Drift Diver

PADI

Specialty Course Instructor Guide

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PADI Drift Diver
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Drift Diver

Introduction

This section includes suggestions on how to use this guide, an overview of course philosophy and goals, a flow chart to show you how course components and materials work together for success, and ways you can organize and integrate student diver learning.

How to Use this Guide

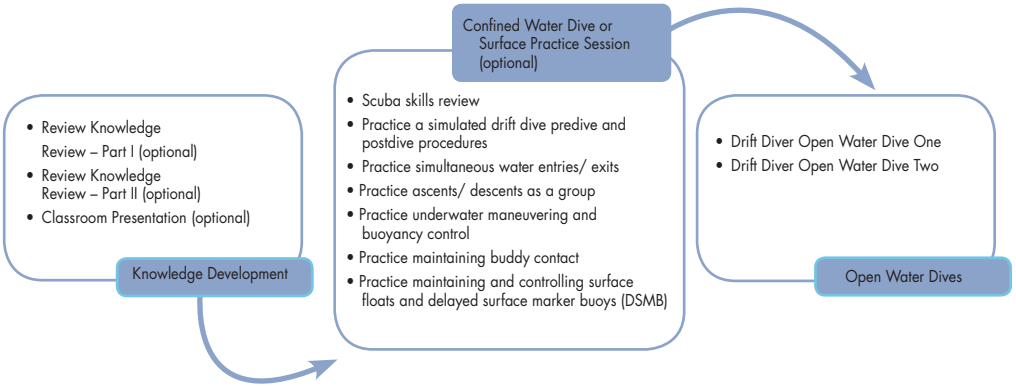
This guide speaks to you, the PADI Drift Diver Specialty Instructor. The guide contains three sections – the first contains standards specific to this course, the second contains knowledge development presentations, the third considers optional confined water or surface training and details the open water dives. All required standards, learning objectives, activities, and performance requirements specific to the PADI Drift 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 Philosophy and Goals

Drift diving is a relaxing and enjoyable form of diving that offers an alternative to using lines and other techniques to move against current. It is especially suited to areas with mild to strong current with long reefs, kelp forests or other topography within recreational depth limits. The current allows the diver to see more aquatic life and underwater formations than usual. However, drift diving is often performed more for the experience of underwater flight than for sightseeing. Although it is typically conducted from a boat in open ocean, drift diving is also possible from shore in rivers and areas with strong tidal currents. While it is an effective way to dive, it is typically difficult or impossible for divers to swim against currents for anything more than a short distance while drift diving. This raises potential concerns including staying together as a group, maintaining contact with the boat or (in the case of shore-based drift diving) not missing the exit point. With this in mind, the philosophy of this course is to focus on a controlled effortless flight underwater. Thus, the goal of this course is to teach student divers a systematic, methodical approach to drift diving, with an overview of regional and situational variables in the techniques used. Student divers will develop the techniques involved in drift diving within recreational limits in a local drift diving environment.

The best way to learn drift diving is to do it. This course philosophy therefore, expands student diver knowledge about drift dive planning, safety, potential problems, procedures and techniques. Student divers will learn how to plan and organize, and then implement a drift dive using techniques commonly used in the local drift diving environment. Student divers will apply the knowledge they gain by reading the PADI *Drift Diver Manual* and watching the companion PADI *Drift Diving* video with at least two open water dives, practicing and demonstrating the practical aspects of drift diving.

Course Flow Options



Course Flow Options provides a visual representation of how knowledge development and confined water or surface practice sessions support open water dives. When possible, it's preferable to have student divers complete and go over the Knowledge Reviews from the PADI *Drift Diver Manual* before participating in the open water dives. Knowledge Review – Part I is the same Knowledge Review that appears in the Drift Diving section of Adventures in Diving. If you have the first part of the Knowledge Review on file, you may at your discretion, have student divers complete only Knowledge Review – Part II.

Confined water or surface practice sessions are not required for the PADI Drift Diver course; however, you may choose to have practical sessions that allow student divers to review boat diving procedures and to practice skills such as simultaneous entries and exits, ascents and descents as a group, maintaining and controlling surface floats and delayed surface marker buoys (DSMB), basic navigation, buddy communication and buoyancy control.

There are two 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. You may choose from one of the approaches from Program Options, or develop your own.

Program Options

Step	Independent Study	Adventure Dive Integration	Instructor-Led
1	**Independent study** with manual and video (optional)	**Independent study** with manual and video (optional)	**Knowledge Development** Classroom Presentation (optional)
2	**Review Knowledge Review –** Part I and Part II (optional)	**Give credit for Drift Adventure Dive and collect Knowledge Review –** Part I (optional)	**Review Knowledge Review –** Part I and Part II (optional)
3	**Confined Water Dive or Surface Practice** Session (optional)	**Confined Water Dive or Surface Practice** Session (optional)	**Confined Water Dive or Surface Practice** Session (optional)
4	**Open Water Dive One** Part II (optional)	**Review Knowledge Review –**	**Open Water Dive One**
5	**Open Water Dive Two**	**Open Water Dive Two**	**Open Water Dive Two**

Section One:
Course Standards

This section includes the course standards, recommendations, and suggestions for conducting the PADI Drift Diver course.

Standards at a Glance

Topic	Course Standard
Minimum Instructor Rating	**PADI Drift Diver Specialty Instructor**
Prerequisites **Minimum Age**	**PADI (Junior) Open Water Diver** **12 years**
Ratios	**Open Water 8:1**
Site, Depth, and Hours	Depth: 9-18 metres/20-60 feet recommended Hours Recommended: 12 **Minimum Open Water Dives: 2**
Materials and Equipment	**Instructor:** **•PADI Drift Diver Course Instructor Guide** **•Lines, knife/diver tool capable of cutting line, reels, floats, and DSMBs as required for drift diving in the local environment**

Instructor Prerequisites

To qualify to teach the PADI Drift Diver course, an individual must be a Teaching status PADI Open Water Scuba Instructor or higher. PADI Instructors may apply for the Drift Diver 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 (Junior) 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. At least 12 years.

Supervision and Ratios

Open Water Dives

A Teaching status PADI Drift Diver Specialty Instructor must be present and in control of all activities. If Dive One is conducted deeper than 18 metres/60 feet, the Specialty Instructor must directly supervise at a ratio of no greater than 8 student divers per instructor (8:1). Otherwise, the Specialty Instructor may indirectly supervise all dives. The Specialty Instructor must ensure that all performance requirements are met.

The ratio for open water dives is 8 student divers per instructor (8:1), with 4 additional student divers allowed per certified assistant (4:1).

Site, Depths, and Hours

Site

Choose sites with conditions and environments suitable for completing requirements. Ideally, select sites familiar to student divers. Shallower dives will provide students with more experience. If possible, use different open water dive sites to give student divers experience in dealing with logistical challenges in a variety of environmental conditions while incorporating environmentally friendly techniques throughout each dive. It is recommended, but not required, that student divers be exposed to the techniques and procedures for diving current from both boats and from shore. Practice skills in confined water sessions first to better prepare divers to apply skills in open water later.

Depths

6-18 metres/20-60 feet recommended

30 metres/100 feet limit for Dive One, with no dive exceeding 40 metres/130 feet

Children

21 metres/70 feet limit for 12-14 year olds if they have taken the Deep Adventure Dive

Hours

The PADI Drift Diver course includes two open water dives, which may be conducted in one day. The minimum number of recommended hours is 12.

Materials and Equipment

Instructor Materials and Equipment

Use the PADI Drift Diver course materials prescriptively to accommodate various sequencing preferences and teaching and learning styles.

Required

- **PADI *Drift Diver Specialty Course Instructor Guide***
- **Specialty equipment needed for student divers to perform drift dives in the local environment**
  - **Surface signaling devices of different types as examples for students**
  - **Lines, knife/diver tool capable of cutting line, reels, floats, and DSMBs**

Recommended

- PADI *Drift Diver Manual*. Use the student diver manual for detailed content explanation.
- PADI *Drift Diving* video.
- As needed: underwater slates with pencils etc. for student divers.

