Draft

Ministry of Defence

Nuclear Accident Response Organisation

Exercise SHORT SERMON 97

All Agency
Post Exercise Report

February 98

Draft

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The following agencies also participated in the exercise but to a lesser degree:

Scottish Ambulance Service
Inverclyde Council
West of Scotland Water
Cabinet Office
Foreign and Commonwealth Office
Department of Environment Transport & Regions (RIMNET)

PREFACE

The Ministry of Defence conducts regular exercises of its nuclear accident response arrangements. Every year a Grade A (formerly major) exercise is held which involves not only activity at the accident site and in the surrounding area, but also the process of Central Government co-ordination. The 1997 Grade A exercise was nick-named SHORT SERMON. In keeping with our policy, all the agencies that would have responded to the situation presented by the exercise scenario were invited to participate. They were also invited to provide a contribution to this All-Agency Report summarising their experience in the exercise. These contributions are contained in this document; the MoD report also includes a summary of the scenario and comments which put the exercise in context.

In February 1998 a follow-up meeting was held by those agencies who had participated in the exercise planning process. Those present reviewed a draft of this report and agreed mechanisms to take forward issues arising from the exercise that were of a multi-agency nature. It was recognised both that there were day-to-day contacts between the agencies on matters of common interest and also that the following existing groups that would have an interest in the outcome or could provide a forum for further discussion:

The Clyde Naval Base Local Liaison Committee

The Strathclyde Emergencies Co-ordinating Committee (SECC)

The (national) Nuclear Emergencies Planning Liaison Group (NEPLG).

However, it was agreed that, initially, those who had participated in the exercise would take the matters identified forward; in each case a lead agency was nominated to convene further discussion.

The subjects arising from Exercise SHORT SERMON 97 and requiring further multi-agency work are in five categories:

Health Advice and Potassium Iodate Tablet Distribution

The emergence during the exercise of a Health Advisory Group was seen to be beneficial. Plans need to be adjusted to reflect the existence of the group and its interaction with other groups, especially the Strategic Co-ordinating Group and the radiation monitoring group. It is expected that parallel activity, to be conducted under NEPLG auspices, will inform this work. In addition, it was considered that the arrangements for distribution of potassium iodate tablets should be re-examined. It is hoped that a review of national guidance on this subject will be helpful in this work. Argyll & Clyde Health Board will lead.

Remediation

Arrangements for remediation, centring on the Remediation Working Group, were considered to have worked well. The pre-exercise work that went into the formation of this group needs to be reflected into agencies' plans. Argyll & Bute Council will lead.

Post Accident Investigation

Strathclyde Police and MoD, in particular, found the work done on post accident investigation during the exercise of great value. There is a need to establish the precedence of all inquiries that might be held under Scottish Law and to resolve potential overlap between them. The Scottish Office will lead.

Public Relations

The information provided to the "public" and "media" during the exercise was considered to have been reasonably satisfactory. However, it was noted that the public relations officers from all agencies were very experienced and managed to achieve this without detailed plans and procedures that less experienced personnel would have required. Such plans and procedures need to be generated. Strathclyde Police will lead.

Physical and Administrative Arrangements in the Clyde Off-site Centre (COSC)

This was the first time that the COSC had been used in a Grade A exercise. Many useful lessons had been learnt in previous lesser scale exercises, but there remained some further work to do. In particular, accommodation needs to be adjusted to facilitate working in functional groups (eg. The Remediation Working Group) rather than by agencies. The Ministry of Defence (Clyde Naval Base) will lead.

Prepared by

Directorate of Nuclear Policy
Ministry of Defence

MINISTRY OF DEFENCE

INTRODUCTION

1. The Ministry of Defence sponsored exercise SHORT SERMON 97 was the first Royal Navy exercise of the recently redefined MoD Grade A nuclear accident response exercises (formerly Major exercises). A Grade A exercise requires live play and the participation of the MoD and external agencies to be maximised at the national strategic, local strategic, tactical and operational levels over a duration of three days (cf. Dealing with Disaster). The exercise was held between 18 and 20 November 1997; principle locations were the Clyde Naval Base, the Clyde Off Site Centre (COSC) at Rhu, the Scottish Office in Edinburgh and the Ministry of Defence in London

EXERCISE PLANNING

2. Exercise planning commenced about a year ahead of the exercise; an Exercise Steering Committee, chaired by MoD and including all local agencies met in the COSC. It was supported by five sub-groups with the following remits: in-base and medical aspects; off-site release of radioactive material; public relations; central government aspects and remediation. All agencies were able to incorporate their own specific aims and objectives into the exercise scenario.

SCENARIO

3. A hydrogen leak occurred on a Swiftsure Class Nuclear Powered Submarine which had recently returned to port following a prolonged operational deployment. This led to an explosion in the diesel room and a subsequent fire. A series of highly unlikely defects, system and procedural failures then resulted in a nuclear reactor accident with a release of radioactive material to the atmosphere and into the surrounding water. The exercise weather caused the radioactive material to be carried broadly to the south. The accident caused a number of casualties, some with conventional injuries but others irradiated and contaminated; hospital treatment was required. A number of fatalities were simulated.

4. The scenario gave scope for wide-ranging media play which was designed to provide a very high level of realism to players, and a realistic type of feedback in real time to them. Exercise media outputs (radio, TV and print media) were also routinely copied to London for reaction and response. Over the three day exercise around 120 journalists tested the response of public relations staffs at the COSC, producing eight daily newspapers (front pages and inside stories), three daily TV news broadcasts plus bulletins, and radio news each hour.

AIMS AND ACHIEVEMENTS

5. The MoD aims were to demonstrate all phases of the response to a nuclear submarine reactor accident at the Naval Base Clyde at the Operational, Tactical and Strategic co-ordination levels; to demonstrate the Central Government co-ordination process and to test arrangements for remediation.

6. The MoD exercise aims were met. They could not have been achieved without the significant level of support and co-operation given by all the external agencies; the MoD is, as ever, grateful for their efforts. The MoD response forces showed a high degree of enthusiasm, professionalism and motivation. The MoD Nuclear Accident Response Organisation (NARO), constituted for the response to the scenario, satisfactorily demonstrated that it is capable of responding to an accident involving a submarine nuclear reactor in the Clyde Naval Base.

DEGREE OF PARTICIPATION AND CONSTRAINTS

7. The crew of HMS Sovereign, working on board, provided the "casualty" submarine. The full Clyde Naval Base NARO, led by the Flag Officer, Scotland, Northern England and Northern Ireland, participated in the exercise. In addition to base personnel this included support from the Army: 42 Survey Engineer Group and 33 Regiment, Royal Engineers; from the RAF: Health Control & Monitoring Force, Tactical Communications Wing and Mobile Catering Support Unit and from DERA; Radiation Protection Services (DRPS). Technical support was provided from Bristol by staff of the Directorate of Nuclear Propulsion assisted by Rolls Royce & Associates at Derby and the Safety & Reliability Directorate of AEA Technology. The Scottish Universities Research & Reactor Centre provided airborne radiation monitoring support. In London the HQ NARO was formed with staff from the Naval Nuclear Technical Safety Panel, the Meteorological Office and DRPS supplementing those of the Directorate of Nuclear Policy. The Assistant Chief of Defence Staff (Policy) chaired meetings of the inter-departmental Nuclear Accident Information and Advisory Group (NAIAG). The Minister (Armed Forces) participated on the second day of the exercise. The Cabinet Office convened a meeting of the Civil Contingencies Committee (for the first time in a defence nuclear accident response exercise).

8. A number of constraints were imposed upon the exercise players. No overt ground play took place outside MoD property. Monitoring vehicles were sent outside the base but civilian outer clothing was worn. Emergency actions affecting the general public were not initiated but were played between exercise participants and the Directing Staff. Simulated Potassium Iodate Tablets (PITs) were issued to personnel within the Automatic Countermeasures Zone, but these were not issued elsewhere.

