

INCIDENT DEBRIEF CORRECTIVE ACTION REPORT

INCIDENT NO: 4376	Date: 3 August 2010	Time: 21:10	Watch: Green
Address: Special address 4, AWE Aldermaston			

Debrief Report Status:

In Progress ✓ Contact the [Performance Review Team](#) for progress details.

Completed

Debriefing Officer:

Name: Eduardo Cardoso	Role: SM	No: 2587
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Attendees at Debrief:

Bryan Morgan	Andy Mancey	Barry Hayward	Bob Rea	Dave Sharpe
Jerry Allen	Chris Havers	Eddie Shepperd	Gene Ashe	Lincoln Ball
Julian Tubb	Chris Holland			
Andy McDonnell (AWE CFO)				
Paul Cooper (AWE Manager for Emergency Response)				

Appliances Attending Incident:

TYPE	STATION	CALLSIGN	RIDERS	OIC
WRL	Tadley	TAD1	6	CM Shaw
WRL	Dee Road	03P1	4	CM Abbott
WRL	Whitley Wood	20P1	5	WM Holland
MRV	Dee Road	03C1	3	DCM Minterm
WRL	Mortimer	11P1	6	DWM O'Rourke
ICU	Maidenhead	19C1	6	WM Strand
WRL	Hungerford	05P1	4	WM Rackham
WRL	Pangbourne	07P1	4	CM Aiken
ALP	Slough	17A1	2	CM White
HVP	London/Hants			
WRL	Slough	17P2	4	DCM Brown
WRL	Crowthorne	15P1	5	DWM Jell
WRL	Windsor	13P1	5	DCM Hastings
WRL	Maidenhead	19P1	6	DWM Smith
WRL	Wokingham Rd	02P1	4	WM Buckland
WRL	Wokingham	10P1	4	DWM Beard

Officers Attending or Involved:

NAME	ROLE/POST	CALLSIGN	ROLE AT INCIDENT
Ball, L	SM	S006	HMEPO
Havers, C	SM	S081	Level 2 Incident Commander
Mancey, A	AM	A033	Level 3 Incident Commander
James, J	SM	S028	Command Support Commander
Sharp, D	SM	S047	
Wollen, S	GM	G057	
Ashe, G	AM	A071	
Jones, P	GM	G067	
Clarke, K	GM	G016	
Stevens, A	SM	S051	
Morgan, B	AM	A037	
Allen, J	SM	S001	
Jefferies, S	GM	G029	
Newcombe, A	Tech	T100	

Brief Details of Incident:

Royal Berkshire Fire and Rescue (RBFRS) were informed for information only of a fire - type unknown by AWE control at 21:10 as per agreed protocol. At 21:25, RBFRS were requested to attend without knowing the details of the incident and the full risk PDA was mobilised. Whilst on the phone to AWE control, RBFRS Control personnel overheard a simultaneous fire ground communication in the background stating that explosives were involved. At this point Control informed the Level 3 Officer who immediately made the decision to attend and mobilised the ICU.

Shortly after booking in attendance, the Level 1 Officer confirmed that hazardous materials were involved and declared Delta Mode. Following the arrival of the Level 2 Commander, a 600M safety cordon was put in place following the confirmation of a fire in an explosives processing building and the ROV was requested. The MOD Police with approval of TVP carried out a full evacuation of the affected area.

At 23:45, the Level 3 Officer made appliances six, requested the attendance of an HVP and CHEMET forecast. The ALP was also mobilised to be used as a viewing platform for the camera.

In addition to the explosive hazards, airborne asbestos was initially believed to be involved and close liaison took place with the Environment Agency.

The incident remained in Delta Mode with regular inspections of the building being carried out by the ROV's and it was eventually closed at 14:56 by AWEFRS and handed back to the Facility Manager to undertake recovery stage on the 4 August.

Significant Items of Note

Mobilising and Information Before Arrival

An MOU between RBFRS and AWE ensures that RBFRS are informed of all incidents on site but do not automatically attend as most can be dealt with by the onsite professional FRS resources.

AWE did inform RBFRS control of a confirmed fire in B area, and overheard the first informative from the AWEFRS Watch Manager, that explosives were involved; whilst the AWEFRS watch room attendant was updating RBFRS of the incident over the telephone.