Student Diver Materials and Equipment

Required

- **One audible or one visual surface signaling device per student; suitable for gaining attention from a distance in the local drift diving environment**
  - These may include signal mirrors, flares, inflatable signal tubes, whistles, low-pressure inflator powered horns and similar devices. It is recommended that students each carry a visual and an audible signaling device.

Recommended

- PADI *Drift Diver Manual*
- PADI *Drift Diving* video
- Access to drift diving support equipment as necessary, including but not limited to suitable boat, float, reel and line.

Assessment Standards

To assess knowledge you may review the Knowledge Reviews from the student diver's manual with the diver. 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

Document student diver training by completing the PADI Specialty Training Record for Drift Diver (see Appendix). To qualify for certification, by completion of the course, student divers must complete all performance requirements for Drift Open Water Dives One and Two.

The instructor certifying the student diver must ensure that all certification requirements have been met. Reference the "Administrative Procedures of the General Standards and Procedures" section of your PADI *Instructor Manual* for detailed information on Referral.

Links to Other Courses

The Drift Diver Adventure Dive conducted during the PADI Adventures in Diving program may count as the first dive toward this specialty at your discretion.

Similarly, divers who successfully complete Drift Open Water Dive One and Knowledge Review Part 1 may receive credit as an Adventure Dive toward the PADI Adventure Diver and the PADI Advanced Open Water Diver certifications. They may also credit the specialty certification toward the PADI Master Scuba Diver rating.

Section Two: Knowledge Development

Conduct

The philosophy of this course is to focus on a controlled effortless flight underwater by making dives in a current, drifting with the current rather than using various means to move into it. This course shows student divers the benefits, advantages, risks and disadvantages of drift diving. It includes teaching student divers several procedures and techniques used to conduct drift dives, and how to interact responsibly with the aquatic life while drift diving.

Student divers complete independent course study by reading the PADI *Drift Diver Manual* and by watching the PADI *Drift Diving* video. Work hand-in-hand with the student diver manual to clarify and to address prescriptively student diver misconceptions, and to enhance learning with respect to local practices and individual student interest. If there is a need for instructor-led presentations, use the following teaching outline, which appears in point form, as a road map of the conduct, content, sequence and structure for the PADI Drift Diver course.

By the end of this program, you should have equipped student divers with knowledge and experience needed to adapt what they've learned in this course to future drift diving adventures. **Regardless of how you conduct knowledge development (independent study, instructor-led or a combination of these instructional approaches), student divers will be able to explain the following learning objectives.**

Knowledge Development

Learning Objectives

By the end of knowledge development, student divers will be able to explain:

Reasons why people drift dive and its advantages and disadvantages.

- What is drift diving?
- What are four advantages of drift diving?
- What are four concerns of drift diving?

Drift dive environments.

- What are four types of currents and what causes each?
- How does current intensity vary from the surface to the bottom in most circumstances?
- If you need to swim against the current, where is the best place to do so?

Types of drift diving and surface supervision.

- What are the three general types of drift dives? When would you use each?
- Why is surface supervision usually recommended for drift diving? By what methods can it be provided?

Drift diving equipment and boats.

- What are the three common types of surface reference floats, and the advantages and disadvantages of each?
- What type of line should you use to pull a surface float, and how should you control it?
- What are the two basic types of surface signaling devices, and why should you have at least one of each?
- What is an EPIRB? What is a PLB? Under what circumstances would it be and would it not be appropriate to use a diver-carried PLB?
- What is the most important criterion when choosing a boat for drift diving? Why must the operator be familiar with drift diving procedures?

Drift diving techniques and procedures.

- What seven considerations go into planning a drift dive?
- How do you navigate during a drift dive?
- What is the most important factor in preparing for a drift diving entry?
- What are the differences between buoyant and negative drift diving entries, and when would you use each?
- What are two procedures you can use when beginning a drift dive that will use a surface float?
- When using a surface float and line, what techniques can you use so the group stays together while descending?
- What are the procedures for beginning a drift dive that will not use a surface float?
- When not using a surface float and a line, what techniques can you use to keep the group together while descending?
- What techniques can you use to stay together during the tour portion of a drift dive?
- What body position should you generally maintain during a drift dive?
- What techniques do you use and what factors do you consider when ascending as a group from a drift dive?
- What techniques do you use and what factors do you consider when ascending as individual buddy teams from a drift dive?
- What are the procedures for exiting the water after surfacing from a drift dive?

Drift diving hazards and problems.

- What constitutes "being lost" when drift diving? What do you do to rejoin the dive team were that to happen?
- How can diving in currents contribute to exhaustion, stress and buddy separation? What do you do to avoid these problems?
- How does the line handler avoid entanglement in the float line? What is the procedure if a diver becomes entangled?

Specialty activities while drift diving.

- What concerns and considerations do you have while deep diving on a drift dive?
- How do you address deep diving concerns while drift diving?
- What are the difficulties involved with digital underwater photography or videography while drift diving?
- What do you do to photograph/video effectively while drift diving?
- What challenges do you have attempting to search for or recover something while drift diving?
- What can you do to handle search and recovery challenges while drift diving?

Knowledge Development Teaching Outline

Suggestions to you, the PADI Drift Diver Specialty Course Instructor, appear in note boxes.

A. Course Introduction

1. Staff and student diver introductions

Note:

Introduce yourself and assistants. Explain your background with drift diving if your student divers are not familiar with you.

Have divers introduce themselves and explain why they are interested in drift diving. Break the ice and encourage a relaxed atmosphere.

Give times, dates and locations as appropriate for classroom presentations, confined water or surface practice sessions, and open water dives.

Review with student divers other skills they'll want as a PADI Drift Diver. These opportunities, through additional specialty course training, may include, but are not limited to: PADI Enriched Air Diver, PADI Deep Diver, PADI Peak Performance Buoyancy Diver, PADI Dry Suit Diver, PADI Boat Diver and DSAT TecRec.

2. Course goals -this course will help:
   a. Develop your practical knowledge of drift diving environments, techniques, procedures, and considerations
   b. Increase your diving skills.
   c. Plan, organize, and make your drift dives.
   d. Improve your diving ability and provide you with additional supervised experience.
   e. Encourage you to participate in other specialty training.

3. Course overview
    a. Classroom presentations and confined water or surface practice sessions.
    b. Open water dives. There will be at least two open water dives.
4. Certification
a. Upon successfully completing the course, you will receive the PADI Drift Diver Specialty certification.
b. Certification means that you will be qualified to:
1. Plan, organize, make, and log open water drift dives in conditions generally comparable to, or better than those in which you were trained.
2. Apply for the Master Scuba Diver rating if you are a PADI Advanced Open Water Diver, a PADI Rescue Diver (or hold a qualifying certification from another training organization), are certified in four other PADI Specialty ratings, and you have 50-logged dives.

Note:

Use the PADI Student Record File. Explain all course costs and materials, and what the costs do and do not include, including equipment use, dive site fees, etc. Explain what equipment student divers must have for the course, and what you will provide. Cover and review points about scheduling and attendance.

5. Class requirements
    a. Complete paperwork.
    b. Course costs.
    c. Equipment needs.
    d. Schedule and attendance.

B. The Advantages of Drift Diving

• *What is drift diving?*

1. Fighting a strong current can be tiring and may require the use of lines and special techniques. In some situations, moving against the current is impossible, so you don't try. Instead, you plan your dive so you enter the water, ride the current and exit down current.
2. Drift diving is usually defined as any form of diving done by drifting with a mild to heavy current where the exit point is significantly down-current from the entry point. In some places with very strong flow and very clear water, you rush over the underwater landscape as if flying underwater. It's relaxing because you don't fight the current, yet exhilarating and exciting at the same time.

Note:

Inform student divers that there are other forms of diving in rivers and similar currents, where other techniques especially in regard to safety and rescue procedures apply, which need special instruction. This course focuses on recreational drift diving only.