GOOD POINTS

9. Submarine operating procedures and crew training were shown to be particularly robust. The Directing Staff had to "prevent" the submarine's crew from carrying out routine and innovative measures to mitigate the accident. Had they not done so, the nuclear reactor accident would not have happened.

10. The evacuation of around 1400 personnel from the naval base was successfully achieved on the first day.

11. The exercise provided an excellent scenario to verify MoD's nuclear reactor accident response command and control procedures. In particular, the integration of the MCA and his team into the Strategic Co-ordinating Group at the COSC was very successful. A significant number of personnel had not been involved in an exercise of this magnitude before, but they very quickly assimilated their responsibilities giving confidence in the procedures. It was evident that lessons learned in previous exercises had been incorporated into the appropriate plans.

12. Media play was managed in order to provide a severe test for players at all levels; Strathclyde Police and MoD public relations staffs bore the main brunt of this workload. After a hesitant start, players seized the initiative and executed a pro-active damage limitation campaign, and there was a noticeable improvement in player media performance as the exercise progressed.

13. This was the first MoD exercise in which remediation aspects were played live along with other issues rather than on a separate occasion. MoD's embryonic plans for staffing this issue were seen to be appropriate.

14. This was also the first time that exercise planning flexibility allowed the players the option of "sinking" the casualty submarine in order to limit the release of radioactive material; an option that was taken.

LEARNING POINTS

15. The internal review process, as well as comments from other agencies, indicates that MoD policy and plans need attention in the following areas:-

a. the management and communication of monitoring information;

b. the MoD role and participation in off-site monitoring arrangements and in providing health advisory at the COSC;

c. the implications for MoD response forces of police investigations under the direction of the Procurator Fiscal;

d. the management and dissemination of information in support of public relations activities;

e. the distinction between the responsibilities of the NAIAG and those of the Civil Contingencies Committee.

INTERFACES WITH OTHER AGENCIES

16. The interfaces with other agencies generally worked well. In the incident area, there was a notable improvement from previous major exercises in the understanding of each agency's responsibilities; a tribute to the efforts all have made in lower grade exercises. As noted above, there is a need to refine the co-ordination of health advice to the Strategic Co-ordination Group by co-ordinating the roles of the Health Authority, the National Radiological Protection Board (NRPB) and MoD radiation medicine and health physics staff in a Health Advisory Group. Further work also needs to be done with the NRPB on the co-ordination of monitoring. A particularly pleasing aspect was the seamless handover of the lead co-ordinating role from the Strathclyde Police to Argyll and Bute Council once the immediate emergency was over; this enables MoD personnel to continue to operate in their roles to best effect.

17. The support of the Ministry of Agriculture, Fisheries and Food to the Scottish Office notably strengthened discussion of food issues at the NAIAG. The participation of the Northern Ireland Office was a welcome opportunity to integrate them into the central government co-ordination arrangements.

Provided by

Staff Officer Nuclear Accident Response and Training (Exercise Director)
Naval Support Command

STRATHCLYDE POLICE

AIMS AND ACHIEVMENTS

1. To test and evaluate the role and responsibilities of Strathclyde Police in their response to a nuclear reactor incident at HM Naval Base Clyde.

2. To test and evaluate the interface between Strathclyde Police and the Ministry of Defence in relation to the investigation of a nuclear reactor accident at HM Naval Base Clyde.

3. The exercise aims and objectives of Strathclyde Police were all achieved, although some to a greater degree than others. In particular, the role of the Clyde Off Site Centre (COSC) Co-ordinator was seen to provide a strong strategic focal point maintaining a strict control of the 'big table' meetings addressing only issues of a strategic nature. Further invaluable assistance was provided by the Co-ordinator making himself available to other agencies for meetings without the forum of the 'big table' allowing more general issues to be resolved in more informal surroundings.

4. The Co-ordinator also provided a positive lead and structured handover to the Chief Executive of the Local Authority once the emergency phase of the incident was deemed to be over.

5. The exercise provided the first opportunity for Strathclyde Police to exercise the role of the Procurator Fiscal (PF) and the Senior Investigating Officer (SIO) and their response to such an incident while also providing a valuable insight to other agencies involved and the requirements that would be made of them through the process of investigating the incident.

6. Early involvement of the PF was identified as a crucial requirement.

DEGREE OF PARTICIPATION AND CONSTRAINTS

7. By virtue of the fact that Strathclyde Police are one of the main agencies responding to a nuclear reactor/weapons accident, co-ordinating the overall response, a high level of participation was necessary in particular as the exercise was run on a 24 hours basis over a three day period.

8. It was therefore somewhat disappointing that 'through the night play' was severely restricted due to limited or non participation of other key agencies involved in the response, thus making many of the resources provided by the police to facilitate through the night play redundant.

9. Although the demands on manpower facilitating such an exercise are great it would be obvious to all agencies concerned that contingencies are required to support a sustained response at a high level of expertise if such an incident was to happen for real, however

unlikely that may be. The exercise provided an ideal platform for such contingency arrangements to be tested.

GOOD POINTS

10. The alerting process went well with early notification by telephone followed by a facsimile message confirmation including appropriate information on weather conditions and area likely to be affected. The police alerting procedures were then activated on a priority basis.

11. The police cell within the COSC operated well with very few difficulties being experienced. However, due to the high demand for the use of a facsimile machine in support of the police command and control system structure, it is considered appropriate that a dedicated facility should be provided to the police cell.

12. As already alluded to the role of the COSC Co-ordinator and the subsequent transfer of this role to the Chief Executive of the Local Authority was achieved with a high degree of success. Liaison and interaction within the policy-making group provided a sound framework within which the response to the incident was managed.

13. The Incident Control Post (ICP) was located within Dumbarton Police Office and generally worked well. The length and scale of the exercise allowed for a better understanding of the equipment and manpower level requirements within the ICP while also serving to reinforce the belief of Strathclyde Police that Dumbarton Police Office would be best suited to provide this facility in the event of a nuclear incident anywhere in the Clyde area. Accordingly this should be reflected in CLYDEPUBSAFE.

LEARNING POINTS

14. As alluded to earlier the role of the PF should not be underestimated and early notification is therefore essential. Furthermore, the consequences of such an incident would require the PF and the SIO being involved at the strategic point of command although not necessarily from a policy making point of view and therefore not likely to be represented at the 'big table' meetings. This of course raises an issue of accommodation within the COSC which may be shared by both these roles and due consideration should be given accordingly.

15. The joint interviewing of key personnel by the police investigation team and MoD(RN) was seen as a point of best practice. Such procedures are of immense value particularly where a witness may be imparting information of a highly technical or specialist nature,

16. The status board on display in the main atrium area of the COSC was seen to serve very little purpose and a more appropriate facility may be the provision of an 'information' board on which the policy decisions and press releases can be displayed as well as any additional appropriate information.

17. The exercising of the ICP at Dumbarton Police Office confirmed the facilities and communications systems available would suffice, with a little modification, for this function to service any such incident within the Clyde area.

INTERFACES WITH OTHER AGENCIES

18. The exercising of the media response as a major part of the exercise made for some very testing times for those responsible for providing information to the public. Full and structured joint briefings of those attending press conferences would go some way to alleviating many of the areas where difficulties were experienced, in particular in areas where there appeared to be a distinct lack of commonality in the messages being given, resulting in general dissatisfaction amongst the media players.

19. That having been said it is recognised that at times the pseudo press had been whipped up by their tutors presenting some unreasonable behaviour, however, that only served to highlight the importance of a properly prepared and appointed liaison team as an interface between the COSC and the media.

20. The value of hard copy media releases being available to all key players prior to press conferences taking place should not be underestimated and an appropriate amount of time allowed for structured joint briefings prior to press conferences.

