PADI/RNLI Diver Sea Survival Diver Specialty Instructor Outline

Introduction

This section includes suggestions on how to use this guide, an overview of course philosophy and goals.

How to Use this Guide

This guide speaks to you, the PADI RNLI Diver Sea Survival Specialty Instructor. The guide contains three sections – the first contains standards specific to this course, the second contains knowledge development presentations and the third details the open water dives.

All required standards, learning objectives, activities, and performance requirements specific to the PADI RNLI Diver Sea Survival Diver course appear in **boldface** print. **The boldface assists you in easily identifying those requirements that you *must* adhere to when you conduct the course.** Items not in boldface print are recommendations for your information and consideration. General course standards applicable to all PADI courses are located in the General Standards and Procedures section of your PADI *Instructor Manual.*

Course Overview and Goals

The purpose of the PADI RNLI Diver Sea Survival Specialty Diver Course is to cover the knowledge and skills to enable divers to be better prepared and skilled to dive in the UK environment.

The goals of RNLI Diver Sea Survival training are:

A. Pre-dive planning. (site conditions, tides and appropriate exit and entry points)
B. Reinforce buddy procedures and additional considerations when diving in low visibility.
C. Diving equipment checks appropriate for local environment. (including inspection for wear and tear and servicing requirements)
D. Appropriate emergency equipment orientation (location of emergency oxygen and first aid kit, emergency equipment to alert RNLI - visual and audible)
E. Practice diving with a surface marker buoy and deployment of delayed surface marker buoys.
F. Demonstrate effective emergency surface positions to maintain position, diver contact and warmth. (group huddle, contact with a stationary object and crouch position)

Course Flow Options

This course contains knowledge development and 2 open water training dives. When possible, you should conduct the knowledge development session before any confined water training.

There are 2 open water dives to complete. You may rearrange skill sequences within each dive; however, the sequence of dives must stay intact. You may add more dives as necessary to meet student divers' needs. Organize your course to incorporate environment friendly techniques throughout each dive, to accommodate student diver learning style, logistical needs, and your sequencing preferences.

Section One: Course Standards

This section includes the course standards, recommendations, and suggestions for conducting the PADI RNLI Diver Sea Survival course.

Standards at a Glance:

Course Standards

Minimum Instructor Rating:	**PADI RNLI Diver Sea Survival Distinctive Specialty Instructor**
Prerequisites:	**PADI Open Water Diver or qualifying prerequisite certification.**
Minimum Age:	**12 years**
Ratios Open Water:	**8:1**
Maximum Depth	**18 metres/60 feet for those qualified as Open Water Diver and 30 metres/100 feet for those qualified as Advanced Open Water Divers. Recommended depth is 9-12 metres/30-40 feet.**
Minimum Open Water Dives:	**2**

Materials and Equipment - Instructor and Student:

- **RNLI Diver Sea Survival Diver Course Instructor Outline** *(Instructor only)*
- **Student and Instructor equipment as outlined in the PADI Instructor Manual, General Standards and Procedures**
- **Surface marker buoy, such as a delayed surface marker buoy (DSMB).**
- **Appropriate reel for use with a Surface Marker Buoy (SMB)**
- **Knife/cutting tool**
- **Audio Signaling Device**
- **Visual Signaling Devices at the surface appropriate for low visibility (recommend: strobe lights, torches, flares and reflective markers on hoods and SMBs etc.)**
- **Buddy Line or appropriate equipment to maintain contact with diver and stationary objects.**

- **Emergency Equipment:**
  a. **Spare parts kit**
  b. **Extra weights in small increments for diver trim**
  c. **Emergency Oxygen Equipment**
  d. **First Aid Kit**
  e. **Radio** *(if available)*
  f. **Mobile Phone**
  g. **Water and food rations** *(recommended)*

Reference Material:

- **RNLI Sea Survival Film** *(recommended)*
- **RNLI Sea Survival Lesson Guides** *(recommended)*
- **BDSG Pre-season Checklist** *(recommended)*
- **BDSG Pre-dive Checklist** *(recommended)*
- **BDGS Routine Safety Checks** *(recommended)*
- **BDSG Diving Accident Management Procedures** *(recommended)*
- **BDSG Advice Regarding Free Flowing Regulators** *(recommended)*