Control personnel were very proactive and this ensured that all the information and resources were readily available at the appropriate times as information became available.

On learning of the potential involvement of explosives, the Level 3 Officer was proactive in mobilising the ICU which ensured that full ICS was implemented at the outset ensuring a structured and safe working environment.

The HERU was not mobilised as per the PDA and this may have been due to the WRL already being committed to the incident however it could have been mobilised with the ALP/OSU crew. It is noted that the HERU was not in fact required **(CA1)**

Subsequent resources were fully informed of their roles and requirements in ample time prior to being mobilised.

The tactical plan and AWE on site plans primarily focus on radiological incidents and does not cover incidents of this nature. **(CA2)**

Both Bracknell and Ascot RDS appliances failed to crew for relief duties and there were no RDS personnel to relieve the ICU crew. **(CA3)**

Maidenhead's RDS crew failed to crew for ICU relief duties on the morning of 4 August. Although available for fire cover personnel failed to crew the ICU on welfare grounds and were subsequently taken off the run based on their welfare issues. This led to a delay in the relief of ICU crew for some considerable time. **(CA3)**

Dynamic Risk Assessment

The onsite specialists fully informed RBFRS personnel of the risks on their arrival and this informed the DRA process. The Level 1 Officer immediately introduced a safety cordon. A AWEFRS senior officer had asked for all AWEFRS crew to withdraw to a distance of 400m from the involved building and on liaison with the first RBFRS officer then ordered all AWEFRS staff to vacate B area, and liaise with the incident Commander at gate 17 some 800 m away from the involved building .

The DRA was continuously monitored as information became available from the HMEPO and specialist onsite advisers.

Tactics Deployed

AWE crews were mobilised to a report of an AFA and on arrival were informed that this was a fire, persons reported. On inspection, the initial crew observed a small amount of flame and almost immediately the fire flashed. They withdrew from the building and placed covering jets on the fire. The AWE FRS duty Officer attended the scene and a make pumps four message was sent to RBFRS control.

Once it became apparent what was involved, AWE FRS crews withdrew into Delta Mode.

On-site specialists and RBFRS crews were informed of the tactical mode on arrival followed up by clear tactical and safety briefings. RBFRS Officers were informed that water was having a limited effect on the fire and were given details of the hazardous substances involved. It was jointly decided to withdraw and establish the safety cordon.

The incident was primarily in Delta mode, only changing to allow the ROV and ALP with camera to be positioned within the cordon. This equipment gave an invaluable insight to the HMEPO, Incident Commander and specialist personnel without exposing them to the risk.

All tactical changes were clearly communicated to all personnel via fire ground radio and the decision was recorded on the messaging facility in Vector.

Resources Required

At its height, there were 68 Fire Service personnel present from RBFRS, AWEFRS, HFRS and London at the incident. This figure does not include SCAS and other agencies personnel.

This included:-

- 9 WRL
- HVP (London/Hants)
- 2 Command Units
- 1 ALP
- ROV
- 11 Officers
- RBFRS OSR was also set up.

Specialist Appliances

Berkshire's HVP was away for a service however London and Hampshire were able to assist.

The ROV's proved an invaluable tool at the Incident Commander's disposal as it secured information gathering from a place of safety.

ALP also proved valuable as it was utilised to set up a remotely operated camera giving an overview of the incident in safety.

The printer on the MRV did not work and the images from the ROV could only be seen in the front of the ICU. That aside; both units worked well and performed to expectations.

(CA4)

The Command Decisions electronically captured on the ICU are encrypted and not available to view by the PR Department at a later date. (CA5)

ICS

AWEFRS operate to RBFRS ICS procedures and fully embraced and complied with RBFRS procedural requirements.

The non-dynamic nature of the incident allowed the Incident Commander to set out a well structured ICS from the outset and the early mobilisation of the HMEPO was of great benefit to the Incident Commander. An early issue was identified over the use of the

satellite communications on the MRV but this was overcome by moving the unit following advice from on-site specialists.

A result of the status of the incident, i.e. non-dynamic and long duration, ensured that the Incident Commander was able to ensure that his plan was robust and to develop plans for different eventualities.