21. Communication between those represented at the 'big table' meetings was sometimes difficult particularly as this function is carried out in the main atrium area with all the other distractions, noises and movements of personnel. While it is not suggested that this interfered unreasonably with the process of the policy group it did provide difficulties with one end of the table unable to hear clearly the other end.

22. The inclusion of individual microphones would alleviate this problem whilst also enabling others in the main atrium to hear to course of the discussions. Similarly, consideration of a public address system would enable the Co-ordinator to call the meetings and update cells on matters on common interest.

23. The message logging system provides a vital function essential to the smooth operation and management of the Actions/Messages. Although, in the main, the system worked it had to be made to work.

24. The COSC Logging Desk was often referred to as the police-logging desk which brought about a degree of confusion between the separate roles of the COSC Logging Desk and the Police Operations Cell. It is therefore important that other agencies use the correct nomenclature and understand the separate roles of each cell,

25. There were also significant difficulties being experienced through the lack of understanding of the functions of the logging desk system in particular with regard to the purpose of 'actions' and 'messages' and the need to respond to actions at the earliest, recording

the responses at the logging desk. Consideration may therefore be given to the production of a training video highlighting the administration processes within the COSC with copies made available to each agency represented within the COSC.

26. The siting of the general use photocopier next to the logging desk gave the impression that it was those staffing the logging desk who were responsible for servicing the copier. There was also a real danger of COSC Logging Desk papers being removed inadvertently by those using the facility. Consideration should be given to relocating the general use copier, perhaps within the Administration Cell.

27. Due to the pivotal role of the logging desk within the COSC it is considered inappropriate that the staff at the logging desk should queue for access to the photocopier. Therefore a need is identified for a dedicated facility.

28. The Strathclyde Police liaison officer at Nuclear Accident Headquarters was co-located with the Ministry of Defence Police and this caused some confusion of their separate roles. It was sometime before the Navy Incident Commander appreciated the role of the Strathclyde Police representative. It is recommended that within the NAHQ the 'police desk' be separated into 2 areas, i.e., 'MoD Police' and 'Civil Police'.

29. Although not fully tested during the exercise the role of the liaison officer at MoD HQ, London was seen as vital in communicating the local perspective in Whitehall. Additionally it provides a link for the police as the co-ordinating authority during the emergency phase with the Central Government response. It is recommended that this role is maintained for incidents under the scope of CLYDEPUBSAFE. Previous experience of high profile incidents has demonstrated that such a role is crucial in facilitating solutions which require wide consultation.

GENERAL

30. Taking an overview, SHORT SERMON 97 was seen as both worthwhile and successful. Strathclyde Police derived a great deal from our participation and the exercise directing staff are to be commended for their organisation of the exercise.

31. It is appropriate that in this document the various arms of the Ministry of Defence be recognised for the facilities made available to Strathclyde Police including accommodation and catering which were of a high standard. It would be appreciated if our thanks are formally recorded.

Provided by

Emergencies Planning Section
Strathclyde Police

HM COASTGUARD

AIMS AND ACHIEVEMENTS

1. The aims of the agency for the exercise were achieved with participation from both the operations room staff at the Maritime Rescue Co-ordination Centre, Greenock and Coastguard personnel present at the Clyde Off-site Centre (COSC).

DEGREE OF PARTICIPATION AND CONSTRAINTS

2. The only constraint within the Coastguard was the fact that we rely heavily on volunteers, ie. The RNLI and our own Coastguard Rescue Teams to assist us in Search and Rescue. I am not fully sure whether these volunteers would be available to us given the scenario of the exercise or in fact even for a similar real life incident.

GOOD POINTS

3. The thing that went well was the fact that we were able to overcome all tasks set by the exercise and other organisations in a competent and professional manner. Also the exercise gave other agencies a chance to see how the Coastguard could assist if this type of thing were to happen for real.

LEARNING POINTS

4. One of the main learning points was to actually get Coastguard personnel into the COSC who would or could be there in the event of a major incident. The officers that attended this exercise thoroughly enjoyed the experience of working closely with other organisations and benefited enormously by being part of the message handling system of which they now fully understand.

INTERFACES WITH OTHER AGENCIES

5. The interface between all agencies went well especially our close links with the Navy, police, fire, ambulance and (MOD police) Clyde Marine Unit.

Provided by

Sector Manager, Clyde
HM Coastguard

STRATHCLYDE FIRE BRIGADE

AIMS AND ACHIEVEMENTS

1. The aims of Strathclyde Fire Brigade during Exercise Short Sermon were:
   a. To evaluate the liaison between Brigade personnel and the Defence Fire Service on site fire team;
   b. To audit the hosting and escort arrangements within HM Naval Base, Clyde;
   c. To audit the Brigade Major Incident Plan at Strategic Command Level within the Clyde Off-Site Centre (COSC).

2. These aims were fully met as detailed below.

DEGREE OF PARTICIPATION AND CONSTRAINTS

3. Strathclyde Fire Brigade were involved at all stages of the planning process for the exercise with our representatives playing a full and active role. Full consultation with the Fire Service representative bodies was encouraged with access being allowed to the exercise area to conduct a risk assessment which allowed any concerns they may have had to be alleviated.

4. Because of the need to maintain fire cover within the Brigade area and taking account of geography of the exercise area, the response from the Brigade within the base was limited to one pumping appliance and a Technical Support Unit plus the associated Senior Officers and scientific advisors required to deal with the incident on and off site.

GOOD POINTS

5. Liaison between the Officers in Charge of Strathclyde Fire Brigade and the Defence Fire Service proved effective, with a full briefing on the incident being exchanged. A clear and concise briefing was also given by the incident vessel's Duty Officer. The Captain of the incident vessel showed an acute awareness of the safety of attending personnel and his actions were fully supported by the respective Officers in Charge.

6. On arrival the attending appliances were allowed to make an entry into the base without being challenged and were immediately escorted to the incident site thereby minimising any delays.

7. The role of Strathclyde Fire Brigade at strategic level was well supported by the first class facilities provided within the COSC. The communication links within the Fire Brigade cell were tested for the first time and proved more than adequate for the task.

LEARNING POINTS

8. Strathclyde Fire Brigade's role within the exercise scenario was limited to supporting actions on the jetty. This role indicated a reduced familiarity by Brigade personnel of the

quayside fire fighting systems and showed the need to maintain and reinforce the Brigade's current knowledge regarding the potential risks within the base and in the use of Defence Fire Service equipment. This knowledge should be strengthened by the continued development of familiarisation visits and continued liaison with the Base fire teams through joint training exercises. Steps are being taken locally to deal with the points raised above.

9. The absence of Health Physics monitors on the jetty was an area of concern in that safe access and egress routes require to be established for the safety of attending personnel. The Brigade's Technical Support Team Chemist provided this support during the exercise, but it is felt that on-site personnel fully equipped and conversant with the scenarios likely to be found, would be able to provide a fuller appreciation of the hazards associated with incidents of this type. This would allow the Technical Support Team Chemist to act in a liaison role providing support and assistance to the Brigade's operational function at the incident.

10. The initial call to Brigade Control caused some confusion in that although the call was received from Strathclyde Police as expected, a codeword was used which was not recognised as the declaration of an off-site incident, therefore our response to the COSC was delayed. As the exercise was designed to simulate the response to an incident requiring the COSC to come into operation, the notification process for the exercise should have followed the actions expected from an actual incident. It is recommend that CLYDEPUBSAFE be amended to include that, where a response to the COSC is expected, the notification message should contain a clear and unambiguous declaration of an off-site incident.

11. The Nuclear Accident HQ (NAHQ) within the Naval Base is considered an essential element for command and control of an incident, providing a suitable arena for the tactical element of incident command and control to be undertaken. It is therefore essential that the Fire Brigade is provided with a place within the NAHQ during incidents. This would allow an effective communication link between the operational command element at the accident site and the strategic command element at the COSC. The communications link to the incident scene may prove achievable by the Brigade's hand portable radios and should therefore be tested to establish if they are effective. Arrangements are being made at a local level to have a Brigade presence within the NAHQ during incidents, and communications links are being established to provide support.