•*What are four advantages of drift diving?*

3. Drift diving is associated with four advantages:
   a. Saves energy – you usually don't have to swim much, if at all, during the majority of the dive.
   b. Opens the door to diving sites that would be hazardous or impossible to dive due to strong current.
   c. Allows you to see far more area than you would expect to see swimming.
   d. In many types of drift diving, you don't have to worry about finding a particular exit point.

4. Drift diving has an environmental benefit as well because boats don't have to anchor. Although dive boats are usually very careful to anchor in insensitive bottoms, this reduces risk to the environment in areas without moorings.

Note:

This is the perfect opportunity to introduce the subject of mooring buoys and Project AWARE's involvement in this area of environmental concern.

Project AWARE is involved in the worldwide efforts of dive industry leaders and environmental groups in promoting, constructing and funding the placement and maintenance of mooring buoys.

Since the early 1970s, pioneering members of the dive community, whose livelihoods depended on the quality of coral reefs in their area, have championed the installation and use of mooring buoys. Over the years, mooring projects have gathered momentum and are now widely accepted as an effective solution to one aspect of habitat degradation. Mooring buoys lessen the harmful effects of anchors on delicate underwater ecosystems.

The benefits to the environment far outweigh the effort involved in mooring buoy planning and installation. Project AWARE has compiled an extensive Mooring Buoy Planning Guide that can be a valuable tool to project coordinators. It outlines the types of mooring buoy systems, their benefits, management and liability considerations and more.

Relay to your student divers that they can download more information on the importance of coral reefs, types of mooring buoy systems, the benefits of mooring buoys, management and liability considerations, case studies of mooring buoy programs and getting started on a Mooring Buoy project of their own by visiting Project AWARE at www.projectaware.org

• *What are four concerns of drift diving?*

5. Drift diving has four concerns that this course will teach you to address:
   a. Drift diving often requires close coordination among divers during entry, descent, tours, ascents, and exits.
   b. Drift diving requires extra vigilance to maintain buddy contact.
   c. Drift diving commonly requires some form of surface supervision or support.
   d. Drift diving requires an extended dive site such as a reef or wall that you tour with the current. Small, localized sites are not usually suitable drift diving sites, no matter how strong the current.
      1. Small (narrow) extended site will often work.
      2. In some areas, divers drift to a specific site with ample shelter from the current (such as a wreck) to start the dive, then leave the site, ascend and get picked up drifting. The dive begins and ends as a drift dive, though you don't drift the entire dive.

C. Drift Dive Environments

• *What are four types of currents and what causes each?*

1. Main types of currents
   a. Longshore current: created by waves approaching the shore at an angle and pushing water along the coast.
   b. Offshore current: large-scale permanent currents caused by the earth's rotation, prevailing winds, and the heating and cooling of water.
   c. Tidal currents: currents caused as the daily tides rise and fall. Tidal currents alternate direction and vary in speed, slowing to almost zero as the tides reach their highest and lowest points and switch direction. Drift diving tidal currents is most common where there's a pronounced variation in tidal heights, and a relatively contained area like a bay with an opening to the sea to create a strong water flow.
   d. River currents: caused by water flowing downhill to the sea and by the earth's rotation.

Note:

Provide information about the currents in the local environment, with emphasis on the characteristics that apply to the conditions expected during the open water dives.

Remind student divers that an ocean current is more or less continuous, directed movement of ocean water that flows in one of the earth's oceans. Ocean Currents are rivers of hot or cold water within the ocean. Currents develop from the forces acting upon the water like the earth's rotation, the wind, the temperature and salinity differences, and the gravitation of the moon. The depth contours, the shoreline and other currents influence the current's direction and strength.
Surface Ocean currents are generally wind driven and develop their typical clockwise spirals in the northern hemisphere and counter-clockwise rotation in the southern hemisphere because of the imposed wind stresses. Surface currents make up about 10% of all the water in the ocean. Note up-to-date information for local area currents in the instructor outline below. Depending upon course requirements, you may also consider having student divers research currents in different areas for a home-study assignment. This student diver research may assist divers when diving on vocation. Regardless of your instructional approach, review with student divers currents they should expect to experience on their open water drift dives.

a. Arctic Ocean currents:

_____
_____
_____

b. Atlantic Ocean currents:

_____
_____
_____

c. Pacific Ocean currents:

_____
_____
_____

d. Indian Ocean currents:

_____
_____
_____

e. Southern Ocean currents:

_____
_____
_____

- ***How does current intensity vary from the surface to the bottom in most circumstances?***

2. Characteristics of currents
   a. Currents do not flow uniformly
      1. Flow near the bottom is usually slower than at the surface due to drag against the bottom and reef in most circumstances.
      2. In rivers, the flow is usually faster outside of a curve than inside if the bottom topography is even. This may vary, however, with water depth.
      3. Bays and inlets may have higher speed current where tidal flow has to squeeze past restrictions.

- ***If you need to swim against the current, where is the best place to do so?***

   b. You can only swim against a very mild current (usually less than 1/2 a knot). Trying to swim against a stronger current for a sustained interval leads to exhaustion.
   c. If you must swim against the current, the best place to do so is along the bottom. Stay in the shelter of rocks, coral heads, a wreck, etc. If you must swim against a current in a river, the best place to do so is usually on the bottom on the slowest side of curves.

D. Types of Drift Diving and Surface Supervision

- ***What are the three general types of drift dives? When would you use each?***

1. You can divide drift diving into three general types: 1) drift dives with a surface float, 2) drift dives without a surface float and 3) drift dives that start without a surface float and finish with one.
   a. Drift diving with a surface float
      1. Divers drift along under a tethered surface float tended by a line handler/tender in the group. The float shows their location.
      2. Divers remain as a group, keeping the line in sight at all times.
      3. The dive boat usually follows the float and picks up the divers at the end of the dive.
      4. The float makes it easier for surface supervision to track the group, and the float helps warn other boats that there are divers in the area.
      5. Very common procedure especially suited to conditions including choppy surface water, relatively limited visibility, moderate boat traffic and lack of a vertical slope/reef to guide descents/ascents.

   b. Drift diving without a surface float
      1. Divers drift along as a group without a surface float.
      2. The dive boat tracks the group by following their bubbles.

3. Multiple groups or choppy surface conditions can make following the group more difficult for surface personnel.
4. Drift diving without a surface float is suited for:
   a. Deeper diving because the float in the faster surface current may drag the line handler in the slower bottom current.
   b. Environments with lots of relief or obstacles that present an entanglement hazard.
   c. Visibility that is adequate for a group to stay together simply by keeping in sight of each other.
   d. Areas (including rivers) with little or no boat traffic where local law does not require a dive flag.

c. Drift diving with a delayed surface marker buoy (DSMB)
1. Divers drift along as a group without a surface float.
2. Divers carry a DSMB deflated and rolled up in a pocket, or rolled and attached to their reels allowing them to travel with the current unhindered by a line.
3. At the end of the dive, prior to ascending, the lead diver inflates the DSMB by using an alternate airsource or by exhaled bubbles and sends it to the surface, paying out line from a reel as it goes. This allows boats recovering the divers to identify their location when they ascend, and provides warning to other surface vessels that divers are in the water.
4. The lead diver slowly reels in the line as divers make an ascent.
5. Very common procedure especially suited for conditions when it is difficult to return to a shotline for any reason. DSMBs provide the advantage of not having and having a surface float. DSMBs also allow boat traffic and surface cover to identify divers as they begin their ascent.

- ***Why is surface supervision usually recommended for drift diving? By what methods can it be provided?***

2. Surface supervision is usually recommended for drift diving as it:
   a. Warns away boat traffic.
   b. Provides assistance in case of problems.
   c. Simplifies the dive by picking up divers at the end of the dive.
3. Surface supervisors for river dives or other shore-based drift dives can drop off divers and then meet them on shore down current for pickup.

