

APPENDIX G – Model Training Course Offshore Personal Safety

With acknowledgements to IMO (International Maritime Organization), Australian Sailing, RYA (Royal Yachting Association) and US Sailing whose publications have been consulted in the preparation of Appendix G. A possible model course follows.

INTRODUCTION

- 1 **Purpose of the model course:** to provide an example of training under World Sailing Offshore Special Regulation Section 6. The model course is not the only means of providing such training. Other courses satisfying the needs of Section 6 may apply to the appropriate MNA for World Sailing Approval (see Introduction paragraph 6). The MNA is vested with the authority to decide which courses meet the requirements and which do not.
- 2 **Use of the model course.** The course should be adjusted to address the experience and knowledge of the trainees. In addition to offshore sailing experience, trainees should be familiar with the topics in OSR Special Regulations 6.02. A trainee with particular, suitably documented skills may be excused from that part of the course, e.g. professional medical knowledge.
- 3 **Presentation.** Particular presentations may need repeating until the instructor is satisfied that the trainees understand each topic.
- 4 **Evaluation.** The final activities on each day are exercises/exams to test the attendees' knowledge. A score of 70% in each of the marked units, plus the instructors' continuous assessments, will provide an overall evaluation.
- 5 **Structure of the model course:**
 - Part A** describes the course framework, including suggestions for teaching facilities and equipment.
 - Part B** describes a possible syllabus, including learning objectives. For more detail on a suggested model course, see the website link shown above.
 - Part C** provides a sample outline of lectures and hands-on sessions with suggested timetable, which should be adjusted to ensure trainees achieve proficiency in the required skills.
 - Part D** describes guidelines for an offshore personal survival refresher course.
- 6 **World Sailing Approved Training Courses and Trainee Certification.**
 - 6.1.1 The status of "World Sailing Approved" together with authority to use the World Sailing logo may only be awarded to a training course by a World Sailing MNA (Member

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- National Authority), which must be satisfied that the course delivers training as required by OSR Special Regulation Section 6.01 and 6.02.
- 6.1.2 A grant of approved status requires the MNA to ensure the course provider delivers appropriate training and the MNA must remove such approved status if it judges this necessary.
- 6.2.1 It is not necessary for a training course to follow the Appendix G Model Training Course to be approved as in 6.1 above, but the course must deliver the training required by Special Regulation 6.02.
- 6.2.2 An MNA which lacks experience in offshore training or which, for other reasons, needs or desires advice should contact the World Sailing Secretariat – Offshore and Technical Department.
- 6.3 A sailor holding an in-date “pass” certificate (each has a validity of 5 years) from a World Sailing Approved Offshore Personal Survival Course shall be accepted by an Organising Authority as having complied with the requirements of World Sailing Offshore Special Regulation 6.01 and 6.02.
- 6.4 “Pass” certificates issued at a World Sailing Approved course shall carry the statement “World Sailing Approved Offshore Personal Survival Course” and may carry the World Sailing logo.
- 6.5 Unless otherwise stated in the Notice of Race, it is not mandatory that a training course for compliance with SR 6.01 and 6.02 is “World Sailing Approved,” however this status is encouraged wherever possible.

Part A Framework

- A1 **Class Size:** While the class size for the lecture sections of the curriculum may be larger, the maximum recommended group size for hands-on training is twenty (20) with smaller sub-groups as needed for effective communication of specific lessons.
- A2 **Instructors** should have:
- wide experience with offshore sailing including in severe weather,
 - thorough knowledge of the course material and the requirements of the World Sailing Offshore Special Regulations,
 - a sound understanding of teaching methods,
 - a current World Sailing approved Offshore Personal Survival Course pass certificate,
 - experience with liferaft and lifejacket use for in-water training.
- A3 **Facilities and equipment**
- A 3.1 A classroom with desks or tables and chairs should allow movement of the furniture to create a variety of room arrangements. Ideally, extra rooms will allow the class to split into smaller work groups.

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- A 3.2 The main room should have equipment suitable for all audio-visual presentations positioned appropriately and wired safely.
- A 3.3 Group rooms should include table, chairs, display board and writing materials for instructors and trainees.
- A 3.4 A warm-water swimming pool, deep enough to float everyone, is most suitable for demonstration/training with lifejackets and liferafts and must include all appropriate safety equipment, personnel and facilities.
- A 3.5 An outdoor location with proper safety equipment, personnel and facilities is required for demonstration and training with pyrotechnics and fire extinguishers.

A4 Reference and Display Material

To be modified appropriately by course providers for their own geographic areas.