The early attendance of the Level 3 Officer had a positive impact on the remainder of the incident resulting in only two handovers between Incident Commanders. These handovers were very comprehensive and time consuming and the minimal change over of command ensured that minimal disruption to incident command was caused. **(CA1)**

The abilities and enthusiasm of all personnel involved also contributed to a successful support system to the Incident Commander throughout.

The AWE Situations Coordination Centre was set up on site resulting in some confusion on a couple of occasions in the closing stages of the incident.

Communications

Initial communications by AWE FRS with RBFRS control were limited and the fact that explosives were involved; was passed on and delivered at the earliest opportunity to the first Senior RBFRS officer attending the site.

Liaison and communications with MOD Police, and on-site private security, towards the closing stages of the incident was poor leading to delays in facilitating access and egress to the site resulting in oncoming Officers and Appliances being denied immediate access – note this caused in some cases delays in excess of 1 hour. This was mainly due to the time of day as MOD Police resources were limited coupled with the inability to communicate with RBFRS. **(CA2)**

RBFRS Officers attempted to contact the ICU on the OPS2 channel but this was not being constantly monitored by the ICU.

There was also some confusion as crews were told; in line with the Tactical plan; to switch off the main scheme radios and yet, they could use fire ground radios and mobile phones within the site. **(CA2)**

There were some issues identified with the downloading of images from the helicopter and ROV's but this was dealt with by the communications officer and is part of the ongoing development of the units.

AWE have their own fire ground radios which use a different frequency. This resulted in a delay in the sharing of communications at the outset. It is also reported that there were poor communications with MOD Police which may have been overcome had we had the facility to communicate over Airwave radios. **(CA2)**

Procedures

The RBFRS tactical plan is primarily based around the risk of radiation, which caused some operational issues when being implemented. **(CA2)**

The crews coming on the following day were subject to security checks by the on-site security officers which is not part of the tactical plan and outside the emergency protocols.

During the incident a RBFRS crew was safely committed in an armoured vehicle to within 200M of the incident. They were given a very clear brief and task specific risk assessment as were AWEFRS personnel who undertook a specific electrical isolation external of the

effected building which was agreed by the RBFRS IC in liaison with the AWEFRS Senior Officer as the AWEFRS Crews had full knowledge of the local surroundings.

The RBFRS OSR was established and supported the incident commander throughout. However on one occasion there was a breakdown in communications between the incident and OSR resulting in the relief crew times being changed by the OSR without further explanation. The Officer in the OSR was trying to ensure adequate cover County wide and the changes were made to maximise the availability of resources. The outcome of this change was that it clashed with the change of shift at AWE which had it not been delayed by the gate issues could have impacted on operational management of the incident.

Due to reliefs not being part of the operational plan at that time, vehicles attending the site on non blue lights were subject to normal security protocols. This could have been resolved with better liaison from RBFRS to Situations Coordination Centre.

Due to the operational demands of the incident, there was only one AWE FRS control operator at the fire station who was overwhelmed by the demands of the incident and unable to effectively provide the information required.

Equipment

The MRV printer failed however this has been the subject of previous corrective actions and will not be addressed through this report as is being resolved.

ORIS on 20P1 had an outstanding defect resulting in no printing facilities but it is noted there were two other RBFRS appliances with working printers which overcame this issue

The portable camera was not available at the time but was taken to the incident by the communications technician. It has since been stowed on the MRV.

On-site hydrants were reported to be inefficient resulting in the HVP being mobilised. On investigation by AWE, it was found that this was down to a mistake with the opening and closing of sluice valves by a maintenance contractor which has now been rectified.

Not enough AWE TLD's were initially available to enable issuing to all relief personnel attending the incident due to there being a delay in transporting further supplies from AWE B. The incident did not involve radiation and the delay was caused by RBFRS insisting that TLD's were issued as per the current tactical plan. **(CA2)**

Safety

A 600M exclusion zone was put into place with the affected area being evacuated and enforced by MOD Police and TVP.

Although no injuries or accidents occurred, there were some breaches of safety measures:

- In the later stages the on-site AWE Situations Coordination Centre attempted to reduce the safety cordon without the knowledge of the Incident Commander however this was quickly rectified by the AWE FRS liaison officer.
- There weren't enough TLD's available to be issued to all personnel and there was a delay in distribution albeit this was a non radiation incident
- An RBFRS and SCAS crew were left outside the facility without escorts following the site security arrangements, however individuals were not left in the risk area

Training Needs

There was limited knowledge of the site by some of the attending crews and officers including knowledge of some of the risks likely to be encountered.

