

EMERGENCY RESPONSE TRAINING - SIMULATION AND TRAINEE FITNESS

J. H. Cross

Robert Gordon's Institute of Technology  
Offshore Survival Centre

Address for reprints:

RGIT Offshore Survival Centre  
352 King Street  
ABERDEEN AB9 2TQ  
Scotland

Historical maritime records provide an insight into the appalling loss of life among seafarers and passengers who were forced to abandon ship. Since the sinking of the Titanic in 1912, when 1,489 persons died due to a lack of sufficient lifesaving appliances, the provision, design and reliability of equipment has improved. Particularly so during the last twenty years, where inflatable liferafts, to some extent, have replaced the old traditional lifeboats and more recently as totally enclosed and free-fall lifeboats have appeared on the scene. In so far as personal survival equipment is concerned great advances have been made with inflatable lifejackets and immersion suits.

Similar improvements internationally in the provision and quality of sea survival training has not occurred, although some countries have made useful progress in providing emergency response training for many of their maritime workers.

People called upon to face a maritime disaster will face many inherent dangers in conditions of extreme stress. In many cases the response to danger, particularly should it arise suddenly, will be psychomotor rather than intellectual. It has been concluded (1) that 12½-25% of untrained personnel involved in a catastrophe will remain cool, calm and collected. They will command and act sensibly. 50-75% will be bewildered and indecisive and will wait for somebody to tell them what to do. The remaining 12½-25% will tend towards panic. The middle group will react to command once they are told what to do. They will, as far as their ability allows, react to orders. If panic is allowed to spread they will join the last group.

Training has a part to play in preparing individuals to respond correctly and responsibly, and thereby safely during a survivable incident. Training must be designed to ensure that the psychomotor response to the incident is the correct one, ensuring that remedial actions, which might not be immediately obvious, are swiftly implemented. To ensure this, training should be practical and realistic, based on sound common sense and certainly not over theoretical. Trainees should as far as possible utilise liferafts, lifeboats, immersion suits, and lifejackets found at the individual's work place. Where it is inappropriate to provide the actual equipment, realistic simulation utilizing helicopter underwater escape, dry evacuation trainers, environmental drill tanks and (shore based) offshore installation drill platforms can play a very useful part in ensuring practical training at the right level, bearing in mind the need to carefully balance on the thin line between safety and realism.

Some fatalities during training have indicated that a minimum health and fitness standard of trainees should be observed by all training establishments. In addition this recognises that the age of trainees will increase as training becomes the norm for all maritime workers. Particularly as they return for refresher type training. Because of strenuous and often stressful activities during training it is extremely important that the persons being trained are "fit" to participate. Ideally attendees should be in the possession of a recent medical certificate identifying their level of fitness. An alternative currently under consideration in Aberdeen, is to medically screen all individuals at the establishment prior to training. This is to be achieved by a nurse based screening service backed up by a duty doctor to approve the state of trainees' fitness to undertake the course.

References (1) Hielm, J., 1983. An Appreciation of the Requirements for Dealing with Emergencies Offshore, Safety and Health in the Oil and Gas Extractive Industries (Graham & Trotter, London).