A 4.1 For the Instructors to understand and have available to trainees in the classroom:

- World Sailing Offshore Special Regulations,
- World Sailing RRS (The Racing Rules of Sailing),
- COLREGS (International Regulations for Preventing Collisions at Sea),
- appropriate Notices to Mariners,
- appropriate World Sailing MNA Training Book, or, if not available, World Sailing's Guide to Offshore Personal Safety or US Sailing's Safety at Sea, Guide to Safety Under Sail and Personal Survival.

A 4.2 Recommended further study, books on material such as:

- The Offshore Special Regulations Handbook by Alan Green (Adlard Coles),
- The Grab Bag Book (F & M Howorth, Adlard Coles),
- Instant Weather Forecasting (A Watts, Adlard Coles),
- Heavy Weather Sailing (A Coles & P Bruce, Adlard Coles),
- Essentials of Sea Survival (F Golden and M Tipton, Human Kinetics).

Part B Suggested Course Outline

Introduction: Explanation of assessment required for ISAF/World Sailing certificate; OSR overview (structural design requirements, vessel portable safety equipment, personal safety equipment, training both in formal sessions and on-board practice); Responsibility of the *person in charge* (leadership); Responsibility of each crewmember for his/her own safety as well as the safety of the vessel and other crew (situational awareness); Importance of crew briefings and displayed stowage chart; Safety ethos

Session 1 – Giving Assistance to Other Craft

Learning Objectives: Laws that cover providing assistance; Moral imperative; Responding to a distress call; Assessing whether you can help; Stages of a typical rescue; Types of assistance

you can provide; Manoeuvring close to a sinking vessel; Tactics if the other vessel is on fire; Towing and being towed.

Session 2 – Personal Safety Gear, Theory and Practice

Learning Objectives: Life jacket performance factors; Life jacket classification systems; Pros and cons of different inflation systems; Maintaining inflatable life jackets; Using harnesses, tethers, and jack lines/stays; Personal signalling devices.

Session 3 – Care and Maintenance of Safety Gear

Learning Objectives: Pre-departure and under-way inspections; Vessel systems; Safety gear preparation and maintenance; Crew overboard equipment maintenance.

Session 4 – Fire Precautions and Firefighting, theory and practical

Learning Objectives: Common causes of on-board fire; Classes of fires; Fire prevention; LPG (Propane) and alcohol stoves; Extinguisher types and regulations; Firefighting techniques.

Session 5 – Crew Overboard Prevention and Recovery

Learning Objectives: Crew overboard (COB) prevention; Challenges of COB rescue; What a Person in the Water (PIW) can do; Manoeuvres to return to the PIW; Dangers of the vessel's proximity to the PIW; Getting the PIW back on board; Using COB beacons to signal for help; Techniques for high-performance, fully crewed boats.

Session 6 – Hypothermia, Cold Shock and Drowning

Learning Objectives: Human thermoregulation; Causes of hypothermia; Phases of cold-water immersion; Survival in cold water; Classifications of cold exposure; Assessment, care, and treatment; Drowning.

Session 7 – Crew Health

Learning Objectives: Crew responsibility; Contagious diseases; Dehydration; Caloric depletion, low blood sugar; Seasickness; Sprains and strains; Wound management, infection; Burns; Sun injury; Head trauma; Heart attack; Shock; Anaphylactic shock.

Session 8 – Marine Weather

Learning Objectives: Global weather systems; Weather maps; Lows; Squalls and thunderstorms; Thermals; Storm avoidance; Weather forecast models and sources; Wave Dynamics – Wave development, Significant Wave Height (SWH) definition, unusual waves, currents, and seamounts, effects of shoaling and lee shores.

Session 9 – Heavy Weather

Learning Objectives: Preparation & evaluation of boat and crew; On-deck safety; Securing the vessel; Preparing the galley; Being a responsible shipmate; Adjusting the plan; Sea state; Heavy weather techniques; Storm tactics; Seeking shelter; After the storm.

Session 10 – Storm Sails

Learning Objectives: Depowering the rig; Reducing sail; Mast support; Reefing the main; Rigging and setting storm headsails and storm trysails.

Session 11 – Damage Control

Learning Objectives: Priorities of damage control; Question of abandoning the boat; Types of damage and breakdowns; Tools and spares; Short-term fixes; Damage control examples; Grounding hazards and consequences.

Session 12 – Search and Rescue Organisation

Learning Objectives: When and how to ask for help; Local Rescue Coordination Center (RCC) organisation and assets; Commercial ships (AMVER); Transferring to a ship; Helicopter evacuation; Meeting the RCC halfway.