GENERAL

12. The exercise proved to be of great benefit to the Brigade participants at all command levels and the lessons learned will form best practice within the Brigade's Major Incident Plan. Thankfully live incidents of this magnitude are rare, and it is only by participating in exercises of this type that the Brigade Senior Officers can gain experience of their role at the strategic level of command and control for major incidents.

ARGYLL AND BUTE COUNCIL

AIMS AND ACHIEVEMENTS

1. The most important aims of the Council were:-

   a. to exercise the liaison between ourselves and other agencies;
   b. to exercise the handover of primacy from the Chief Constable to the Chief Executive;
   c. to look at the implications of media and press handling in particular after the handover of primacy;
   d. to address the composition and work of the Remediation Working Group.

2. The Council is satisfied that our aims were achieved, and overall feel that the exercise was successful, albeit with learning points which we will build into our future response.

DEGREE OF PARTICIPATION AND CONSTRAINTS

3. All the significant departments were present in the COSC, and, although it transpired that Roads and Housing were not particularly well used, it was still a worthwhile experience as it gave them an insight into the progression of the exercise and they could anticipate being involved at a later stage in remediation. Social Work and Education were fully involved as were Environmental Services and our Press Officers. In retrospect, we should have played overnight on the first night, and we would do so in the future. None of our Councillors were able to attend the exercise as observers due to our Committee cycle. We felt that the Ministerial presence added significantly to the exercise and we would consider Councillor involvement in a future exercise to add that dimension to our play.

GOOD POINTS

4. All the members of the Council played at their parts properly and with enthusiasm. They worked well together particularly in cross boundary co-operation. All the work that they progressed e.g. transportation, information from head teachers, extra staffing and equipment for notional Rest Centres was fully tested and not brought into play until real confirmation had been received. This was an excellent opportunity to raise awareness with our own staff not actually playing in the exercise and also in the development of mutual aid with other authorities. Our Press Officer commented on her satisfaction on being fully briefed from within the cell when she needed information and given attention almost as soon as a press release had occurred, and there was more of a change of emphasis rather than a clear distinction between the emergency and remediation phase. The Chairman of the Remediation Group found that he had considerable difficulties gathering together the group for meetings as they all worked in their individual cells. It would be more effective to

recognise this group as a cell in its own right, to facilitate their deliberations from early on in an incident. This would necessitate all agencies represented in the group identifying a member of staff with that specific role.

LEARNING POINTS

5. **Staffing Issues:** the local authority cell consisted of representatives from six departments. We found that the major departments (Education and Social Work) needed two people, Environmental Services probably three, as one of them was designated Chairman of the Remediation Group. Ideally the same people should play throughout the exercise, although the obvious reason for not doing so, is to give as many as possible the experience. We recognise that we should develop a means of perhaps faxing bulletins to the next person playing, and leaving more extensive briefing notes, although neither substitute for a face to face handover.

6. **Administrative Support:** consideration will have to be given to the administrative back up which is needed, especially in post handover phase. This was noted, not just for the cell, but also in support of the Chairman of the Remediation Group and for the Chief Executive as COSC Co-ordinator who needed a staff officer, clerical support and a runner.

7. **Cell Management:** there needs to be someone in charge of the cell preferably at Director level, particularly after the handover to the Chief Executive as COSC Co-ordinator.

8. **Communications:** there were some difficulties within the cell on getting sight of press releases and top table decisions. This would have been better circulated to each departmental group within the cell. It was also difficult to get the time to get information from the local authority departments before meetings, and brief them after the top table meetings, because these were too frequent and too long.

9. **Staff Confidence:** a significant issue which we had not anticipated, (but which would probably really happen) was that Environmental Health Officers were very reluctant to undertake the type of response which we would normally expect of them. This was simply because they did not want to go from relative safety, into a contaminated area, despite assurances as to their safety (e.g. the issue of PITs and protective masks). This raises a fundamental question as to the reality of available staff in such a situation.

10. **Help Lines:** although we notionally established a help line for the exercise, we did not fully exercise this within the council. We will now identify staff from different departments who will undertake training in this area. This will be taken forward in the New Year.

11. **Public Relations:** the press and public relations responsibilities in the remediation phase were still enormous, and although we were grateful to the police for their continued assistance, it became evident that we needed press officers with local authority experience to

help. There is a fledgling mutual assistance group of Scottish PROs recently established, and we would call upon other local authority PROs in future.

INTERFACES WITH OTHER AGENCIES

12. In most cases the liaison links with other agencies were good, partially due to already established working relationships. This was particularly true of Environmental Services with the Health Board, and Emergency Planning with the Emergency Services and the Navy. There was also a willingness among the players to quickly learn the strengths of others and ask for assistance when it was needed. Inevitably however there were areas where we need to do some work. The Scottish Office players did not seem to have an appreciation of the work of the Water Authority or the local authority in the testing of public water supplies or the role of the environmental health officers in the control of the food supply, so consultation and liaison was less than effective. We need to train and exercise more with them. Our own Public Relations Department need to form stronger links with PROs in the Police, Navy, Health Board and Scottish Office Information Directorate, and a more robust liaison between local West of Scotland Water Authority officers and ourselves is also important.

GENERAL POINTS

13. PHYSICAL RESOURCES IN THE CLYDE OFF-SITE CENTRE

a. Insufficient desks and chairs in cell.

b. Photocopying arrangements need improvement, a colour photocopier is required for monitoring data maps.

c. There is a need for meeting space for diverse groups, properly identified, and a booking system for its use, other than the top table.

d. The heating and ventilation needs to be addressed.

e. It would have been useful to have a skilled plotter (either from the Navy or from our own resources), to update maps with weather changes, or a proper print-out which could have been issued, and updated as appropriate to all cells.

f. An e-mail / network link for all cells would be extremely useful for the passage of information.

g. The top table needs microphones for better communication both at the table and for those 'hovering'.

h. The size of the local authority cell was barely adequate. In the event of another council being heavily involved, space to work would be a real problem.

14. GUIDANCE TO PLAYERS

Each agency must be responsible for ensuring that their players know what responsibility their agency has and what their own role is; if they don't it slows down the overall response.

15. REMEDIATION GROUP

Recognising that this was the first real exercise of this group many lessons were learned. We assumed that the remediation cell would start in the post handover phase, but it was evident very early on that, for the local authority, the issues of remediation were being identified

16. HANDOVER PROCEDURES

A longer handover period would probably be useful. Although the Chief Executive was briefed by the Assistant Chief Constable, as time went on, he recognised that there were gaps in his knowledge. This was probably more evident in an exercise than would be in a real incident.

17. AGENCIES REPRESENTED IN REMEDIATION PHASE

Some thought should be given to the composition of cells and the numbers of people required by agencies in the remediation phase. Even in such a good facility as the COSC, space is a premium, and agencies really need to question if they have to be on site, or could respond just as effectively from their own offices.

IN SUMMARY

18. The Chief Executive and the officers of the Council who took part in the exercise all found it a valuable experience. The lessons we have learned will be of great assistance in our response to all types of emergency situations.

