken steps to reconfirm the condition and documentation of its stock of such items and, where necessary, brought the condition of those items as well as accompanying documentation up to date. However, to avoid error by omission, all national MA authorities, as well as any UN led MA operations, should be immediately advised to hold a review of their collections, and those of any operators under their control.

It should also be noted that this is not the first accident of this type to take place, although most of those have fortunately not resulted in such a large number of serious casualties and fatalities. The IMAS may be clear on this and, since many if not most of the personnel providing expert oversight to MA operations are ex-military, the normal regulations and controls of both regular armies and multi-lateral military organisations (such as NATO) are well known in the international MA community. Nevertheless, complacency in regard to some aspects of these regulations is rather the rule than the exception. In the humanitarian sector, training aids, including inert and FFE items, are regularly exchanged or loaned among operators, military units, and coordination bodies. A sense of mutual confidence and trust among those working together in various places, contributes to a certain laxity in following the letter of regulations. Over time, particularly in circumstances where regular rotations of personnel in and out of the overall operations area are concerned, a direct link between the originator of an FFE item or collection and those presently responsible for management of the collection becomes tenuous and dated. Added to this, many of the operations, and particularly that aspect of those operations pertaining to the training of new personnel, are conducted under the mutually reinforcing pressure of both time and funding. Since it is a fairly common occurrence among those working in the field to "discover" that ammunition and other ERW in various states have been dropped off by passers-by, it is also possible that items may turn-up in collections which have been added into the collection by error. Again, regular checks that collections and records match are recommended (see Modifications to Training above)

4.4 Other immediate or longer term actions necessary to prevent similar incidents from occurring in the future.

It is recommended that the AMAC (Albanian Mine Action Committee) should be informed of the various implications of the present accident/incident for future HMA operations, including some essential MEDEVAC issues such as the assured coverage of operations, where essential, by helicopter.

MEDEVAC coverage is a key element which will allow all MA operators to efficiently assist the Albanian government to fulfil its obligations as a State Party to the Ottawa Accords and to achieve its goal to become mine-free.

- 4.5 Recommendations for Operators.
- 4.5.1 [The Demining group] should review the suitability of its present Project Manager for his continuation in his present post in the Technical Survey Project in Albania.
- 4.5.2 Specific reference to IMAS 10.50 including ANNEX H should be made in the [Demining group] SOP and steps taken to assure routine compliance. (NB: the board notes that this has already been done.)
- 4.5.3 [The Demining group] and AMAE, in the ongoing process of accreditation which was suspended because of the accident, should assure that [Demining group] SOPs are in line with all aspects of the National Technical Safety Standards (TSS).
- 4.5.4 [The Demining group] should review its crisis management system in light of the accident in order to, where necessary, identify weak points, initiate corrections and strengthen its response capability to catastrophic accident. The [Demining group] SOPs in this regard should be modified as appropriate.
- 4.6 Recommendations on Handicap's Operations/Training Level:
- 4.6.1 [The Demining group] should review the suitability of its present Assistant Technical Advisor his continuation to his present post in the Technical Survey Project in Albania.
- 4.6.2 All [Demining group] supervisors should undergo refresher training about EOD basic rules, CASEVAC procedures and First Aid.
- 4.7 Recommendations to the International Mine Action Community
- 4.7.1 Accreditation procedures for all Mine/UXO clearance organizations (NGO or commercial) to a UN supported Mine Action Programme or to other controlling bodies (multi-lateral donor organisations, for example) should require a specific section or chapter on the control of inert and FFE objects, whatever the reason for their use.
- 4.7.2 The same accreditation procedures mentioned in the above subsection, should also contain clear procedures in regard to crisis management in case of incidents, accidents and other catastrophic events.
- 4.7.3 <u>All staff</u> from Mine/UXO clearance organizations should be aware of the potential for danger where poor control is maintained over inert or FFE materials, and be aware of their responsibilities in regard to questioning such practices as may seem to them to be out of line with general guidelines of good practice.
- 4.7.4 All organisations involved in Mine Action should review its controls over such materials and information as could lead inadequately prepared persons to assume a greater personal capability than they actually have. The Board recommends that the teaching of Render Safe Procedures (RSP) about any item be restricted to only those persons whose job or post specifically requires this knowledge for the performance of his or her functions. The BOI notes with some dismay that certain RSP appear to be available to the general public through websites.

