

REPORT ON
IMO OPRC Model Training Course, Level 2, for Supervisors and On-Scene
Commanders held in Colombo, Sri Lanka from 22 to 26 September 2003.

By Kevin O'Connell

1. The Consultant's role

The Consultant was contracted by the International Maritime Organisation (IMO) to participate in the IMO OPRC Model Training Course, Level 2, for Supervisors and On-Scene Commanders held in Colombo, Sri Lanka from 22 to 26 September 2003. The consultant was also asked to develop a tabletop oil spill simulation exercise suitable for the final day of the course. The consultant presented the following course modules:

1. Spill Assessment
2. Syndicate Exercise, Day 1
3. Contingency Planning, Response Management and Organisation
4. Syndicate Exercise, Day 2
5. Operations Planning
6. Syndicate Exercise, Day 3
7. Post Incident Briefing
8. Table-Top Oil Spill Simulation Exercise

1.1 Other lecturers involved

1.1.1 John Ostergaard, Senior Advisor on Marine Pollution, International Maritime Organization (IMO) organised and acted as Chief Facilitator for the seminar. Mr Ostergaard presented the following seminar modules:

1. Introduction to the Course
2. Evidence Gathering and Documentation
3. Media Relations

1.1.2 Richard Johnson, Senior Technical Advisor, The International Tanker Owners Pollution Federation (ITOPF), presented the following seminar modules:

1. Shoreline Clean-up
2. Transfer, Storage and Disposal
3. Liability, Claims and Compensation
4. Response Deactivation

1.1.3 Yogaraj Retnam, Trainer/Consultant, East Asia Response Ltd (EARL) presented the following seminar modules:

1. Oil Behaviour, Fate and Effects
2. The Use of Dispersants
3. Containment, Protection and Recovery of Oil
4. Site Safety
5. Operations Planning

1.1.4 Chan Kok Pyng, Trainer, East Asia Response Ltd (EARL) presented a case history on the recent 'Tasmin Spirit' Incident in Pakistan.

- 1.2 The videos: 'Working Together, Effective Contingency Planning'; 'Erica, the Black Tide'; and 'The Brear, The Real Story' were also shown.

2. Course Modules.

The Consultant presented the modules using the standard IMO Level 2 course material, with photographs and short video clips used to reinforce the teaching. Some modifications were made to the course material to reflect the local situation and risks.

2.1 Spill Assessment

In order to predict and monitor the fate of spilled oil and mobilise the correct response it is essential that adequate surveillance is carried out. Surveillance will provide information on oil slick location and appearance. Visual appearance can be used to estimate the quantity of oil on the sea's surface. Quantifying oil slicks is not easy but it must be attempted. Even in cases where known volumes have been lost, the changes in the oil due to weathering (evaporation, dispersion and emulsification) can significantly alter the volume of floating pollution.

It is difficult to accurately assess the quantity of oil spilled at sea, due to the difficulty in gauging the thickness of the oil and the area of sea that it covers. However, certain factors make it possible to give a reasonable assessment of the magnitude of the spill and therefore help in determining the required clean-up response and allow you to report this accordingly. This session examined the various methods that may be used in the assessment.

2.2 Syndicate Exercise, Day 1

The participants were divided into three groups. Each group was given a scenario and asked to plot the trajectory of an oil slick on a chart and to predict how a given oil would behave. This was used to reinforce some of the important messages discussed during the previous sessions.

2.3 Contingency Planning, Response Management and Organisation – National and Regional Level

This session described how Government have recognized the serious threat posed by a Tier 3 spill and the need for international co-operation to help mitigate the consequences of a oil spill and how, against this background, countries have produced regional contingency plans. National and local contingency plans, detailing a response to both Tier 1 and 2, as well as Tier 3, were also discussed as was the internationally recognised three tier system of response. The participants were made aware that, irrespective of the type and size of the contingency plan, each plan must incorporate three key components; 1. a strategy section, 2. an action and operation section and, 3. a data directory. The participants were also made aware of the need to continuously exercise, up-date and develop the plan to ensure a prompt response to a spill and to mitigate the potential damage of any spill.

Whilst an overview of the factors involved in command, control and communications was given, how these three elements needed to be built into a plan to ensure their effectiveness, was also stressed.