Provided by

Emergency Planning Office
Argyll and Bute Council

ARGYLL AND CLYDE HEALTH BOARD

AIMS AND ACHIEVEMENTS

Status achieved.
A= actually done or put in place
M= major liaison or organisational work undertaken without actual set up (exercise artificiality)
P= paper play or decision without further action to set up (would require further major resources not possible in exercise situation)

1. **Health Board Control**

   a. Set up Health Board (HB) Control at Ross House, Paisley in response to Exercise alert (A)
   b. Planned relief and support for key staff members (M)
   c. Provided postcode and Community Health Index (CHI) linked population data for affected area to Clyde Off-site Centre (COSC) HB staff (A)

2. **Countermeasures (Potassium Iodate Tablets (PITs))**

   a. Alerted Distribution teams (A)
   b. Distributed PITs to 4.5km downwind of incident berth (M) and whole of Rosneath Peninsular (P)
   c. Organised provision of PITs for Emergency Services (P) and Victoria Halls (M)
   d. Set up 0800 helpline number for those receiving stable iodine tablets and received and answered 25 logged calls using a four line cascade telephone system number (A)

3. **Health Monitoring (Short-term)**

   a. Arranged for training of doctors to man health monitoring stations (with Navy) (M)
   b. Organised occupational health monitoring for emergency services on Day 2 with whole body monitoring of 10 people with high readings (with Navy & NRPB) (M)
   c. Described and mapped geographical zones for priority monitoring groups (with DRPS) (A)
   d. Set up 3 health monitoring stations for the population to include transport options and priority group definitions (with Argyll & Bute Council and NRPB) (M)
   e. Developed referral system and threshold for referral of high body dose persons (P)
   f. Commissioned counselling teams to be present at monitoring sites (with Argyll & Bute Council) (M)
   g. Requested Greater Glasgow HB to also set up monitoring including whole body monitors at NHS hospitals (P)

4. Health Monitoring (Long-term)

a. Commissioned prospective cohort study of long term health effects from Scottish Centre for Infection and Environmental Health (SCIEH) (P)
b. Set up neonatal and known thyroid disease monitoring of thyroid function in stable iodine tablet receivers and mothers in third trimester (P)
c. Alerted GPs to low threshold for suspicion of thyroid disease in those who had PITs (P)
d. Set up and chaired Health Advisory Group comprising key agencies: remit to discuss the health implications of radiation monitoring results and task agencies with joint actions. 4 meetings (A)

5. Communication (Public, Media & Professional)

a. Provided press officers to COSC resulting in close inter-agency working (A)
b. Provided direct response from COSC to media inquiries (days 2 & 3) (A)
c. Attended COSC press conferences (A)
d. Exercised Health Board's Media Management Plan (A)
e. 2 media statements issued from Director of Public Health (A)
f. From HB Control: cascaded information to health professionals
g. Explanatory letter faxed to local GPs (A)
h. Information on exercise progress to local hospital (A)
i. Developed public information leaflets for monitoring stations (with NRPB & Navy) (M)
j. From HB Control: answered miscellaneous public and media phone calls (Day 1) (A)
k. Links established with Scottish Office Emergency Room (A)
l. Commissioned full page advert detailing answers to health queries (with SO & NRPB) (P)

DEGREE OF PARTICIPATION AND CONSTRAINTS

6. We estimate that approximately 40 health board staff were involved in the exercise on day one spread between the Board's headquarters and COSC; falling to 12 for day two and 10 on day three. Other NHS hospital staff were included as observers. Planned additional assistance from Greater Glasgow Health Board staff was not required, and they were keen to save energy and resources for another 2-day exercise. Ayrshire & Arran Health Board provided an EPO Distaff. The exercise also clashed with one at Hunterston which would have depleted both boards' resources if we had been required to contribute to that.

7. Constraints on participation included having to ensure capacity to deal with other public health incidents (which did occur), lack of staff resources to hope to play overnight and no true capacity to allow for staff shift changes. In a real event the load would have been spread between different directorates in the Health Board, other colleagues from Public Health Medicine and the SCIEH.

GOOD POINTS

8. Once some technical problems were sorted out, the PITs helpline went well.

9. Health Advisory Group lead by Consultant in Public Health.

10. The Health Board's media management plan and press officer response.

11. Good potential for use of new mapping GIS software linked to population data.

12. Excellent exercise to form a starting point for new HB Emergency Procedures.

LEARNING POINTS

13. Major communication difficulties between COSC and HB Control due primarily to lack of co-ordinating staff available at COSC to give regular situation reports. We will address this by reviewing our IT resources and appropriate use of electronic communications in both centres and by redefining staff roles and responsibilities.

14. We did not devote enough staff resources to the COSC at the start possibly because previous exercises have not stretched us in the way this one did.

15. We will review the mechanisms used for distribution of PITs after an internal review of this exercise; it is likely the working group previously set up to discuss PIT distribution in 1993 will be reconvened.

16. We need to discuss the most effective way to keep the Scottish Office Emergency Room updated; this will be achieved through direct discussion and role definition.

17. We now appreciate better the need to protect "strategic" staff from becoming concerned with the operational aspects.

INTERFACES WITH OTHER AGENCIES

18. Links with Argyll & Bute Council staff were excellent. We valued the close working relationships that developed between us, the NRPB, all the Navy & DRPS radiation physicists and medical staff although roles were confused initially. There was no "interface" between the Scottish Office COSC players and the Health Board and no joint discussion about health implications or mixed messages for food bans etc.. In retrospect, formal links with SEPA would have been useful.

19. Difficult to fully appreciate roles and potential uses of so many health/medical advisers/ doctors from other agencies. This needs to be considered in the health advisory group

discussions. The NHS Radiation Protection Adviser would be better at COSC rather than at Health Board Control.

20. We are not convinced that to get the Director of Public Health to lead the Radiation Health Cell is the best idea without a major rethink about the whole function of monitoring, health protection, population information and remediation etc.. We are already having discussions with the key personnel at Faslane about how this could be achieved.

21. A major problem was that geographical extent of PIT distribution/countermeasure advice was not recorded as a policy decision at top table meeting. This then led to very different reports and actions by involved agencies. Need to stress that recording countermeasure advice and action in detail is vital. We felt that widely disseminated top table meeting notes were needed in addition to policy decision notes.

22. It seemed that health issues (and public information on such) was somewhat discarded in initial top table discussions, but we hope that it became apparent to all by day 3 that these need to be considered very early on.

23. The message system is not appropriate for dealing with ad hoc queries from the public on such a wide variety of issues; most could have been answered from a "generic" central cell with more complex issues, then directed but appropriately. A multi-agency team could have written basic question and answer sheets to assist with this function but would have had to be directed to do so by someone. The media cell adopted this type of response where different press officers were able to respond to multiple wide ranging questions.

24. Interesting that the remediation group had to have a discussion about whether health issues should be considered alongside environmental remediation!

25. The media "circus" and "public" players were excellent and provided very realistic complexities. Our press officers were appreciative of the close working relationships that developed between key agencies, especially as the remediation phase got underway.

26. Re-organisation of the COSC to deal with the different requirements of the agencies involved in remediation once the role of the emergency services is lessened would be extremely helpful. Our hope would be that cells or areas devoted to specific aspects be developed instead of agency cells.

27. In order to fully respond in a real situation we would require many more telephone points: the ability to communicate and co-ordinate from a two agency cell with only 3 lines is severely hampered currently.

Provided by

Consultant in Public Health Medicine
Argyll & Clyde Health Board

THE SCOTTISH OFFICE

AIMS AND ACHIEVEMENTS

1. The aims of The Scottish Office (TSO) were to test the Department's ability to respond to a military nuclear incident and specifically:-

a. To test the call-out procedures;

b. To test communications between the Scottish Office Emergency Room (SOER) and the Clyde Off-site Centre (COSC);

c. To test links and communications with TSO Liaison Division in London;

d. To provide briefing and other material for pseudo-ministers through Liaison Division.

2. The achievements, by reference to the above aims were:-

a. This was achieved satisfactorily. Everyone who needed a call got one and all involved arrived promptly at the SOER. The arrival of staff from Edinburgh at COSC was necessarily much slower.

b. This was successful insofar as it proved the hard systems worked. It was less successful in other ways. First, there was a period of 2 hours or more where information from the COSC had not begun to come through to the SOER. Second, the 'rolling brief from the COSC was sometimes up to 2 hours late. Also, there did not seem to be consistent prioritising of material from the COSC (for example, towards the end of the Exercise we were receiving several documents simply "lumped" together under one fax cover sheet). In addition, our small numbers at the COSC led to difficulties for them in keeping the SOER fully in touch.

c. This tested the internal SCOTS (computer network) system and the Video link between our Liaison Division in Dover House and the SOER in St Andrew's House. These links were successful. Less satisfactory was the quality side, i.e. the degree of success in communicating all the desired information to our Liaison Division.

d. This was tested and there was a considerable improvement in quality on previous years. But there is still some way to go to reach a volume and quality of material in exercising which would be acceptable in the real event. However, in the real event additional skilled resources would be brought to the SOER.

