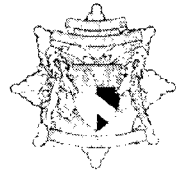




Exercise Astral Bend 10

EXERCISE DIRECTOR'S POST EXERCISE REPORT

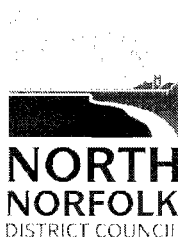


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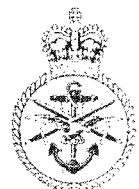


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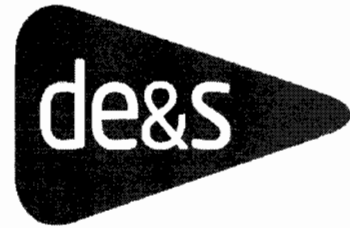
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Issue 2
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2010

EXERCISE ASTRAL BEND 10 – POST EXERCISE REPORT

References:

- A. JSP 471
- B. JSP 483 Vol 3
- C. JSP 483 Vol 4
- D. JSP 538
- E. COPS
- F. LAESI
- G. Standing Orders for STANTA Training Areas

1. Nuclear Accident Response Exercise ASTRAL BEND 10 was conducted on 12th May 2010 at DTE Sculthorpe, Norfolk. This exercise was a GRADE C Nuclear Accident Response Exercise designed to test the interface between the Station NARO Team (SNT) and the CES and is subject to formal assessment by the Nuclear Weapons Regulator. The Exercise Director's Report is at Annex A.

2. The report focuses on the execution and facilitation of the exercise as the formal assessment will be provided in the Regulator's Report. It is distributed for action or consideration where appropriate, in order to inform both the planning of future exercises and the review of existing NARO plans.

3. A number of comments raised by individual members of Directing Staff (DISTAFF) and controlled players were captured at the exercise debriefs. These comments, which are reproduced or summarised at Annex C, are also forwarded for consideration. It

should be noted that whilst these comments are the view of experienced individuals they are not to be considered as any form of assessment.

A Cold Wash up meeting was held with the Norfolk LRF on 7th December and is attached at Annex D in Issue 2 of this document.

Signed on original

[REDACTED]

Annexes:

- A. Exercise Director's Report (Exercise ASTRAL BEND 10).
- B. DNSR NWR - Summary of the Regulator's Oral De-brief
- C. Comments from the ASTRAL BEND 10 Hot Wash up meeting
- D. Summary of Cold Wash up with Norfolk LRF

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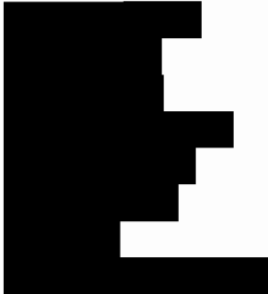
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ASTRAL BEND 2010 – EXERCISE DIRECTOR’ S REPORT

BACKGROUND

1. Exercise ASTRAL BEND 2010 was a Grade C Field Training Exercise, a requirement falling out of JSP 471. The Exercise was planned to test and demonstrate the Command and Control activities of the Station NARO Team (SNT) and to demonstrate integration with the responding CES and other agencies. The exercise took place on the 12th May 2010 at DTE Sculthorpe, Norfolk.

EXERCISE PLANNING

2. Planning for the exercise was led and coordinated by the NARO Threat Reduction Manager (TRM) and supported by staff from AWE through a series of Exercise Planning Meetings with local CES partners from Norfolk Police, Norfolk Fire and Rescue Service, East of England Ambulance Service Norfolk County Council and NHS. A Project Management Plan was produced to identify key planning activities. As Exercise Director, whilst the key objective was to satisfactorily provide the vehicle to demonstrate the response, a secondary objective was to maximize the opportunity for additional training activities to take place.

3. The scenario for Exercise Astral Bend 10 was based around USAF SAAM flight (C17) carrying a number of Nuclear Weapons. The aircraft suffered a bird strike which damaged the engines and caused the aircraft to crash on Sculthorpe Airfield at GR TF861317. The crash resulted in breached weapons and the spread of contamination due to the ensuing fire.

4. The scenario and time scale worked well, on this occasion as the wind direction corresponded to exercise wind. As a result of lessons learned, a marker was available should this have been so.

Recommendation: Consideration should be given to providing an additional visual reference for exercise wind direction at all exercises where a real fire is provided.

5. It is normal to expect to see the Police in control of the situation, but as the numbers that were initially agreed with the MoD for the exercise did not meet the final objectives, they were overwhelmed by the scenario. Following the Cold Wash up with Norfolk LRF, it became clear that when the initial request from the MoD was made, only a small contingent would be available. The requirements to meet the exercise objectives need to be reinforced during the initial approach and at every subsequent planning meeting.