E. Drift Diving Equipment and Boats

• *What are the three common types of surface reference floats, and the advantages and disadvantages of each?*

1. Equipment
   a. Surface reference float
      1. Oval-shaped, international-orange boat fenders (float balls) make useful surface floats.
         a. Advantage: At 45-60 cm/18-24 inches in diameter, they're easy to see from a distance. They're also buoyant enough to support several divers pulling down on the line during ascents or safety stops.
         b. Disadvantage: Because of their size, boat fenders are strenuous to tow if you have to swim across or against the current.
      2. A Delayed Surface Marker Buoy (DSMB) is a long sausage like marker buoy, with an opening at one end for inflation (like a lift bag). The sausage is a plastic tube that is usually inflated by purging the second stage of an alternate airsource.

   a. Advantage: About 2 metres/6 feet tall when inflated and bright orange-red in color, they're easily seen from a distance, even in choppy conditions.
   The primary advantage of using a DSMB is that you don't have to tow the float until the end of the dive. An inflated DSMB on a reel can support a small group of divers while making a safety stop.
   b. Disadvantage: The primary disadvantages of DSMBs are that they can spill and deflate if you don't maintain tension on the line (though some types won't), and that they take a bit more skill to use.

   3. Conventional dive flag/buoy setup (inner tube) displays the diver's flag may be used as a surface reference float.
      a. Advantage: This type of float can support a dive flag which can be easily seen from a distance. Local requirements may require a dive flag to be flown to alert boat traffic.
      b. Disadvantage: Larger dive flag/buoy setups work well, though small ones (such as the compact Styrofoam type) may be less desirable because you can pull them underwater easily by accident.

•What type of line should you use to pull a surface float, and how should you control it?

b. Float line and reels
   1. A. 4-1.25 cm/1/8 - 1/2 inch diameter nylon or polypropylene line is suitable for towing the float. Thinner line is difficult for divers to use to control descents/ ascent. DSMBs are commonly used with tec diving type reels with #36 braided nylon line.
   2. Line should be on a reel or line caddy, with approximately twice as much line as the depth. Although you usually don't deploy all of it, this gives you extra length in case you end up

deeper than planned, to allow the buoy to drift ahead of the group in the faster surface current, and to allow for the curve the current tends to put in the line. The added length allows the buoy to drift ahead of the divers, and reduces the tendency to drag the line handler.

3. A small hook on the reel/caddy allows the line handler to hook into the bottom for short stops. This has to be done cautiously to avoid damaging aquatic life.

4. The types of surface float, line and reel we'll be using in this course are _____.

Note:

Remind student divers that few skills can do as much for them as peak performance buoyancy. It's a skill that reaches into every dive- especially drift diving. It saves air, it saves energy and it saves the environment. Suggest to divers if they haven't already they should consider completing the PADI Peak Performance Buoyancy course- it makes diving more fun.

Note:

It's a good idea to have a sample of all three surface floats to be available for students divers to hold and manipulate with gloves on (if diving with gloves) in the classroom. If possible, have student divers practice using the different floats, line and reel during a confined water practice session. Brief student divers on the floats, lines, and reels they'll use during the course.

- **What are the two basic types of surface signaling devices, and why should you have at least one of each?**

Note:

Inform student divers that devices used to gain attention at the surface should be a standard piece of equipment for every diver, regardless of certification level, and are required by PADI Standards in all courses. Audible devices like whistles or air horns (devices that attach to the low-pressure inflator of the BCD) can be easily heard at night or in limited visibility conditions. For daytime use, a visual

signaling device like a signal mirror or surface marker buoy (safety sausage) can be used. Familiarize divers with the latest devices on the market and have samples available for divers to hold and manipulate with gloves on (if diving with gloves).

2. Surface signaling devices: visual and audible
   a. Visual devices alert surface support at the longest distances, and over loud noises or engines.
      1. Inflatable signal tubes/surface marker buoys - brightly colored and protrude above waves in choppy seas
      2. Signal mirrors - visible over long distances and to aircraft
      3. Flares & lights - visible at night
   b. Audible devices get surface support's attention
      1. Whistles - quick to deploy and use; unlimited use
      2. Low-pressure inflator powered horns - very loud; attract attention over long distances
   c. It's recommended that you have at least one visual and one audible signaling device so you can be seen over long distances, and so you can attract attention. These devices are compact and easy to stow, so you can reasonably carry more than one of each type.
   d. During night operations, surface support (boat or shore) should have ample lights so divers can spot them and to assist entries and exits. Divers should also carry appropriate signaling devices visible at night such as flares, or have other emergency equipment such as an electronic rescue and locating system.

Note:

Inform student divers that electronic rescue and locating systems are now available in some countries (Egypt, Germany, Ecuador, Galapagos, Maldives and Seychelles). These systems consist of two components- one, the receiver aboard the dive boat or land operation and the other, the transmitter, which is carried by the diver during the dive. They are GPS-satellite based rescue systems that support the search at the surface for missing divers. The receiver determines its position through GPS and is then ready to receive any emergency calls from the transmitters. The transmitter, which is only activated in a case of emergency then also determines its position through GPS and relays this to the receiver via radio. Using these positions the receiver then determines the exact location of the missing diver and displays this as a graph on its screen. Some systems are pressure proofed up to 100 metres/330 feet and have a range of 10 kilometres/6.2 miles.

- **What is an EPIRB? What is a PLB? Under what circumstances would it be and would it not be appropriate to use a diver-carried PLB?**

3. EPIRB (Emergency Position Indicating Radio Beacon - One of three classes of devices that alert Search and Rescue (SAR) and provide position data via satellite to summon aid in an emergency.
   a. Standard equipment on commercial vessels in most areas
   b. Increasingly common in private vessels
   c. Used exclusively in maritime operations
   d. Activated only when the vessel is sinking, on fire, or facing a similar life-threatening emergency

4. PLB (Personal Locator Beacon) - A small, carried device that provides position data via satellite to summon aid in an emergency.
   a. PLBs are small enough to be carried in pressure proof/waterproof housings by divers. Typically, also in a splash housing (bag) that allows deployment in water at the surface.
   b. Not exclusive to maritime - also used in remote woodlands, deserts, etc.
   c. Activating a PLB puts significant SAR resources in motion, including but not limited to international and regional personnel monitoring tracking and operating rescue craft (at considerable expense). It can take hours for SAR to get on site. Therefore:
      1. Activating a PLB is not your first option in the majority of instances. The dive boat is a closer, faster source of help. Get the boat's attention and wait for assistance.
      2. Carrying PLBs is most appropriate for situations in which there is an unusually high risk of not being located by the boat and being outside reasonable reach of shore.
      3. Activate a PLB only if it is the only reasonable way to expect to be rescued.

- **What is the most important criterion when choosing a boat for drift diving? Why must the operator be familiar with drift diving procedures?**

5. Many types of vessels are suitable for boat drift diving, and range from inflatables to large charter boats.
   a. The most important criterion for the vessel you choose for drift diving is the ability for divers to enter and exit the water quickly.
   b. This is important because most drift diving requires the entire group to stay together.

6. The boat operator must be familiar with drift diving procedures (ideally, having experience with it).
   a. Drift diving involves a lot of live boating, which means the boat is not at anchor, but under power with propellers engaged with divers in the water. The operator must know when to engage and disengage the propellers to avoid endangering divers.
   b. The deck crew must be familiar with drift diving entries, exits and communicating with the operator during drift dives.
   c. Drift divers and the operator must coordinate and communicate their activities before and after the dive.

F. Drift Diving Techniques and Procedures

• What seven considerations go into planning a drift dive?

1. Drift dive-planning considerations
   a. Surface conditions and current intensity affect the drift technique you'll use and distance you can expect to drift. If conditions are very choppy, you may opt to use a float or DSMB.
   b. Depth and visibility affect the drift technique you'll use and whether you'll travel as one large team or several smaller ones.
   c. Dive objective
      1. May influence drift technique and may affect choice of dive teams.
      2. Drift dives usually have very simple objectives.
   d. Number and size of dive team(s) affect the techniques you'll use because some accommodate large groups more easily than others.
   e. Diver experience levels
      1. Experience with drift diving may expand your options.
      2. Other variables, such as depth, may be expanded or reduced depending upon experience.
   f. Bottom topography influences drift technique, as mentioned earlier. Obstacles that may entangle your line easily may preclude the use of a line during the tour portion of the dive. A site without a sloping or vertical reef as a descent/ascent reference may make a float and line highly desirable. A site with both factors may make using a DSMB the best choice.
   g. Availability of surface support
      1. Lack of surface support may change the logistical requirements. a boat crew very experienced with drift diving may have no trouble following your bubbles even in choppy water, whereas a less experienced boat crew may want you to tow a float so they can track you more easily.
      2. In many situations, lack of surface support makes a drift dive unfeasible.