DEGREE OF PARTICIPATION AND CONSTRAINTS

3. TSO participation was enthusiastic but lacking in players. The duration of the exercise over 3 days demanded a greater degree of commitment on parts of the Department than it was able at this time to offer.

4. All staff in the Home Department's Emergency Planning team were actively involved up to and including the Under Secretary, and they were supported by a range of staff from across TSO on the Health and Agriculture sides, as well as (on one day) by the acting Director of Information Directorate. Some parts of the office operated from their desks and there was insufficient activity on their area of responsibility to test whether this would work in a real incident.

5. The exercise fell at a time when Devolution matters were being given priority and when our Information Directorate (Press Officers) were sorely stretched and so unable to provide an adequate number of staff. Consequently their input was considerably reduced from previous occasions.

6. It is likely that numbers of players in exercises will be constrained for the foreseeable future and we are exploring ways of addressing this.

GOOD POINTS

7. It was felt that the administration of the SOER had gone very well : this was commented upon by Distaff at the end of the exercise.

8. The attendance of the Under Secretary after lunch on Day 1 probably replicated reality and also helped to focus on the pressure points, such as statements in the House etc..

9. The video-link between St Andrew's House and Dover House was tested, added a bit of reality to the exercise and was, in exercise terms, a useful realistic inject.

LEARNING POINTS

10. It is not possible to reach any degree of realism without much more participation by higher-grade staff and greater levels of activity. A key role for us is to brief Ministers, and at times this almost took a back seat to trying to keep the communications flowing because the information they would want is not only what is happening but also what is going to happen and in those respects what are and will be the consequences. That is, due to various difficulties (see above) the collection of information to be used for briefing Ministers almost took precedence over actually preparing briefing.

11. We need to consider the involvement of dedicated "wordsmiths" to pull together the various strands of comment and advice for Ministerial briefings. We should also consider preparing background notes, briefing outlines, lines to take and Q & A material as part of the various emergency plans held across the office.

12. We should investigate the possibility of co-operating with TSO's Energy Division on a joint response to civil and military nuclear incidents thus increasing the opportunities for exercising a larger number of staff more often.

INTERFACES WITH OTHER AGENCIES

13. **MOD:** Given the delays and other difficulties experienced, we should consider a line from TSO cell to our SCOTS system (and scanners in the SOER and COSC) to allow direct mailing of material by SO staff (and possibly links for Video (ISDN) and radio). TSO Video-link was successful and consideration should be given to using this for internal SO meetings and high level meetings between the participating departments.

14. **NRPB/DRPS/MAFF:** The representatives in SOER worked with all staff there to provide expert advice on this subject matter but there was sometimes a lack of clarity about who should be saying and doing what. The most important issue would clearly have been human health and at times this was lost in the discussions about technical/scientific issues. We need to consider this issue internally to establish what information TSO wants and at what location and then put in place or augment procedures, agreements, concordats or whatever is required to ensure the processes are in place to have clear understandable information and advice relevant too health.

15. **SEPA:** Attended the COSC but not SOER. Worked well with TSO agriculture staff and MAFF. But there was a difficulty over receipt in the SOER of RIMNET information and the issues raised also above have some relevant to SEPA.

Provided by

Emergency Planning Branch
The Scottish Office

Exercise SHORT SERMON 97

SCOTTISH ENVIRONMENT PROTECTION AGENCY

INTRODUCTION

1. The Scottish Environment Protection Agency (SEPA) has a regulatory role under the Radioactive Substances Act 1993 (RSA93) to licence and monitor the disposal of radioactive waste from nuclear licensed sites and other industrial users. HM Naval Base Clyde, Faslane is exempt from the provisions of RSA93 but it is MoD policy to ensure that standards no less stringent than those in place at civil sites are applied to all naval sites. One consequence of this policy is a formal agreement between MoD and SEPA to permit the disposal of radioactive waste.

2. The Scottish Office Emergency Handbook defines SEPA's role in a nuclear emergency as:

> "SEPA is responsible for operating RIMNET system in Scotland. In its role as a regulator of any discharges into the environment, SEPA will provide advice on the need for restrictions on agricultural produce and environmental issues. SEPA will also provide advice to Water Authorities and Local Councils."

3. SEPA views the provision of advice as an essential function of its role which is in addition to its regulatory role: to ensure that, at a nuclear site regulated by SEPA, the best practicable means are used to control the amount of radioactivity released to minimise any potential impact on the environment. This includes its role with respect to remediation to ensure that any radioactive waste generated during a clean up operation is disposed of in the most appropriate manner. This could include the grant of authorisations under RSA93. The scenario provided by SHORT SERMON 97 provided SEPA with a number of challenges for both its advisory and regulatory roles.

AIMS AND ACHIEVEMENTS

4. SEPA is a relatively new organisation and the exercise provided an ideal opportunity to test the systems put in place for it to respond to a nuclear emergency. SEPA are at this time preparing a response plan to supersede the interim arrangements put in place at SEPA's formation. SEPA therefore viewed the exercise as an ideal testing ground for the systems in place and to identify areas in the interim plan which could be improved in any new system.

5. There were four main areas that SEPA wished to test during SHORT SERMON: its nuclear emergency response plan; the use of RIMNET; communications within SEPA and with other bodies; and to clarify its role in a nuclear emergency. These were quite ambitious and would involve a significant proportion of SEPA's specialist resources to achieve.

DEGREE OF PARTICIPATION AND CONSTRAINTS

6. Approximately half of SEPA's specialist officers in radioactive substance matters were involved during SHORT SERMON from SEPA West Region (in which HMNB Clyde is located) and other Regions. SEPA Head Office, Stirling, where the Scottish RIMNET system is located, provided technical and policy advisors as well as operating RIMNET. In addition to specialists in radioactivity, SEPA West Region provided general environmental scientific advice; pollution prevention control (PPC) officers to 'take' samples; and a public relations officer who attended the COSC throughout the exercise.

7. SEPA officers participated at the COSC at Rhu, Head Office and at local offices of SEPA West Region. Apart for officers directly involved at the COSC and SEPA Head Office all exercise participation was paper play only. This included SEPA West's research survey vessel, the MV Endrick, which 'sailed' from Greenock to take water and sediment samples. Scientific advice, which contributed to SEPA's advice to Scottish Office, local authorities and West of Scotland Water on agricultural and drinking water matters, included data on the movement of water in Gareloch and the habits of commercially fished flounder in the Clyde Estuary.

8. SEPA participated on an extended day basis only and did not participate overnight.

GOOD POINTS

9. First of all, SEPA wishes to thank the MoD for the provision of a scenario with such an extensive scope. This includes the 'dilemma' provided by the scenario on whether or not to 'sink the submarine'. SEPA understands that sinking the submarine was not in the original exercise programme, and it acknowledge the efforts of the exercise directing staff on keeping half a step ahead of the players ensuring that the latter part of the exercise still provided a realistic challenge.

10. The 'dilemma' mentioned above provided SEPA with an ideal opportunity to introduce and test the concepts of Best Practicable Environmental Option (BPEO) in relation to an emergency exercise; this is an area where SEPA was looking to define its role during nuclear emergencies. This scenario provided a significant amount of information to take forward into the preparation of its Nuclear Emergency Response Plan.