A joint training and visit protocol should be developed to ensure that information, knowledge and understanding flows in both directions to the benefit of all. As part of the ongoing Officer line training we recommend that a program is put into place ensuring that Officers receive formal briefings on AWE protocols and emergency arrangements. **(CA7)**

Welfare

The site provided and met all the welfare expectations of RBFRS negating the need to mobilise our own resources.

Other Agencies

The ICU became the SILVER control with the AWE Strategic Coordinating Centre (Gold) being set up in the AWE SCC.

Numerous difficulties were experienced however many of these can be put down to the time of day, security status of the site and procedures. They are summarised as follow:

- After the initial attendance, access to the site by oncoming resources was slow
- There was a delay in the egress of resources due to security procedures
- Lack of MOD Police resources leading to ineffective liaison.
- Movement through the incident site could only be done under AWE escort.
- Hourly SILVER meetings which, on one occasion, had over 40 attendees
- Conflicting information with regards to the spread of airborne asbestos

It must be stressed that despite the difficulties encountered, all other agencies personnel were extremely helpful and proved invaluable in assisting and advising the RBFRS Incident Commander(s) to bring the incident to a successful conclusion. Good examples of this being:

- The ability of the AWE scientists to give clear support in plain language with tangible options to overcome issues.
- SILVER Command worked well and was effective
- Qinetiq ROV crew worked well together with RBFRS and proved invaluable at an incident of this nature.
- Good effective cordon established and maintained by MOD Police and TVP
- Good interaction with AWEFRS Managers

Learning Points

Areas for Improvement

Review of Tactical Plan to include (CA2)

- Establish actions on arrival, tactical plan states to go to fire station but personnel were escorted straight to the incident.
- Consider establishing pre-arranged RV points
- Consider only deploying a GM and above to the SCC as a Liaison Officer in line with the Silver Command Policy
- Facilitate Airwave communications between all the agencies
- A robust Command structure ensuring the Strategic Coordinating Centre and SILVER have full communications.
- Immediate response PDA by RBFRS to reports of fire and/or Hazmat incidents **(CA1)**
- Review PDA with a view to include ICU and a Level 3 & 4 officer to certain incidents **(CA1)**
- Access and Egress of site
- Strategic Coordinating Centre Command decisions must be fully consulted with Incident Commander prior to implementation.

Additionally:

- RBFRS personnel to have a better understanding of the site
- ICU/MRV IT Support is not available 24/7 **(CA6)**
- Develop video uplink facility on ICU/MRV so that it can transmit to OSR **(CA4)**

Positive Points

- Successful outcome with no injuries
- Good Incident ground ICS
- ROV and ALP proved invaluable
- Good incident communications
- Good decision making
- Good welfare
- Crews remained enthusiastic and professional
- Overall good inter agency working
- Alternative plans in place to deal with any eventuality

Corrective Actions Recommended

1. Review the need for the HERU and the ICU to be on the PDA and also the number and Level of Officers required for a significant incident at the site. **(linked to CA 2)**
2. Carry out a Review of the Tactical Plan
3. Review and Implement a more robust Management system with regards to RDS availability
4. Upgrade MRV and ICU to enable capture of video link from ROV/Police Units and also to feed a live link to the OSR or other appropriate location
5. Upgrade systems to allow full access to, and review of, the electronic information captured by the Command vehicles to be used for debriefing/audit purposes
6. Explore options to secure the provision of IT support 24/7
7. To implement a robust training exercising and operational visit programme to AWE sites to include Strategic, Middle and Operational personnel who may attend the sites

Recommendation	Assigned By	To Be Actioned By	Target Date for Completion
1	Area Manager Response	GM A Ops Support	April 2011
2	Area Manager Response	GM A Ops Support	April 2011
3	Area Manager Response	AM Response	Sept 2011
4	Area Manager Response	GM A PR Communication Officer	May 2011
5	Area Manager Response	GM A PR/ Communication Officer	May 2011
6	Area Manager Response	GM A PR	May 2011
7	Area Manager Response	AM Response/ GM A Ops Support	April 2011

APPENDIX A - Outcomes of Corrective Actions

(To be completed by Performance Review Department within 12 months of report)

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