• How do you navigate during a drift dive?

2. Drift dive navigation
   a. Whether you're diving with a float, without a float or using a DSMB most drift dives require little or no navigation because you float along with the current.
   b. Shore-based drift dives may require navigation so you don't miss your exit point.
      1. May require surfacing and swimming across current shoreward well before reaching your exit.
      2. As you gain experience with a site, you learn when to surface and still have ample time to reach shore and exit.
      3. Avoid having to swim against current. If you overshoot your landing point, the better option is often to exit pass it and walk back.

• What is the most important factor in preparing for a drift diving entry?

3. Drift diving entries: predive

a. The most important factor in preparing for a drift dive entry is for all divers to be ready to enter together. Because you're in a current, divers teamed together must enter together. Otherwise, the current will quickly separate everyone.

b. Conduct your predive safety check and all other preparations together, out of the water until all divers are simultaneously ready to enter.

c. When boat diving, the boat may circle in one place until everyone is ready to go.

d. Regardless of technique you'll be using, you typically enter with all gear in place, breathing from your regulator.

e. Never enter the water until cleared to do so by the captain or crew. This is important because the boat must be in the right place with the propellers disengaged and all divers ready to enter.

Note:

Emphasize that you do not enter the water until cleared to do so by the captain or crew. Drift dives entries from a boat require the coordination of the captain, crew, divemaster, and divers. In most cases, it is difficult for the captain to see when all divers are ready to enter, therefore communication between the captain, crew and divemaster is essential for a safe entry with disengaged propellers.

• What are the differences between buoyant and negative drift diving entries, and when would you use each?

4. Buoyant drift diving entries

a. Divers enter water buoyant with BCDs partially inflated. They assemble (typically on a line tied to the surface float) and descend together when ready.

b. Allows divers to sort out final adjustments/handle problems before descending.

c. You may use a buoyant entry when diving with relatively inexperienced divers and when the drift area is so large that some delay before descending is not an issue.

5. Negative drift diving entries

a. Divers enter water with BCDs deflated and descend without stopping at the surface.

b. All divers must not only enter together, but also descend together.

c. You may use a negative entry when the drift must begin at a relatively specific point. It is also a good choice when surface conditions are rough.

d. Negative entries require divers who have sufficient experience to be able to descend and equalize rapidly.

- **What are two procedures you can use when beginning a drift dive that will use a surface float?**

6. Beginning a drift dive using a surface float. There are several variations; here are two common ones.
   a. Procedure One - buoyant entry
      1. Float trails behind the boat with the line at the surface, much like a current line that is trailed while moored/anchored in a current.
      2. Boat disengages the propellers (or it may be at anchor/moored) and clears divers to enter. You enter together and collect on the line, with the line handler (leader) closest to the boat. Do not let the current carry you past the float.
      3. When all divers indicate ready, the line handler disconnects the line and begins descending. Other divers follow, using the line as a visual reference.
      4. Upon reaching the planned depth, the group drifts together with the line handler.
   b. Procedure Two - negative entry
      1. When all divers are ready and when cleared to enter by the boat captain/crew, the line handler enters the water with the float and line.
      2. All other divers enter water quickly and immediately after and near the line handler.
      3. The line handler descends, letting out line. The rest of the group descends simultaneously, keeping the handler or line in sight.
      4. Do not descend faster than the handler, and maintain contact with your buddy.

Note:

Remind student divers about concerns relative to equalization and buddy contact awareness during all drift diving descents.

- **When using a surface float and line, what techniques can you use so the group stays together while descending?**

7. Descents when using a surface float
   a. Use the line as a guide, but do not hang onto it. You can pull the reel out of the handler's hand, or you may drag the handler if you're in faster moving, shallower water.
   b. Remember to stay with the line and with your buddy as you descend. Don't focus on the bottom or you may get separated from the group. The handler may have to maneuver the line across the current to avoid obstacles, etc.
   c. If you have trouble equalizing, stay with the line and ascend as necessary, pause and try again. If unable to equalize, surface, stay with the float and signal for the boat to pick you up at the first opportunity. Stay with the float until the boat is ready for you.
   d. Swim around other divers experiencing descent problems while staying with the line.
   e. The line handler will wait for everyone at the bottom or planned maximum depth. This typically means floating along, but at sites with lots of topography, the team may gather in an area sheltered from current before continuing the tour.

- **What are the procedures for beginning a drift dive that will not use a surface float?**

8. Descents when not using a surface float
   a. These are often negative entry dives.
   b. When you're not using a surface float or will be using a DSMB, it's important for all divers to descend at the same time to stay together as a group and keep the leader in sight.

- **When not using a surface float and a line, what techniques can you use to keep the group together while descending?**

   c. When drift diving near a wall or sloping reef, descend until you have a visual reference of a shallow portion, then gradually follow it down to your planned depth.
   d. Equalization problems can be problematic because you don't have the line to keep the group together over a wide depth range. Plan procedures for equalization in advance.
      1. One option: the entire group returns to the surface - used when it is necessary for the entire group to stay together.
      2. Second option: buddy team signals the rest of the group, surfaces and returns to the boat - used when the boat will be immediately overhead for pickup.

Note:

Review with student divers that although it's common practice that a single, large group drift dives together, there are times when several groups may drift at the same time.

Multiple groups have the advantage of not requiring so many divers to stay together. If one team has to return to the boat for some reason, it doesn't affect all the other divers. By staggering teams, the crew doesn't have to deal with so many divers at one time during entries and exits.

For multiple groups to be feasible, the drift area has to be long enough for that it doesn't matter if some groups enter and finish before others. The current and dive path must be relatively straight so that the boat doesn't have to track divers moving in significant, broad, opposed directions. To simplify the crew's job, it's more typical for each group to have a small float than to dive floatless, though using DSMBs isn't unheard of. Diving in multiple groups is also common in shore drift diving with fixed entry and exit points.

- **What techniques can you use to stay together during the tour portion of a drift dive?**

9. Tour procedures
   a. After reaching the planned depth, the guide/line handler:
      1. Accounts for all divers.
      2. Confirms the current strength and direction.
      3. Indicates the intended drift direction.
   b. Maintain buddy contact and contact with the guide/line handler.

Note:

During the open water dives, a student diver rather than an instructor or assistant may be the guide/line handler. Regardless of who the guide/line handler is, make sure all divers know to stay with the guide/line handler and the instructional staff will stay with the group.

- **What body position should you generally maintain during a drift dive?**

   c. Stay neutrally buoyant and streamlined.
      1. Wear the correct weight. Don't overweight to descend faster.
      2. Use your BCD and breath control to fine-tune your neutral buoyancy. Depth changes may be subtle while drifting, so watch your computer/depth gauge and remember that a depth change usually means a buoyancy change.
      3. Secure all your equipment to avoid accidentally snagging your hoses on sensitive aquatic life or fragile shipwrecks.
   d. Stay in a generally horizontal, streamlined body position facing forward (your travel direction) so you can see where you are going.
   e. Stay in the group, behind (up current) the guide/line handler.
   f. If the guide/line handler stops (to wait for stragglers or another problem), maintain your position by:
      1. Swimming gently into the current.
      2. Ducking behind something out of the current where you can see the guide/line handler.
      3. Holding onto a nonliving part of the reef. To do this, spot what you're going to grasp while up current and maneuver toward it to intercept. You should not have to fight to reach it.
   g. If you and your buddy are distant from the guide/line handler, swim gently with the current to catch up, but stay up current with the group.
   h. The guide/line handler may swim slowly into the current to slow down but not stop to gather the group together. Face into the current and swim slowly if necessary to stay up current with the group. If you're far from the guide/line handler, swim gently with the current to catch up, but stay up current with the group.