Instructor Prerequisites

To qualify to teach the PADI RNLI Diver Sea Survival course, an individual must be a teaching status PADI Open Water Scuba Instructor or higher. **PADI Instructors may apply for the PADI RNLI Diver Sea Survival Distinctive Specialty Instructor rating after completing a Specialty Instructor Training course with a PADI Course Director, or by providing proof of experience and applying directly to PADI.** For further detail, reference Membership Standards in the General Standards and Procedures section of your PADI *Instructor Manual.*

Student Diver Prerequisites

By the start of the course, a diver must be:
1. Certified as a PADI Open Water Diver or have a qualifying certification from another training organization. In this case, a qualifying certification is defined as proof of entry-level scuba certification with a minimum of four open water training dives. Verify student diver prerequisite skills and provide remediation as necessary.
2. Be at least 12 years.

Supervision and Ratios

Open Water Dives

A Teaching status PADI RNLI Diver Sea Survival Specialty Instructor must be present and in direct control of all activities and must ensure that all performance requirements are met. After all student divers have successfully demonstrated the required skills, the Instructor may exercise indirect control over the balance of the dive.

The ratio for open water dives is 8 student divers per instructor (8:1).

Site, Depths, and Hours

Site

Choose sites with conditions and environments suitable for completing requirements. Shallow dives will provide divers with more time to complete tasks. Use different open water dive sites, if possible, to give students divers experience in dealing with a variety of environmental conditions (incorporate environment friendly techniques throughout each dive) and logistical challenges.

Depths

30 metres/60 feet limit
6-12 metres/20-40 feet (*recommended*)

Hours

The PADI RNLI Diver Sea Survival course includes 2 open water dives. Conduct dives during daylight hours between sunrise and sunset, unless students have night diving experience.

The minimum number of *recommended* hours is 8.

Assessment Standards

The student diver must demonstrate accurate and adequate knowledge during the open water dives and must perform all skills (procedures and motor skills) fluidly, with little difficulty, in a manner that demonstrates minimal or no stress.

Certification Requirements and Procedures

By the completion of the course, student divers must complete *all* performance requirements for PADI RNLI Diver Sea Survival Open Water Dives One and Two.

The instructor certifying the student diver must ensure that all certification requirements have been met. The certifying instructor obtains a PADI RNLI Diver Sea Survival certification by submitting a completed, signed PIC to the appropriate PADI office.

Section Two: Knowledge Development

Use the following teaching outline as a road map of the conduct, content, sequence and structure for the PADI RNLI Diver Sea Survival course. The result should be student divers with theoretical knowledge and pragmatic experience who can adapt what they have learned to enable them to be better prepared and skilled to dive in the UK environment, and how to minimize the risks of, and respond to, emergency situations at sea. **Student divers will be able to explain the following learning objectives.**

Learning Objectives and Knowledge Development

A. Course Introduction: Staff and student diver introductions

Note: Introduce yourself and assistants. Explain your background within the context of UK Diver Sea Survival if your student divers aren't familiar with you. Explain all course costs and materials, and what the costs do and do not include, including equipment use, dive site fees, etc.

Give times, dates and locations as appropriate for classroom presentations, confined water skill development sessions, and open water dives.

1. **Course goals:**
    a. To reinforce the need to always undertake thorough pre-dive planning, buddy and equipment checks prior to diving.
    b. To orient divers who are unfamiliar with UK coastal diving to specific considerations such as assessment of tide and currents, boat and shore diving techniques and diving in low visibility conditions.
    c. Encourage divers to take personal measures to ensure suitable emergency equipment is available, in good working or and kept in a suitable and accessible location.
    d. Have divers practice diving techniques which minimize the risk of separation.
    e. Demonstrate and identify when to dive with an SMB and how to deploy a DSMB.

f. Use in-water signaling devices (various).
g. Learn how to stay in contacted with divers on the surface and how to position themselves to retain as much warmth as possible in an emergency situation.

2. Course overview

a. Classroom presentations.
b. Open water dives. There will be 2 open water dives.

3. Certification

a. Upon successfully completing the course, you will receive the PADI RNLI Diver Sea Survival Specialty certification.
b. Certification means that you will be qualified to plan, organize, and make dives in conditions generally comparable to or better than, those in which you are trained.
c. Apply for the Master Scuba Diver rating if you are a PADI Advanced Open Water Diver and a PADI Rescue Diver (or qualifying certification from another training organization) with certification in four other PADI Specialty ratings, and you have 50-logged dives.