11. SEPA believes that the remediation aspects of SHORT SERMON 97 were a significant improvement on last year's exercise (held at NRTE Vulcan, Dounreay). It believes that the higher priority given to it during exercise planning provided a good springboard for a more successful remediation section during the exercise. SEPA would encourage operators of nuclear sites give a similar priority to remediation when planning their own exercises. SEPA found the remediation strategy group concept to be of use and would welcome its further development, perhaps as part of CLYDEPUBSAFE.

12. SEPA has recently installed a new computer system and this was tested during the exercise. It worked well ensuring that, in addition to telephones and faxes, the officers attending the COSC were 'on-line' with SEPA West HQ and SEPA Head Office. This greatly improved the communication between attending officers and their technical and policy advisors in other parts of SEPA.

13. The majority of staff within SEPA have had no involvement with the nuclear industry. The exercise provided an excellent training and awareness opportunity for SEPA staff and the enthusiasm with which officers responded to the developing emergency showed that the opportunity was well received.

LEARNING POINTS

14. The learning points arising from the exercise are still being identified but some initial points have been given below. They are split into the following areas of concern: COSC; use of non-specialist staff; public relations; and use of RIMNET.

15. Clyde Off-site Centre

a. SEPA did not provide any administrative support at the COSC and it now believes that record keeping, channelling of information etc., suffered because of the lack of a dedicated administrator. Given the number of different organisations which may occupy a cell, SEPA suggest that the MoD should consider providing of a single dedicated cell administrator. Larger organisations provided their own administrators but the provision of dedicated cell administrators would help smaller organisations or those which have to travel some distance to attend the COSC.

b. SEPA found the flow of monitoring information during the early part of the exercise to be slightly problematic. SEPA understands that the provision, by MoD, of a new IT system at the COSC may alleviate this concern. Further, the role of NRPB as monitoring co-ordinator did not become evident until the latter parts of the exercise. The lack of proper, defined co-ordination contributed in part to the delays in information flow. The use of functional working groups, as opposed to organisationally based groups, may help alleviate this problem. However, it is recognised that a significant amount of work would be required to develop the functional concept, especially for the early stages of an accident and its use may be restricted to remediation.

c. Some of the reference material used by SEPA officers at the COSC was found to be slightly dated. Although this did not effect any advice they provided during the exercise SEPA believes that information used by its officers should be as up to date as reasonably possible. Consideration is being given to the provision of an emergency

box at each Regional HQ containing relevant information for use in any nuclear emergency.

16. Use of Non-Specialist Staff

It was recognised early in the exercise that the use of non specialist staff to obtain samples required additional staff training, e.g. sampling techniques for materials contaminated with radionuclides, and an assessment of related health and safety issues.

17. Public Relations

a. The usefulness of the press hall could be enhanced, in SEPA's opinion, by improving the acoustics. The press conferences were at times noisy and the echoes in the hall sometimes drowned out questions etc. Further, better management of the hall to keep extraneous noise down would have assisted although it is recognised that the student press core were inexperienced and slightly undisciplined.

b. That said, SEPA found the 'ladies and gentlemen' of the press core provided a realistic challenge in getting the right message out to the public.

18. Use of RIMNET

a. The electronic mail system within RIMNET was effective in transmitting information although it was noted that in some cases there was an appreciable difference between the time stated on the press release of information and the time that DETR quoted the press release information as being received by them. It is not clear whether this was due to delays in messages being sent to the DETR or if it was due to delays in the DETR distributing messages.

b. Supplementary data became available on the system as the exercise progressed. However, it was some time before these data became available. SEPA found that it was important to set very specific criteria in order to extract data from the system due to the large amount of supplementary information held on the Central Database Facility in London.

c. SEPA intend to expand access to RIMNET at Regional HQs via the use of recently purchased RIMNET PCs. RIMNET could be used as another form of communication between or within organisations but is currently underused. The RIMNET system is likely to be more useful in the later stages of dealing with an accident when areas for remediation and control are being more clearly defined based on all available monitoring results.

CONCLUSION

19. SEPA found the exercise provided a realistic test of its procedures and in the main provided sufficient scope to permit SEPA to move forward on the objectives stated above, especially the preparation of the new nuclear emergency response plan.

20. As indicated above SEPA contributed a significant amount of its specialist resources to the exercise but that it found that the effort was worthwhile, both from the learning experiences provided and general awareness training for all SEPA staff.

Provided by

West Region
Scottish Environment Protection Agency

Exercise SHORT SERMON 97

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

INTRODUCTION, AIMS AND PARTICIPATION

1. The Ministry of Agriculture Fisheries and Food (MAFF) only became involved with this exercise during the final stages of planning, as a result of the recently concluded agreement to act as scientific advisors to the Scottish Office in the event of an accident involving the release of radioactivity to the environment. These comments solely reflect MAFF's views.

2. This was the first opportunity for MAFF to exercise our arrangements with the Scottish Office and it proved extremely valuable. Although we only became involved in the latter stages, the general planning and arrangements of the exercise seemed to be good. It was an excellent scenario which tested both our modelling and monitoring arrangements. The use of EXIGENNE (NRPB tool for generating radiological scenario) was particularly' welcome.

GOOD POINTS

3. The convening of the Civil Contingencies Committee in an exercise was a useful addition.

4. The NRPB monitoring co-ordination role worked well, although clarification is needed in some areas. These are issues which MAFF will discuss with the NRPB.

5. Communications and the flow of information were generally satisfactory. The supply of monitoring results was particularly good, being a great improvement on previous exercises.

LEARNING POINTS

6. Many internal lessons have been learnt by MAFF, especially regarding our liaison with the Northern Ireland Office, and the new arrangements with the Scottish Office and the NRPB.

INTERFACES WITH OTHER AGENCIES

General Procedures

7. Telephones facilities at MoD HQ NARO were not as adequate as desired. More importantly, the screening of all incoming faxes lead to delays and even the loss of some faxes sent to MAFF. A review of this procedure would be welcomed.

8. The concentration on discussion of MoD and naval issues at the Nuclear Accident Information and Advisory Group (NAIAG) rather diluted time spent considering public safety

issues. It is this latter aspect which will be of major public concern and which a multi-agency forum, such as NAIAG, needs to be ensure is presented as a coherent message.

9. With regard to COSC arrangements, for an accident involving several local authorities, it would be very useful if there could be a Liaison Officer, who could act as one point of contact.

10. The idea discussed in the hot wash-up, of having groups dealing with single issues (such as food or remediation) may have some merit. Whilst it could produce new problems of manpower etc., it may be worth trying in a future exercise.

11. The point of most concern in this exercise, was the continued use by the MoD of the out-dated unit, the curie. Perhaps worse, was the fact that the predicted inventory of the reactor was originally given without units. It was instantly assumed to be in becquerels, but later discovered to be in curies. Great care is required when quoting values and SI units should be adopted as the norm. [*MoD note: becquerels are the normal unit used, but there was a mistake on this occasion*].

12. More information about the predicted source term would also have been of use. The radiological impact on the food chain of different nuclides and isotopes can be of major significance and MAFF therefore requires as much detail as possible.

Exercise Driving

13. This was generally good. However, it would have been very useful if all drivers could have been supplied with a plot of the deposition. More technical information to support the scenario would also have been welcomed. The continued use of EXIGEN (see NRPB report) in MoD exercises is to be strongly encouraged, as is the use of its scatter facility.