Session 13 – Pyrotechnics and Signalling Gear, theory & practical

Learning Objectives: Sound signals; Lights; Visual signals; Pyrotechnic pointers; Deploying flares safely.

Session 14 – Emergency Communications, theory & practical

Learning Objectives: Emergency procedure words; Marine communication options; Making a Mayday call; VHF and antennas; Know local VHF channels; Digital Selective Calling (DSC) and AIS; GMDSS and why it is important; Crew overboard alarms; Cellular telephone vs VHF; EPIRBs; Single sideband; Satellite data and voice systems.

Session 15 – Liferafts and Abandon Ship, theory & practical

Learning Objectives: Life raft categories; International standards; Valise or canister; Servicing your raft; Emergency packs; Raft storage; Grab or “Ditch” bags; When to launch; Life raft stability; Boarding the raft; Righting after a capsized; Maximizing your chance of survival on-board the raft.

End of each day Evaluations/Exams:

Instructor to facilitate small group discussions of challenging scenarios, which require crucial decision-making, with solutions shared among the entire class and/or administer written exam(s) comprising about 15 minutes of multiple-choice questions, plus 2 short essays/listings with 5 minutes for marking after swapping the papers amongst the class. Overall assessment

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for the course will be a combination of the discussions/exams plus the instructor's overall assessment during both theory and practical sessions.

Part C Outline Timetable

World Sailing Offshore Special Regulations Appendix G Model Training Course Part B Day 1

Session	OSR	Topic	Theory	Start	Stop
		Introduction: OSRs, Safety Ethos, Responsibility of PIV, Leadership	00:30	09:00	09:30
1	6.02.1	Giving Assistance to Other Craft	00:30	09:30	10:00
2	6.02.3	Care and Maintenance of Safety Gear, theory	00:45	10:00	10:45
3	6.02.5	Crew overboard prevention and recovery	00:30	10:45	11:15
4	6.02.6	Hypothermia, Cold Shock & Drowning	00:30	11:15	11:45
5	6.02.7	Crew Health	00:30	11:45	12:15
		Break, with demonstration	01:00	12:15	13:15
6	6.02.8	Marine Weather	00:30	13:15	13:45
7	6.02.9	Heavy Weather Techniques	00:30	13:45	14:15
8	6.02.10	Storm sails	00:30	14:15	14:45
		Break	00:30	14:45	15:15
9	6.02.11	Damage Control	00:30	15:15	15:45
10	6.02.12	Search and Rescue Organisation	00:30	15:45	16:15
		Test Scenarios from Lessons Learned and/or exam	00:45	16:15	17:00
Day 1 total hours including breaks			08:00		

World Sailing Offshore Special Regulations Appendix G Model Training Course Part B Day 2

Session	OSR	Topic	Theory	Practical	Start	Stop
		Introduction to Hands-On Training	00:15		08:30	08:45
11	6.02.3	Care and Maintenance of Safety Gear, practical		00:30	08:45	09:15
12	6.02.2	Personal Safety Gear, theory & practice	00:30	00:45	09:15	10:30
13	6.02.15	Life Rafts and Abandon Ship, theory & practice	00:30	00:45	10:30	11:45
		Lunch Break, with demonstrations	00:45		11:45	12:30
14	6.02.4	Fire Precautions/Fire Fighting, theory & practice	00:20	00:40	12:30	13:30
15	6.02.14	Emergency Communications, theory & practice	00:20	00:40	13:30	14:30
16	6.02.13	Pyrotechnics & Signalling Gear, theory & practice	00:20	00:40	14:30	15:30
		Lessons Learned, Situational Awareness	00:30		15:30	16:00
		Exam & Wrap-up	00:30		16:00	16:30
Day 2, total hours including break = 08:00			04:00	04:00		

Part D - Guidelines for an Offshore Personal Survival Refresher Course

For sailors whose certificates have expired, a refresher training course of about 8 hours training may be arranged. It should contain these sessions:

Session 1 (1 hr)	Update on recent changes in Offshore Special Regulations, national relevant documents or any other changes of importance
Session 2 (1 hr)	Update on new safety equipment
Session 3 (1 hr)	Update on recent lessons learned from fatal accidents and incidents in offshore races
Session 4 (1 hr)	Update on national/regional changes in Maritime Search and Rescue organisations, resources, locations etc. as well as in relevant meteorological services
Session 5 (2 hrs)	In water training with life vests, liferafts, recovery slings etc.
Session 6 (1½ hrs)	Medical and/or fire-fighting training as appropriate regarding national regulations.
Session 7 (½ hr)	Written exam

Detailed contents are to be developed by the appropriate Member National Authority. After the course has been passed with accepted written exam, a new certificate for another five-year period may be issued.