Recommendation: Sufficient levels of Police are requested to be available to meet the exercise objectives as they are the leading authority.

6. A formal visitor program was laid on and hosted on the day of the exercise. An observer escort was provided by AWE to explain the various activities to the observers and this worked well.

EXERCISE CONDUCT AND SIMULATION

7. The Exercise Director was able to keep control of the exercise and kept in contact with his Directing Staff team using AIRWAVE radios as a primary means of communication.

COMMUNICATIONS

8. A total of 5 AIRWAVE radios were found to be defective throughout the day and this was a matter of concern as these radios were drawn from the pool used for the response. This is the second time that AIRWAVES have performed poorly at exercises. (The first being reported in the Bronze Endeavour 2007 PXR)

Recommendation: Consideration to the comprehensive pre exercise testing of AIRWAVES sets needed and a Public Address System for making real time announcements.

SECURITY

9. The exercise crash site was adjacent to a public road and the exercise location was in the public domain due to a Parliamentary Question (PQ).

10. Security at the exercise site was nevertheless maintained throughout play although several members of the public did approach the exercise area during play. Ministry of Defence Police Officers positioned at the gate dealt with this in a profession and courteous manner. A contingency arrangement was in place to call in extra support from Norfolk Police should the need arise.

11. Passes: Exercise passes were issued to all Di-Staff/Visitors/Observers and where possible Players. Exercise passes were withdrawn at ENDEX. The Exercise Security Plan identified that the MDP (SEG) were to control the issue and return of exercise passes. However, it was evident that the MDP had not been tasked to issue exercise passes.

Recommendation: The Exercise Director identifies MDP tasking requirements and these are fully communicated to the MDP prior to the exercise.

12. Overall the security awareness of the exercise participants appeared to be of a high standard.

FEEDBACK ROUTE

13. Points raised in this Exercise Director's Report concentrate mainly on the execution and facilitation of the exercise, as the Nuclear Weapons Regulator will make the formal assessment. Summarised at Annex B are the key observations made in the Regulator's informal debrief, and at Annex C are the points raised by DI Staff and Players at the exercise wash-up. They are distributed for action or consideration where appropriate, in order to inform both the generation of future exercise plans and the review of existing NAR plans.

DNSR NWR - Summary of the Regulator's Oral De-brief

The Regulator was content that the exercise was an adequate vehicle for demonstrating capabilities and that the response was fit for purpose.

1. Exercise Planning:

The exercise had been well planned and meetings had been well supported by all agencies. DNSR were actively involved at all stages of the planning process.

2. Exercise Play:

Interfaces

The numbers that were initially agreed with the MoD for the exercise did not meet the final objectives; they were overwhelmed by the scenario. The police deployed to interface at the Bronze level were drawn in to cordon control issues which distracted them.

Fire

Responded in sufficient numbers to the incident, and carried out dynamic risks assessments in accordance with their SOPs. The Fire Service stood off whilst awaiting radiological advice before tackling the fires, this is normal protocol.

Ambulance

The Ambulance Service deployed their HART to the incident, and entered cordon to assist the Fire Service in the recovery of casualties. Paramedics demonstrated their capabilities to a high standard.

Arrival of SNT

SNT arrived in the right place but the CES had moved the cordon forward to standard CBRNE protocols, 400m. This did not help with the SNTs co-ordination with key players. The SNT were too slow to get together, the SNT may need to be more pushy for a real incident.

Monitoring

Monitoring equipment carried by the CES does not detect Alpha and PU. The SNT will need to reinforce their capabilities and undertake the in-cordon monitoring tasks.

SNT Commander

In the developing scenario the SNT Commander provided briefing to an acceptable standard, but were slightly late on protocols, they need to take due regard to the incident hazards.

Temporary Control Post (TCP)

All TCP decontamination drills carried out effectively; the decontamination method is dry due to the requirement to monitor Alpha. This method needs to be clearly explained to the responding CES.

Chief of Staff (COS)

Good team management and reporting back to the SSC.

Incident Commander (IC)

The difference in cordon distances between CBRNE (400m) and NARO (600m) caused issues, this is not unusual. The IC needs to be more proactive and identify the Police IC to brief the immediate hazards and reinforce shelter and evacuation advice.

US

The US provided effective liaison. They need to develop an understanding of the key issues with nuclear weapon accidents on UK soil. The US need to understand the Rules of Engagement (ROE) as addressed under IJOP Part 2. The US Render Safe activities were not understood by all. If US personnel go into cordon then a UK person must accompany them – they are not to enter cordon on their own

Media

Tricky area, with the added US dimension. For the level of exercise participation they were overactive. There was some confusion about whose weapons they were. The second press conference with the SNT press officer had too many no comments, they need to rely on the prescribed press statements that they carry.