14. One problem which was of concern regarded the Met. data. There was a lot of confusion with players regarding the wind direction. Whilst this was very realistic, there is the need for there to be a route via which players can obtain additional (and perhaps more accurate) information. In reality, there would be several sources of Met. data available. The MoD may find it useful to investigate the use of the MIST system supplied by the Met. Office; this provides 'live' met. data and forecast. *[MoD note: Met. Office representative attended MoD HQ NARO with MIST]*

Provided by

Radiological Safety and Nutrition Division
Joint Food Safety and Standards Group

NATIONAL RADIOLOGICAL PROTECTION BOARD

AIMS

1. The National Radiological Protection Board's (NRPB) aims for Exercise SHORT SERMON 97 were:

a. to exercise extended response to a MoD(RN) nuclear accident;
b. to provide radiological advice and assessment at the Clyde Off-site Centre (COSC) including to the media, at the Scottish Office Emergency Room (SOER), and at MoD HQ Nuclear Accident Response Organisation (NARO) and the Nuclear Accident Information and Advisory Group (NAIAG);
c. to exercise the co-ordination of radiation monitoring resources in line with NRPB's recently acquired responsibilities in relation to domestic civil nuclear emergencies;
d. to exercise the transport and operation of the portable NRPB whole body monitor.

DEGREE OF PARTICIPATION

2. The NRPB provided staff at the COSC and its associated media briefing centre (MBC), in the SOER in Edinburgh, in London and at NRPB Headquarters at Chilton.

GOOD POINTS

3. The exercise was considered to have been successful from NRPB's perspective. It incorporated a significant number of novel or recently developed issues including:

a. the first full NRPB Chilton Emergency Centre play in a MoD exercise;
b. the longest NRPB play in a nuclear emergency exercise to date;
c. the first NRPB play of monitoring co-ordination in a MoD exercise;
d. the first MoD use of v3.2 of the EXIGEN monitoring simulator for a major exercise;
e. the first exercise involving forwarding of media broadcasts (sound) to NRPB Chilton;
f. the first time MoD(RN) monitoring information was forwarded straight to NRPB from the EMHQ;
g. the first Grade A MoD(RN) exercise following publication of NRPB advice on recovery.
h. the first exercise involving real deployment of the NRPB transportable whole body monitor;
i. the first Scottish exercise involving liaison with the Ministry of Agriculture Fisheries and Food (MAFF) on food restrictions outside MAFF's area.

4. In almost all cases, these "firsts" turned out successfully.

5. Our attendance at HQ NARO & NAIAG in London was effective, especially liaison with DERA Radiation Protection Services (DRPS) staff.

6. At the MBC, the media simulation was effective and produced stimulating play for NRPB participants.

7. The exercise provided many NRPB staff at our Chilton Headquarters, used to participating in civil nuclear exercises, with experience of a MoD scenario. In general, the reactor basis for the accident allowed staff to apply their existing experience well.

8. The provision of monitoring data by fax to Chilton enhanced our early information substantially compared with previous SHORT SERMON experience.

9. This was the first occasion on which the NRPB portable Whole Body Monitor was deployed. We also took the opportunity to test the use of personal monitoring forms developed for use in this context. The occasion provided a good first experience in "field" use of the facility.

10. Many valuable lessons relating to monitoring co-ordination were learnt from the level 3 civil nuclear emergency exercise OSCAR V only 3 weeks prior to SHORT SERMON. Modifications to the original mode of play were made on the basis of that exercise, including: physically locating external representatives close to the Chilton Monitoring co-ordination team; and developing a set of pro-formas to be used to provide formal communication of monitoring priorities (from OSF to Chilton), available resources (from Chilton to OSF) and progress (from Chilton to OSF).

11. The overall amount of monitoring simulated for the exercise was much improved on some previous SHORT SERMON exercises. This was probably only made possible through the use of the EXIGEN program, especially through the extensive simulation of non-MoD resources.

LEARNING POINTS

12. There is more work to be done on the liaison between NRPB, MAFF, SO and others in relation to accidents in Scotland.

13. NRPB failed to identify some of our own data entry errors in RIMNET. This will be taken up in a regular review of internal procedures.

14. At Chilton, NRPB entered early MoD monitoring data onto RIMNET. We took the decision not to manually enter early monitoring data into the military mapping system at Chilton since the COSC mapping team were scheduled to take over fairly soon after the start of the release. With hindsight, it would have probably been better to pursue the manual Chilton route to the military mapping team until the COSC team confirmed their operability through the RIMNET data route

15. At the COSC the NRPB monitoring co-ordination liaison representative requires frequent access to RIMNET-PC for maps of NAME and monitoring. We aim to provide this for future exercises.

INTERFACES WITH OTHER AGENCIES

16. One negative aspect was the spillage of an exercise issue, specifically the decision to sink the submarine, outside the confines of the exercise and into the real media.

17. Although COSC/MBC facilities were generally good, the temperature control within the building was inadequate. This issue was raised on a number of occasions in the exercise planning meetings and a previous smaller COSC exercise.

18. The Radiation Health Cell (RHC) took too long to form up properly. This cell, with its involvement of non-MoD agencies needs to form a strong identity and good working patterns. It would benefit from a template of operation including predetermined likely participating agencies, leads on specific issues, agendas for meetings etc. The room itself was very crowded and for part of the exercise there was, confusingly, a place called the MC (Monitoring Controller) as well as a team of people going under the same acronym.

19. Sometimes it took a long time to obtain MoD monitoring information.

20. Play at the SOER was valuable and the involvement of MAFF in food related monitoring and advice is a very welcome development. There is more to be gained from this, both in terms of clarifying the inputs of various agencies and in developing practical familiarity of the arrangements in the various players.

21. No pre-prepared maps for day 3 were available at SOER.

22. The monitoring simulation at Chilton on the third day was distracted by the injection of the pre-prepared monitoring plots at the COSC. While not disputing the need for these at the COSC to help to drive recovery decisions, such an inject does not sit comfortably with an ongoing monitoring simulation. It is however worth pointing out that the plot provided on the third day presented no surprises to the teams playing at Chilton which testifies to the quality of monitoring and interpretation carried out on the previous two days.

23. The NRPB monitoring co-ordination liaison representative was able to effect a good liaison with SEPA, local authority and health authority representatives as well as MoD monitoring controllers. The MC room provided insufficient working space given the large number of interested parties. The NRPB monitoring co-ordination liaison representative and his assistant were relocated within the COSC with the assistance of DRPS. This caused some temporary disruption to the NRPB team and others.

24. The military mapping teams provided good support to NRPB teams at Chilton and COSC but the time lag between RIMNET data entry and availability of a map can probably be reduced through further review of procedures among the various agencies involved. There is also scope for the specification of default RIMNET data and default maps to be used until more specific requirements are identified.

25. There is a need to develop a strategic level of presentation at the OSF of priorities (the monitoring strategy); progress on existing monitoring tasks; and a call for other priorities at the big table. This should aim to take less time and keep the discussion at the strategic level while informing big table players of the overall position.

Provided by

Emergency Response Group
NRPB

NORTHERN IRELAND OFFICE

AIMS AND ACHIEVEMENTS

1. The aims and objectives of the Northern Ireland Office (NIO) in participating in this exercise related primarily to the testing of central Government Co-ordination arrangements and the operation of the Northern Ireland Technical Advisory Group (NITAG). It is our view that only those aims and objectives associated with NITAG were achieved in that NITAG could have been in session by mid afternoon of the first day, that all the facilities required for an operations room would have been in place, that we were co-ordinating with our Department of the Environment and that arrangements were in place for NIO(L) to represent us at meetings held in London. Regrettably, outside of Northern Ireland co-ordination was far from satisfactory in that the Scottish Office and/or MAFF were making statements on our behalf that had not been cleared by this office and they could not be dissuaded from doing so. There was also concern that the system for distributing Rolling Briefs (from MoD HQ NARO) broke down on day one and this left us unsighted. While a number of these failures are for others to address, it is accepted that NIO procedures will also need to be looked at.

DEGREE OF PARTICIPATION AND CONSTRAINTS

2. Within the normal exercise restraints we had made available most of the staff of Emergency Planning Branch, some members of the Department of the Environment and a number of NITAG members to participate in the exercise.

GOOD POINTS

3. From our point of view all the things that went well in this exercise were local ie. those actions directly under our control such as the Operations Room and its communication facilities, the activation of NITAG and the briefing of NIO(L) staff for meetings.

Provided by

Emergency Planning Branch
NIO