1. Direction changes
   a. The guide/line handler must plan and indicate direction changes well ahead of time to compensate for drift.
   b. Direction changes usually involve swimming across the current for descents/ascents to avoid or intercept something. Avoid having to fight the current.

Note:

Review with student divers Project AWARE Foundation's "Ten Ways a Diver Can Protect the Underwater Environment." Remind divers that they can download a pdf of this information from http://www.projectaware.org .

Ten Ways a Diver Can Protect the Underwater Environment

1. Dive carefully to protect fragile aquatic ecosystems

Many aquatic organisms are delicate and can be harmed by the bump of a camera, the swipe of a fin or even the gentle touch of a hand. Some aquatic organisms like corals grow very slowly and breaking even a small piece can destroy decades of growth. By being careful you can prevent long-term damage to magnificent dive sites.

2. Be aware of your body and equipment placement when diving

Keep your gauges and alternate air source secured so they don't drag over the reef or other vital habitat. Control your buoyancy, taking care not to touch fragile organisms with your body or equipment. You can do your part and prevent injury to aquatic life every time you dive.

3. Keep your dive skills sharp through continuing education

Before heading to open water seek bottom time with a certified professional in a pool or other environment that won't be damaged. You can also refresh your skills and knowledge with a PADI Scuba Review, PADI Advanced Open Water Diver course or Project AWARE Specialty course such as Peak Performance Buoyancy.

4. Consider how your interactions affect aquatic life

Avoid touching, handling, feeding or riding on aquatic life. These actions may stress the animal, interrupt feeding and mating behavior or provoke aggressive behavior in normally nonaggressive species.

5. Understand and respect underwater life

Playing with animals or using them as food for other species can leave a trail of destruction, disrupt local ecosystems and rob other divers of their experiences with these creatures. Consider enrolling in a PADI Underwater Naturalist, AWARE Fish Identification or Coral Reef Conservation Specialty course to better understand sustainable interactions.

6. Be an ecotourist

Make informed decisions when selecting a destination and choose Project AWARE Environmental Operators or other facilities dedicated to sustainable business practices. Obey all local laws and regulations and understand your effect on the environment. Don't collect souvenirs like corals or shells. Instead, take underwater photos and follow Project AWARE's 10 Tips for Underwater Photographers.

7. Respect underwater cultural heritage

Divers are privileged to access dive sites that are part of our cultural heritage and maritime history. Wrecks can also serve as important habitats for fish and other aquatic life. Help preserve these sites for future generations by obeying local laws, diving responsibly and treating wrecks with respect.

8. Report environmental disturbances or destruction

As a diver, you're in a unique position to monitor the health of local waters. If you notice unusual depletion of aquatic life, injury to aquatic animals or strange substances in the water, report these observations to responsible authorities in your area.

9. Be a role model for other divers and nondivers when interacting with the environment

As a diver, you see the underwater results of carelessness and neglect. Set a good example in your own interactions so that others can learn from you.

10. Get involved in local environmental activities and issues

You can greatly affect your corner of the planet. There are plenty of opportunities to support healthy aquatic environments including Project AWARE conservation and data collection activities like local beach and underwater cleanups and CoralWatch monitoring, supporting environmental legislative issues, attending public hearings on local water resources, conserving water or making responsible seafood choices.

10. Drift diving ascents

a. Always look up, watch and listen for the boat and other vessels.

- **What techniques do you use and what factors do you consider when ascending as a group from a drift dive?**

b. Ascending as a group

1. Ascent begins when the first diver reaches the agreed air pressure, no stop time remaining or other limit.

2. All divers signal "up" and perform a normal ascent staying together, with the guide/line handler coming up last.

3. Control your buoyancy. If using a surface float with ample buoyancy, or a DSMB, the line may be used to assist ascent control and for the safety stop, but do not pull against the line handler. If it is a small float, use it as a visual reference only. You may make a loose "ok" around the line, but don't pull against the line handler to slow your ascent. The line handler comes up last.
4. If no float, use the reef or other reference as available to help monitor your rate. Without that, watch your computer to control your ascent rate and maintain safety stop depth (5 metres/15 feet).
5. The group leaves the safety stop together.
6. At the surface, stay in the group. Look to the guide and the boat for directions.

Note:

Review with student divers the sidebar "Sending Up a Delayed Surface Marker Buoy." If the class is going to use a Delayed Surface Marker Buoy on their drift dives consider practicing deployment in a confined water session. Make sure all student divers understand all five steps to send up a DSMB.

Sending Up a Delayed Surface Marker Buoy
Most divers use either lift bags or long, sausage-shaped floats as DSMBs. If your divers have completed the Search and Recovery Adventure dive or the PADI Search and Recovery Diver course, they're already familiar with inflating a lift bag: remaining free of entanglement in the rigging and putting air in the opening of the lift bag using an alternate second stage or an accessory inflator (not the primary second stage).

Inflating a DSMB this way does the job, but the inflation technique used by tec divers may be faster and more effective. This is because there are some differences between sending up a lift bag when recovering something and a DSMB. When recovering something, the diver is only looking to offset the negative buoyancy of the recovered object, and typically ascending with it. With a DSMB, it's important for the float to have the maximum buoyancy possible, and ascend rapidly on the line.

Review the following steps of sending up a DSMB with student divers: (As shown with a lift bag [most common choice in tec diving for ample buoyancy] in the DSAT Tec Deep Diver Manual and the TecRec Equipment Setup and Key Skills video.)
1. Retrieve the DSMB and reel. Put a puff of air in the DSMB so it floats and stands, and then secure the reel line to the float. Some divers carry their DSMBs in a package preattached to the reel line.
2. Hold the reel away from you in your extended right hand where you can see it, with the line tight back to the DSMB. It's important to keep tension on

the line and that you keep it in sight so that you avoid entanglement. Keep the reel unlocked, but put a finger on the spool so it doesn't unwind.

3. If it is the type that allows you to do so, hold the opening of the DSMB to your mouth on the left side of your face. Tilt your head to the right so that your exhaust bubbles go into the buoy. "Puff" your regulator rapidly, with it still in your mouth, so that your bubbles fill it as full and as quickly as possible while keeping your eyes on the line and reel. If it is the type with an inflation tube as shown, fill the tube with one or more breaths. Either keep the regulator in your hand, or drape it over your arm so you don't have to retrieve it from behind your back.

4. The idea is to rapidly make the DSMB as buoyant as you can, then immediately release it before it affects your buoyancy control. Allow it to ascend while maintaining some tension on the reel spool and line (gloves help with this). The tension is important for two reasons. First, it keeps the DSMB upright so it doesn't spill and sink if it's one without a one-way fill opening (like a lift bag). Second, it keeps the reel from spinning so fast that it throws off slack line, tangles and jams.

5. When the buoy reaches the surface, quickly take up any slack and pull down a bit. This holds the buoy upright at the surface for maximum visibility by boats. Maintain tension as you take up line as you and the group ascend. If the reel jams for some reason, let go of it. If necessary, deploy and send up a backup DSMB.

This technique has several advantages. It only takes one diver to accomplish it, and you can do it while you drift. It minimizes the risk of tangle problems by maintaining tension on the line and reel and keeping them visible. Finally, it reduces the likelihood of a regulator freeflow by using your second stage while it's still in your mouth.

Make sure your divers reference the DSAT Tec Deep Diver Manual or TecRec Equipment Setup and Key Skills video for more information.

• What techniques do you use and what factors do you consider when ascending as individual buddy teams from a drift dive?

c. Ascending in buddy teams

1. Depending upon depth, visibility, control, experience and other factors, buddy teams may ascend individually when reaching a limit. This allows others with more time remaining to continue their dive.

2. This technique is used primarily in ideal conditions. It may be appropriate to only permit experienced drift divers to surface in teams and have novices remain in a group.