2.4 Syndicate Exercise, Day 2

The participants were again divided into the three groups identified in the exercise on the first day. A number of scenarios were projected onto a screen using a PowerPoint presentation. Each scenario raised a number of issues and conflicts of interest. The groups were given a limited amount of time to assess each situation and to decide on the strategy that they would employ in response to the scenario. A briefing session followed in which a representative of each group was asked to report and discuss their findings.

2.5 Operations Planning

The main elements of effective contingency planning, and operational management backed up by good communication and technical competence were described as the keys to a successful response. The main phases of a response were introduced. In addition to this, the participants were also advised that the development of an Incident Action plan as an overall strategic plan was also essential to the planning of a successful response. A clear Planning Cycle is needed to ensure command and field activities are properly co-ordinated and this was introduced to the participants as a tool for the effective planning and management of a response.

The basic concept of the Incident Command System was explained and a discussion followed as to the relevancy of such a system to the local area. The various roles and responsibilities within a response team were also identified. The session gave the delegates an overview of the difficulties in co-ordinating a major response and as well as identifying the main areas on which to concentrate to ensure effectiveness.

2.6 Syndicate Exercise, Day 3

The participants were again divided into the three groups identified in previous exercises. Each group was given a number of scenarios and asked how they would detail and manage their response to the situations. This was used to reinforce some of the important messages discussed during the previous sessions.

2.7 Post Incident Briefing

This session identifies the need for a post-incident debriefing. The purpose of which is to carry out a detailed evaluation of all response activities and to document strengths and weaknesses of the contingency plan, with recommendations for future improvement. All members of the response team who have supervisory or decision-making roles should be involved. It is important to develop a 'no blame' culture with an objective to seek improvement, rather than to criticize or embarrass individuals.

The main elements in the facilitation of the post-incident debriefings together with the subjects that should be addressed during the post-incident debriefing were explained. The setting for the debriefing could vary according to the scale of the response.

For a large-scale response, it may be effective to initiate the debriefing process with a detailed questionnaire to participants to stimulate their thoughts on various aspects of the operation. This could be followed by a meeting of key team members to organize review comments. In some situations, more productive comments may be brought forward if the meeting is facilitated by someone who is not part of the core response team. Depending on the complexity of the comments, it may be necessary to assign problem-solving tasks to team members or perhaps small work groups which would report back to the team at a later date.

2.8 Table-Top Oil Spill Simulation Exercise

The exercise was specially developed for this course and centred on a fictitious area called Nuaport. Participants were given a chart of the area along with tidal, metrological, environmental and other relevant information. This enabled the participants to decide the appropriate action required should an oil spill occur in the area.

The class where assigned places within three teams. Each team was asked to carry out the exercise independently. The exercise was divided into two parts. In part one, the teams were asked to assess the likely risks to the area and to produce a plan to respond to a likely oil spill. They were also asked to identify the types of equipment they would need to purchase in support of such a response. In part two they had to respond to a given incident to which further injects were added.

The exercise was run in accelerated time and injects were introduced through a PowerPoint presentation. The teams were encouraged to respond to the incident as realistically as possible, emphasising the importance of keeping to their assigned roles and responsibilities and the need to keep complete and accurate records.

A debrief was held at the end of the exercise, at which point the teams were allowed some time to discuss their response to the incident.

3. Consultants Comments

The secretariat of the South Asia Co-operative Environment Programme (SACEP) made an good job of arranging the logistics for the course. The venue was adequate in size for the number of participants with comfortable furniture provided, however we had to change rooms on a number of occasion. This did cause some disruption and confusion and led to some time delays. Additional facilities, such as photocopying and reproduction, was provided by staff assigned to the course.

Participants were from Bangladesh, India, the Maldives, Pakistan and Sri Lanka, this resulted in a good mix of international interests. Due to the recent grounding of the 'Tasmin Spirit' and the subsequent oil spill in Karachi, Pakistan, the participants showed a keen interest in the subject matter. Discussion was lively during most sessions with participants showing a high level of awareness of the issues that may be encountered during an incident. The participants from Pakistan shared their experience of the response to the 'Tasmin Spirit' incident and this was of great benefit to the course.

A site visit was arranged to tour Colombo Port where participants were shown around a warehouse containing a stockpile of oil combating equipment. The staff at the warehouse were knowledgeable and had arranged a display of assembled equipment; this was of great benefit to the participants because many had not seen this type of equipment before.