4.7.5 Acknowledgements

The staff and doctors of the Meriman Jakupi Regional Hospital, Kukes

- The staff and doctors of the Central University Military Hospital, Tirana
- The staff and doctors of the Polyclinic, Brindisi, Italy
- To all of the staff and doctors of the three hospitals for their untiring efforts to bring care to the wounded and for their support to AMAE and [Demining group] in providing for both victims and their families during their stay at the hospitals
- The Italian Government and the Albanian Government for their role in arranging and carrying out the evacuation of the most seriously wounded person to the Polyclinic in Brindisi, Italy.
- The Prefect of Kukes for support in liaison and contact with the families of the wounded and dead. Also, as a doctor, in providing surgical support to the Kukes hospital during the immediate aftermath of the accident
- The Police, Kukes for support in liaison and contact with the families of the wounded and dead
- The Office of the UNDP, Tirana for its assistance to all parties
- HM Ambassador at the British Embassy, Tirana for support to the [Demining group] personnel during their incarceration at Kukes.
- AMAE Kukes for provision of the premises for the BOI.
- The BOI expresses its thanks to the agencies that provided personnel for participation in the BOI.

5. Attachments [not made available]

- 5.1 BOI Terms of Reference
- 5.2 BOI minutes for open sessions
- 5.3 Initial investigation report
- 5.4 Statements of concerned personnel and witnesses
- 5.5 Sketch map of the accident site
- 5.6 Other supporting documents

Signed: Chair and members Bol.

Validation of Presentation and Return of Documents.

I, the undersigned, as Chairman of the Board of Inquiry for the accident in Kukes, Albania, do hereby confirm that all documents requested by the Board as background to its investigations, were duly provided. These documents have now been considered by the Board and have been returned to [the Demining group] on 29 June 2004.

Signed: Chairman of the Board of Inquiry

Victim Report

Victim number: 560 Name: Name removed

Age: Gender: Male

Status: deminer Fit for work: DECEASED

Compensation: Not made available. **Time to hospital:** 15 minutes

Protection issued: None Protection used: None

Summary of injuries:

FATAL

COMMENT

No medical report made available. Severe fragmentation and blast injury (by inference).

Victim Report

Victim number: 561 Name: Name removed

Age: Gender: Male

Status: deminer Fit for work: DECEASED

Compensation: Not made available Time to hospital: 15 minutes

Protection issued: None Protection used: None

Summary of injuries:

FATAL

COMMENT

No medical report made available. Severe fragmentation and blast injury (by inference).

Victim Report

Victim number: 562 Name: Name removed

Age: Gender: Male

Status: deminer Fit for work: not known

Compensation: Not made available Time to hospital: 15 minutes

Protection issued: None Protection used: None

Summary of injuries:

COMMENT

One of at least 15 severe injuries, retained in hospital for treatment. No medical report was made available.

Victim Report

Victim number: 563 Name: Name removed

Age: Gender: Male

Status: supervisory Fit for work: yes

Compensation: Not made available Time to hospital: 15 minutes

Protection issued: None Protection used: None

Summary of injuries:

COMMENT

One of at least 7 minor injuries, released from hospital after treatment. No medical report was made available.

Related papers

Memoranda from the Bol were made available and are held on file. They showed the delicacy with which the Bol was obliged to operate.

The source of the KB-1 was claimed by the demining group to be the Mine Action Authority (MAA), and the Bol was led by that authority. The demining group was well represented on the Board, and was given the opportunity to object to its leadership, in which case the Board would have been disbanded and another formed. The MAA denied having been the source of the undocumented device. No certification for it existed and no conclusion over its source was reached.

The MAA and the demining group were both anxious to avoid responsibility for having mistaken the device for an FFE item. This made the MAA's leadership of the Bol difficult, but it was handled with patience and skill despite the obstacles placed in its way by the parallel civil investigation. The Demining group contributed to the Bol with commendable patience despite concerns over imprisoned staff.

Analysis

The Bol concluded that the accident was ultimately "the result of an error of procedure", adding that "an error of procedure does not constitute an act of criminal negligence". The errors were made by highly trained personnel and so it is reasonable to infer that their training was in some way lacking. For this reason the primary cause of this accident is listed as "Inadequate training". The secondary cause is listed as a "Management control inadequacy" because it is ultimately the responsibility of management to ensure that the training and experience of personnel is adequate for the job in hand. Both causes were recognised by the investigators who recommended that the suitability of senior staff be reviewed and refresher training conducted.

The Bol was in a politically difficult situation and avoided stating the cause as bluntly as the evidence would allow. Even if the device did come from the Mine Action Authority's display, it did so without documentation of its state and so it falls to the recipient to check it is in the presumed state before handing it out to students. The failure to do so was an understandable error (and may be common, as the Bol generously suggested) but that was the direct cause of the accident.

Training KB-1s are reported to have been manufactured and distributed without marking, so making the discrimination between a live and an FFE training example virtually impossible. [The striker of a live item can be removed, but the item is not rendered FFE by that alone.] Unless handling a KB-1 was a necessary part of the training being given, (which is most unlikely) the error began as soon as the item was requested for use.