3. Upon reaching an agreed limit, the buddy team signals the guide/line handler and makes a normal ascent and safety stop together. If a surface float is used, or a DSMB, dive teams typically ascend along the line, but use it as a visual reference only to avoid dragging the line handler.

4. The team surfaces near the float or DSMB (if used) and looks to the boat for pickup directions. You may need to swim away from the reef especially if the reef top reaches very close to the surface to avoid damaging the boat and the reef.

- **What are the procedures for exiting the water after surfacing from a drift dive?**

11. Exits

a. At the surface, stay in a group (if ascents were in individual teams, they may have already been picked up by the boat). If using a surface float, the line handler will wind in the line, but may leave a length for everyone to hold onto, to assist staying together.

b. If surfacing near slack line, remember it's better to swim over it than under it to avoid entanglement.

c. When drift diving from a boat, do not approach the boat until signaled to do so by the captain/crew. Stay in the group and visible at the surface.

d. Final exit procedures will vary and you will be briefed before the dive.

1. The captain usually maneuvers as close as possible and disengages the engine so divers and the boat drift along together.

2. The crew may throw out a line for everyone to hang onto while waiting to exit. Alternatively, when using a float, the line handler may have everyone grasp the line, then swims to the boat and secures it.

3. Especially in calm conditions, there may be no need for a line; everyone stays close near the boat and drifts with it, waiting to exit.

4. Stay well away from the ladder until it is your turn to exit in case a diver falls back in.

5. If you become separated from the group or boat, relax. Remain buoyant and visible. Deploy your inflatable signal tube or other surface signaling device if necessary and wait for the boat. It will have to retrieve all divers before engaging the propellers, so be patient.

6. Usually the guide/line handler is the last aboard in case someone needs assistance.

Note:

Remind student divers the PADI Boat Diver course covers boat diving procedures in more detail. The PADI Boat Diver course expands student diver knowledge about the advantages of boat diving, boat terminology, types of dive boats, basic rules of the road, safety equipment for boat diving, boat diving procedures and etiquette, and the basic guides to boating safety.

e. Shore drift diving exits

1. Shore drift dives usually have specific exit areas, so it's important to surface well ahead of the exit.

2. Swim across the current toward shore. The last hundred metres/yards or so should be as close to shore as possible.

3. Exit as appropriate for the environment.

4. When shore drift diving, you may dive and exit as a group, or you may spread out and

dive/exit as individual buddy teams based on the considerations discussed regarding individual ascents. You may want to secure a weighted line attached to an underwater light from shore, especially when river diving, to help you spot the exit point, visibility allowing.

G. Drift Diving Hazards and Problems

• What constitutes "being lost" when drift diving? What do you do to rejoin the dive team were that to happen?

1. Getting "lost"

a. Typically when drift diving from a boat (and sometimes from shore), there is no exact exit point; the dive ends based on dive limits. The group only stays together by maintaining contact with the guide/line handler. When shore diving, staying in a group may be more important if only the guide knows where to exit.

b. When drift diving, "being lost" means you're out of contact with the group and can no longer see the group, the guide/line handler, or the line and float (if used). This is true even though you and your buddy may still be together.

c. If you find yourself lost, search no more than one minute before ascending.

1. If you believe you are up current from the group, you may try swimming with the current to catch up.

2. If you believe you are down current, you may stop or swim slowly into the current waiting for the group to catch up.

3. In either case, however, if the group changed course, you may not reunite within one minute.

d. After a one-minute search, ascend slowly and carefully to the surface.

1. Depending upon surface conditions, the boat operator may not be able to spot your bubbles easily. Be very cautious as you surface. Look around and listen.

2. Continue to look for the group's line or bubbles as you ascend. If you spot them, rejoin the group underwater. If not, continue to the surface.

e. At the surface, establish positive buoyancy, signal the boat, and wait to be picked up. Inflate your signal sausage if necessary to be more visible.

1. Depending upon the circumstances, the dive may be over for you, or the boat may help you rejoin the group.

2. If you rejoin the group, it is best to descend from up current (because the current is generally faster near the surface) and swim toward them, catching up as you descend.

3. Depending upon circumstances, the procedure may be for the entire group to surface if someone gets separated.

f. When shore drift diving and you don't know the exit point, look for the float/bubbles at the surface.

1. If you don't relocate the group, you may have to stay at the surface so you don't miss the exit point.

2. However, this may mean you will drift faster than the group.

3. When planning shore drift dives in which only the guide/line handler knows the exit point, it is typical for the entire group to surface when someone or a buddy team gets lost.

4. Although only the guide/line handler may know when to surface to exit underwater, it is

often easier to provide everyone with landmarks for the exit visible at the surface during dive planning. If lost, you and your buddy remain at the surface and exit based on those landmarks.

g. In some drift situations (commonly in shore based drift diving), group separation may be a planned part of the dive.

1. Buddy teams stay together. When appropriate, each team may have a line and float.
2. There may be a guide team that goes first and one that brings up the rear.
3. All teams either know where the exit point is through experience, or because it is easy to find based on landmarks, descriptions, etc.

- **How can diving in currents contribute to exhaustion, stress and buddy separation? What do you do to avoid these problems?**

2. Exhaustion is a primary hazard when diving in currents.

a. Signs and symptoms include fatigue, labored breathing, a feeling of suffocation, headache, muscle cramping and a tendency to panic.

b. To prevent exhaustion, avoid heavy exertion that induces heavy breathing. Stay well within your physical limits. Underwater, stay at or near the bottom and avoid trying to fight the current.

c. If caught in a current too strong to swim against, do not fight it. Ascend at a safe rate (18 metres/60 feet per minute or as specified by your computer), inflate your BCD at the surface and rest while drifting. Signal the boat to pick you up. If shore drift diving, swim across the current to shallow water. Never try to fight a strong current.

3. Diving in currents can cause psychological stress.

a. Some divers find currents stressful due to inexperience in dealing with them. This can be compounded by fighting the current, which can create exhaustion as just discussed, which is also a psychological stressor.

b. This course and the PADI Boat Diver course help relieve this stress by providing training and experience in dealing with stronger currents. You deal with currents two ways: drifting (this course) or using lines (Boat Diver course).

c. Avoid psychological stress by never exceeding your physical limits, and by gradually gaining experience. Never hesitate to abort a dive if you believe it exceeds your capabilities or comfort level.

d. Learn how to prevent and manage exhaustion and psychological stress in the PADI Rescue Diver course.

4. Buddy separation occurs more easily in currents because if one diver stops or slows, the current tends to carry the other onward.

a. Avoiding buddy separation in currents is primarily a matter of close vigilance. You and your buddy should stay extra close and constantly check on/communicate with each other.

b. Be aware that buddies at different depths may travel at different speeds due to differences in current speed.

c. If one buddy stops or slows for any reason, the other must do so also.

• How does the line handler avoid entanglement in the float line?
What is the procedure if a diver becomes entangled?

5. Entanglement in the float line isn't common, but it is a possibility.
   a. The primary cause of entanglement in the float line is excess, slack line. The line handler prevents entanglement by maintaining tension against the float, reeling in slack as necessary so it remains taut.
   b. If a diver becomes entangled, it is rarely serious.
      1. The diver should stop and signal a buddy to assist. The entangled diver should not turn, since this tends to wrap line around the diver and make things worse.
      2. In the unlikely case of severe entanglement, the group surfaces, taking the diver and the line up together. In the even more unlikely situation that the line is snagged on the bottom, it may be necessary to cut the line.

H. Specialty Activities While Drift Diving

• What concerns and considerations do you have while deep diving on a drift dive?

1. Deep diving
   a. Many popular drift dive environments involve diving below 18 metres/60 feet.
   b. Beyond the usual concerns associated with deep diving, when drift diving deep you need to pay particular attention to safety stops and emergency air supply.