There were five lecturers in total, with trainers from the IMO, ITOFF and EARL. The range of experience was evident and this added greatly to success of the event. The lecturers were able put across information based on real life incidents as all have practical experience of attending oil spills. Experience from recent events further enhanced this.

4 Course Programme

IMO OPRC Model Training Course Level 2 Response to Oil Spills for Supervisors and On-Scene Commanders

Programme

Colombo, Sri Lanka, 22-26 September 2003

Lecturers		
John Ostergaard Senior Advisor on Marine Pollution		The International Maritime Organization
Kevin O'Connell Consultant to IMO		Director The Oil Spill Training Company Ltd
Richard Johnson Senior Technical Advisor		The International Tanker Owners Pollution Federation
Yogaraj Retnam (Yogi) Trainer/Consultant		East Asia Response Ltd
Monday, 22 September		
09.00-10.30	Arrival of participants/registration Welcome address by Sri Lankan senior official Opening remarks by IMO Course aims and objectives Introductions of participants and lecturers Course timetable and materials Overview of spill response (2)	John Ostergaard
10.30-11.00	Coffee Break	
11.00-11.30	Video: Working together	
11.30-12.30	Oil spill behaviour, fate and effects (4)	Yogaraj Retnam
12.30-13.30	Lunch Break	
13.30-14.15	Spill Assessment (5)	Kevin O'Connell
14.15-15.00	The use of dispersants (9)	Yogaraj Retnam
15.00-15.30	Coffee Break	
15.30-17.00	Syndicate exercise	Kevin O'Connell
17.00	End of day	

Tuesday, 23 September		
08.30-08.45	Review of previous day	
08.45-10.30	Containment, protection and recovery of oil (7) <ul style="list-style-type: none"> • In situ Burning • Bioremediation • Absorbents 	Yogaraj Retnam
10.30-11.00	<i>Coffee Break</i>	
11.00-11.30	Video: The Braer, the real story	
11.30-12.30	Shoreline clean-up (10)	Richard Johnson
12.30-13.30	<i>Lunch Break</i>	
13.30-15.00	Contingency planning, response management and organisation (3) <ul style="list-style-type: none"> • National and regional level • Presentation from National Representatives on the status of their national plans 	Kevin O'Connell
15.00-15.30	<i>Coffee Break</i>	
15.30-17.00	Syndicate exercise	Kevin O'Connell
17.00	<i>End of day</i>	
Wednesday, 24 September		
08.30-08.45	Review of previous day	
08.45-10.00	Site Safety (11)	Yogaraj Retnam
10.00-10.30	Transfer, storage and disposal (12)	Richard Johnson
10.30-11.00	<i>Coffee Break</i>	
11.00-12.00	Operations planning (6)	Kevin O'Connell
12.00-12.30	Video, VideoTel No.5 Command and Control	
12.30-13.30	<i>Lunch Break</i>	
13.30-14.30	Liability, claims and compensation (16)	Richard Johnson
14.30-15.00	Video: Erica, The Black Tide	
15.00-15.30	<i>Coffee Break</i>	
15.30-16.00	Evidence gathering and documentation (14)	John Ostergaard

16.00-17.00	Syndicate exercise	Kevin O'Connell
17.00	<i>End of day</i>	

Thursday, 25 September		
08.30-08.45	Review of previous day	
08.45-09.30	Response deactivation (17)	Richard Johnson
09.30-10.30	Media Relations (13)	John Ostergaard
10.30-11.00	<i>Coffee Break</i>	
11.00-11.45	Post incident briefing (18)	Kevin O'Connell
11.45-12.30	Case History, The Tasman Spirit	Yogaraj Retnam
12.30-13.30	<i>Lunch Break</i>	
13.30-17.00	Field Trip Special programme organised by the host organisation/Government	
17.00	<i>End of day</i>	
Friday, 26 September		
08.30-08.45	Review of previous day	
09.00-10.30	Simulation exercise: Part I	Kevin O'Connell + all
10.30-11.00	<i>Coffee Break</i>	
11.00-12.00	Simulation exercise: Part II	
12.30-13.30	<i>Lunch Break</i>	
13.30-14.15	Simulation exercise: Debriefing	
14.15-15.30	Course close-out session Course review and evaluation Presentation of certificates	
15.30	<i>End of seminar</i>	