4. Class requirements

a. Complete paperwork according to Paperwork and Administrative Procedures as outline in the PADI Instructor Manual.
b. Course costs.
c. Equipment needs.
d. Schedule and attendance.

B. Knowledge Development

Instructors may use the RNLI Sea Survival Film or the RNLI Sea Survival Lesson Guides to guide the knowledge development session. Additional reference materials listed in the Key Standards may also be used, and these can be presented as handouts to participants.

- **Dive planning:**
  - Assess for dive site suitability using tide tables, coastal charts and weather forecasts (Emphasize the importance of slack water).
  - Assign buddy teams or dive teams (if more than 2). Have an agreed leader to ensure divers are logged in and out of the water.
  - If diving from a shore or with no surface support, ensure divers have informed an appropriate person of the planned dive, including the site location and expected time in and out of the water. Agree to send confirmation when divers have safely exited the water, and provide instructions on who to contact in the event of an emergency.
- **Diver preparation:**
  - Reinforce the value of personal responsibility to maintain fitness to dive.
  - Reference Safe Diving Practices Statement of Understanding.
  - Thoroughly check diving equipment for wear and tear or servicing requirements. Ensure equipment is suitable for the diving activity.
  - Wear appropriate exposure protection.
  - Carry additional emergency equipment to attract attention on the surface should the diver become lost at sea. (e.g. audible and visual signalling devices)
- **What pieces of navigational and safety equipment do you typically find on dive boats?**
  - Emergency Oxygen Unit
  - First Aid Kit
  - Life Jackets
  - Emergency Flotation Devices
  - Marine Radio
  - Flags
  - Global Positioning System (GPS)
  - Visual Distress Signals (e.g. lights, light flares, smoke flare and mirrors)

    - Sound Signalling Devices (e.g. horns)
    - Emergency Water and Food
- **Explain how to ensure you know where to find safety equipment at the dive site, boat etc.**
    - Ensure there is a thorough briefing of location of equipment (listed above) and any specialty instructions on how to use the equipment.
    - Familiarise divers how to operate the marine radio on board a dive boat according to local regulations and procedures.
- **When diving in low visibility conditions, what techniques and equipment can you use to minimise the risk of diver separation:**
    - Maintain close distance to the agreed buddy/dive team. Adhere to any planned missing diver procedures - and surface as agreed during the pre-dive briefing.
    - Have divers wear distinguishing equipment which is more easily identified in low visibility.
    - If appropriate and safe, use a buddy line to maintain contact with another diver. (e.g. strong currents).
- **Review equipment and gas management for out of air emergencies.**
    - Brief review of the different options to secure an alternate air source.
    - Have divers identify the safest way to handle theoretical out of air scenarios based on the priorities of a S.A.F.E diver. (reference the Safe Diving Practices Statement of Understanding)
    - Orient divers to any unfamiliar alternate air sources being carried during the open water dives.
- **Identify the different types of Surface Marker buoy and Delayed Surface Marker Buoys, and their use in various diving situations:**
    - Discuss how SMBs/DSMBs may be used to alert marine traffic to divers below.
    - Identify the features (colours, sizes and inflation options) for DSMBs.
    - Provide instructions on how to safely deploy a DSMB underwater.
- **Learn how to make yourself visible on the surface in the event of an emergency:**
    - Introduce divers to a range of visual signalling devices such as SMBs, lights and strobes, mirrors, etc.
    - Introduce divers to a range of electronic rescue devices such as PLB's, AIS and DSC/VHF radio.
    - Identify various audible signalling devices such as whistles and air horns etc.
- **In an emergency situation on the surface, why is it important to stay and maintain contact with others in the water and to keep as warm as possible? How can this be achieved?**
    - In the UK the water temperatures can be cold and your core body temperature can fall which leads to hyperthermia. Prolonged periods of exposure in the sea can very quickly become a life threatening emergency.
    - Wearing an appropriate, well fitted exposure suit for the dive is important. Divers should consider ensuring their suit also provides more than adequate protection from the cold, should they find they are in the water for longer than they planned. (e.g. discuss water temperatures and how divers choose their thickness of wetsuits or which dry suit and the appropriate under suit, hoods and gloves to wear)
    - Keeping buoyant on the surface is extremely important in an emergency. As people get cold and tired, it becomes harder to maintain themselves on the surface. Ensuring you wear an appropriate exposure suit and a well maintained buoyancy control device will help reduce fatigue if you are waiting on the surface. (remind divers to also perform an emergency weight drop in an emergency situation)
    - Staying with the people you are with when waiting on the surface provides support, warmth and increases your visibility in the water.
    - If you are near a fixed object try and maintain contact with this either by attaching your equipment or using a line to avoid drifting away from you position.
    - In an emergency, 2 or more people can huddle together to minimise the water flowing around each person which helps to retain as much body hear within the group as possible.
    - If you are alone try to hold yourself in the foetal position to keep your body heat isolated in your core torso area. Tuck your knees into your chest and wrap your arms in around your knees.