Hot wash Points - Players

Exercise Astral Bend 12 May 2010

Norfolk Police

Points raised:

- Felt under represented
- Unable to do all tasks
- Problems with getting control of outer cordon
- Control of press – not enough officers
- Comms – difficult between responding agencies

Norfolk Fire and Rescue

Points raised:

- Comms – problem between CES elements and later with military responders
- Need to have command point/post identified as focal point for responders
- Need to have distance of cordons – communicate the rationale behind the distance of CBRNE and NARO cordons
- Need to better understand the military input
- Their paramount concern is safety of all on site

East England Ambulance Service

Points raised:

- Echo what police and fire said about comms
- The initial responders failed to take command and control (this needs to be worked on) as leads to further problems, although once realised the dynamics changed and the response moved on well
- Not aware of medical capabilities with the SNT military response

Local Authority

Points raised:

- Comms problems
- A holding statement would normally be issued
- A tactical co-ordination group of multi agency responders would be set up – the briefing of the press would take place there and not at the cordon edge

Station NARO Team

Points raised:

- Not enough police on the ground – no one to talk to
- The position of the cordon when they arrived (400m) – the cordon edge had been set to CBRNE protocols
- The cordon would lead the SNT to believe that they would have been contaminated

US Forces

Points raised:

- Echo comments made by the other responders regarding comms etc
- First concern is safety of all in the area then getting the accident site and weapons safe
- Echo comments by SNT regarding the move of the cordon
- Need to get an entry control point established

Cold wash up Points - LRF

Exercise Astral Bend 12 May 2010

Exercise Planning

Following the Cold Wash up with Norfolk LRF, it became clear that when the initial request from the MoD was made, only a small contingent would be available. The requirements to meet the exercise objectives need to be reinforced during the initial approach and at every subsequent planning meeting.

The only explanation available was that when the original approach was made and the level of participation agreed the requirement was not communicated when the individual retired.

Recommendation: it is imperative that sufficient Police are requested to be available to meet the exercise objectives as they are the leading authority.

Police

The level of exercise play completely overwhelmed the participants and despite requests for directing staff support continued to be a problem throughout the duration of exercise play. This confirms and reinforces the comments made above.

It was acknowledged that if this had been a real emergency, the level of response would have been sufficient to deal with a major emergency.

Fire Service

The exercise was based around an aircraft crash which would be declared as a major incident. Based on the information provided to the emergency services and the capabilities to deal with such a situation, the approach to the incident would be cautious. The message of responding in a timely manner to reduce the spread of contamination was discussed and understood.

Also the monitoring capabilities to deal with this type of material are not carried by the Fire Service and would not be available until military resources arrive

Note: This approach is not unique, once the information as to the hazards is available; a much more cautious approach is the usual outcome.

Ambulance

The ambulance service was not available due to responding to an emergency. The discussions focused on the response to P1 casualties. It was refreshing to see P1 casualties dealt with in accordance with National Health Service guidelines.

It was also acknowledged that if this had been a real emergency, the approach to P1 casualties may have been different, but not uncommon to other authorities that we have exercised with.

Local Authority

It is agreed that the approach to where the briefings would take place varies dependent on which police/ local authority is playing.

The SNT have a PR representative to support the MoD response: the PRO would deploy to wherever the briefing area is established.

Station NARO Team

The SNT were relatively new to the role. Whilst trained to an adequate standard required to demonstrate their capabilities, on a real response they would need to identify the CES command and quickly communicate their capabilities.

The SNT carry both medical and monitoring capabilities, both of benefit to the CES in a contaminated environment. Also the ability to help understand the hazards from the aircraft and payload.

The movement of the cordon was understandable due to the CES adopting a 400m cordon: 600m is required for explosive hazards safety. The information in writing should be reviewed to ensure that the cordon size is reinforced.

US Forces

The discussion focused on the entries made by the US Forces and the need to have a UK representative with them.

Also the ROE have been agreed and are contained in IJOP Part 2, which would be made available to the police during a real event.

Communications

Although all responders apart from the US were able to communicate, different talk groups are used. Once the MoD are on the scene, airwaves would be made available to the CES control room and the US to enable all parties to communicate effectively.

Media

The level of media play was commensurate to this level of exercise, but due to the lack of police presence was overwhelming. Care needs to be taken when approaching LRF partners to support NARO exercises; sufficient resources are available to ensure that the exercise objectives can be achieved.