Section Three: Open Water Dives

General Open Water Considerations

1. Involve student divers in dive-planning activities. Give special attention to student diver anxiety and stress levels, in addition to student diver equipment preparedness.
2. Dives must be conducted within the no decompression limits of the Recreational Dive Planner (RDP) or dive computer.
3. Conduct a thorough briefing. The better the briefing, the more smoothly the dive will proceed. Assign buddy teams according to ability (weak with strong) and establish a check-in/check-out procedure
4. Assign logistical duties to staff and review emergency protocols.
5. Remind divers to familiarize themselves with their buddies equipment.
6. Evaluate diver's thermal protection for appropriateness for the dive site and expected conditions.
7. Make yourself available to answer questions during equipment assembly.
8. Pay particular attention to diver's safety checks and gear-up.

Performance Requirements

By the end of the open water dives, student divers will be able to:

Dive One

A. Briefing
   1. Evaluation of conditions
   2. Facilities at dive site
   3. Entry technique to be used – location dependant
   4. Exit technique to be used – location dependent
   5. Bottom composition and topography around training site
   6. Depth range on bottom
   7. Ending tank pressure – when to terminate the dive
   8. Interesting and helpful facts about the dive site
   9. Sequence of training dive – review Dive 1 skills

<u>Surface:</u>
a. Identify the emergency equipment at the dive site location.
b. Demonstrate an assessment of dive site conditions according to tide tables and weather forecast.
c. Suiting up and Predive Safety check
d. Buoyancy check at the surface
e Use two forms of visual signaling device.

<u>Underwater</u>:
e. Dive within safe visual and reaching distance to a buddy/group according to dive plan.
f. Deploy a DSMB from a stationary position on the bottom
g. Make a Safety Stop at 5 metres using the DSMB as a tactile reference.
h. Ascent

B. Predive procedures
C. Descent
D. Dive 1 skills
E. Post-dive procedures

F. Debriefing
G. Log dive (instructor signs logbook)

Dive Two

A. Briefing
1. Evaluation of conditions
2. Facilities at dive site
3. Entry technique to be used – location dependent
4. Exit technique to be used – location dependent
5. Bottom composition and topography around training site
6. Depth range on bottom
7. Ending tank pressure – when to terminate the dive
8. Interesting and helpful facts about the dive site
9. **Sequence of training dive – review Dive 2 skills**

<u>Surface:</u>

a. Identify the emergency equipment at the dive site *(if different location to dive 1)*
b. Demonstrate an assessment of dive site conditions according to tide tables and weather forecast. *(if different location or conditions to dive 1)*
c. Suiting up and Predive Safety check
d. Practice holding yourself in a crouched position whist remaining positively buoyant (*remove weight if needed)*
e. Practice maintaining contact in a huddle position on the surface with 2 or more divers.

<u>Underwater</u>:

f. Explore underwater while towing an SMB/DSMB on the surface – demonstrating the ability to control the line by reeling it in and out. Note: If wreck diving deploy a DSMB from a stationary position on the bottom before ascending from the wreck, if this is more appropriate.
g. Attach a buddy line and swim for at least 1 minute attached to another diver.
h. Make a Safety Stop at 5 metres using the SMB/DSMB as a tactile reference.
i. Ascent

B. Predive procedures
C. Descent
D. Dive 2 skills
E. Post-dive procedures
F. Debriefing
G. Log dive (instructor signs logbook)