• How do you address deep diving concerns while drift diving?

   c. As already discussed, drift diving safety stops may require maintaining depth without a line for support. In floatless drift diving, you may have to ascend in midwater using your computer to determine your ascent rate and to maintain your safety stop depth neutrally buoyant.
      1. Sometimes boats deploy lines or bars for safety stops after the group makes contact (but this is not common in drift diving). You hang onto these at 5 metres/15 feet while the boat continues to drift.
      2. How you will conduct your safety stop should be part of all drift dive planning, but especially when deep diving. If you won't have a visual reference for your stop, practice making stops without one in non drift diving circumstances.
      3. A good method for maintaining your safety stop depth with only a dive computer is for buddies to maintain physical contact, with one diver monitoring depth and the other watching for boats, keeping contact with the rest of the group, navigating and so on. Many drift divers can monitor their depth and computers individually while maintaining contact with their buddies and the group.

d. Deep diving calls for having sufficient air reserve to handle unforeseen problems and still be able to ascend safely and make a safety stop.

1. In many deep diving situations, you may have emergency breathing equipment suspended under the boat or a float. However, such arrangements are often impractical in drift diving because boats can't maneuver with suspended equipment. It is also often impractical with towed floats because the gear makes line handling difficult.

2. Therefore, it is especially important to plan adequate reserve with the air you have in your cylinder. A pony bottle or high capacity cylinders are other options to consider.

e. It's recommended that you complete the PADI Advanced Open Water Diver course and the PADI Deep Diver course to learn more about deep diving. Since wrecks are often located in areas of current, you may want to complete a PADI Wreck Diver course as well.

2. Digital underwater photography and videography

- **What are the difficulties involved with digital underwater photography or videography while drift diving?**

a. The primary challenge in underwater imaging on a drift dive (photo or video) is the inability to stop or difficulty in doing so.

- **What do you do to photograph/video effectively while drift diving?**

b. To photo/video effectively while drift diving, plan to take wide angle shots or shots of the group while drifting. Leave close ups of the reef and macros for your other diving adventures because damage to the environment is likely.

c. When stopping or slowing is possible for photo/video, the entire group must stop or slow to stay together so these have to be part of the dive plan.

d. If you want to stop to photo/video something, what the group needs to do needs to be part of the dive plan.

e. Learn more in the PADI Digital Underwater Photographer and Underwater Videographer courses.

Note:

Review with student divers Project AWARE Foundation's "10 Tips for Underwater Photographers." Remind divers that they can download a pdf of this information from www.projectaware.org .

1. Photograph with Care

Dive carefully as many aquatic creatures are fragile regardless of size. Improper techniques while taking or editing photos underwater can damage sensitive aquatic life and harm fragile organisms with the bump of a camera or tank, swipe of a fin or even the touch of a hand.

2. Dive Neutral
Camera systems may add weight or be buoyant. Make sure to secure photo and dive equipment and be properly weighted to avoid contact with reefs or other vital habitat. Practice buoyancy control and photography skills in a pool before swimming near sensitive and fragile environments.
3. Resist Temptation
Avoid touching, handling, feeding, chasing or riding aquatic life. Avoid altering an organism's location to get the perfect shot. Many aquatic creatures are shy and easily stressed. These actions may interrupt feeding, disturb mating or provoke aggression in a normally nonaggressive species.
4. Easy Does It
While diving, move slowly and deliberately through the water. Be patient and still while photographing - allow organisms to show their natural behavior for a more significant and meaningful shot.
5. Sharpen Your Skills
Make sure the difficulty of the dive and the environmental conditions are appropriate for your current skills and comfort level. Avoid stabilizing underwater by grabbing onto the reef for a better photo. Enroll in PADI's Underwater Photographer, Digital Underwater Photography and Peak Performance Buoyancy Specialty courses to become a more skilled and successful photographer.
6. Be Informed
Be aware of local regulations and protocols regarding behavior around marine mammals and other species before entering the water. These regulations protect creatures and aim to assure their preservation for future generations.
7. Be an AWARE Diver
Consider enrolling in an AWARE - Coral Reef Conservation, Project AWARE Specialty or Underwater Naturalist course to learn sustainable dive techniques and increase knowledge about the environment you're photographing.
8. Take Only Pictures, Leave Only Bubbles
Avoid souvenir collection. Nearly everything found in the aquatic realm is alive or will be used by a living creature. Removing specimens such as corals and shells can disturb the delicate balance and quickly deplete dive sites of both their resources and their beauty.
9. Share Your Images

Use images for conservation by reporting environmental disturbances or destruction using your photographs as evidence. Assist scientific research and improve resource management by contributing your photos to The Whale Shark Project and other monitoring programs. You may also submit your photos to Project AWARE. Your images have the power to change perspectives and influence conservation.

10. Conserve the Adventure

Join Project AWARE Foundation, the dive industry's leading nonprofit environmental organization. Your support helps conserve underwater environments through education, advocacy and action.

3. Search and recovery

- **What challenges do you have attempting to search for or recover something while drift diving?**

a. Searches while drift diving are complicated because you cannot easily control your speed or direction. This greatly limits the types of searches you can conduct with a reasonable expectation for success.

b. Depending upon the situation, it may be difficult to stop in a current to rig and secure the object for recovery. Using a lift bag in a current may also be difficult.

- **What can you do to handle search and recovery challenges while drift diving.**

c. Generally, the most effective search is to drop in drift divers well upstream and spread out on a line perpendicular to the current, as close to the bottom as possible without risking running into obstructions. The team searches the area immediately below and drops a heavily weighted marker buoy upon sighting the object.

d. If an object is small enough, recovery is a matter of starting directly up current and timing your pass so you can simply grab it and keep going as you swim upward with it.

e. If an object requires securing and using lifting equipment, it must be in a place sheltered from strong current where you can do so without unreasonable risk of exhaustion. When using a lift bag, once the object is off the bottom, you and your buddy drift with it while ascending.

f. Recoveries that require dealing with equipment while remaining in place in a strong current are beyond the scope of recreational diving.

g. You should be familiar with search and recovery techniques before attempting to apply them to drift diving conditions. You can learn about these in the PADI Search and Recovery Diver course.

Section Three: Open Water Dives

Conduct

There are no required confined water or surface practice sessions for the PADI Drift Diver Specialty course. However, it is sound instruction to develop student diver abilities in conditions that don't add complexity to learning new skills. For example, you may have student divers practice effective water drift diving entries and exits, practice descents, maneuvering with, and ascents with a float, and other drift diving related skills before progressing to more challenging conditions. Entering the water quickly as a group through a single or two openings marked on a dock or poolside can notably improve performance in open water. You may add confined water or surface practice sessions at your discretion. The confined water session may also include a scuba skills review. After completing the course, suggest to divers to dry-rehearse predive preparation, maintaining proper buddy contact, group contact, descents, ascents and other drift diving skills.

Both dives in the course follow the same outline and have the same general performance requirements, though the specifics of meeting these requirements may differ if the environment differs, or if you choose to use different techniques. Although both dives may be similar, it is recommended that you vary the techniques and procedures if possible and reasonable for the situation. For example, you may use a buoyant entry with a float for the first dive, but opt for a negative entry with a delayed surface marker buoy for the second.

Bottom time on each dive should not exceed the no decompression limits of the Recreational Dive Planner or each diver's computer, if used. Regardless of how you conduct the open water dives, student divers must demonstrate the following performance requirements to qualify for certification.

Open Water Dives

Performance Requirements

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

Drift Open Water Dives One and Two

• Within the overall group and with a buddy, plan a drift dive accounting for appropriate techniques for the environment, conditions, depth and other variables.
• Demonstrate an entry specific to the environmental conditions and the planned drift technique(s).
• Demonstrate how to maintain buddy contact throughout the drift dive using techniques appropriate to the environment and the planned drift techniques.
• Demonstrate how to maintain contact with the group and guide/line handler throughout the drift dive using techniques appropriate to the environment and the planned drift techniques. An exception would be for techniques with planned separation from the group, such as individual buddy team ascents.
• Demonstrate appropriate buoyancy control throughout the dive, including neutral buoyancy, streamlining, and avoiding accidental/damaging contact with the environment.
• Make a safety stop for three minutes at 5 metres/15 feet at the end of the drift dive.
• Demonstrate an exit from the water that is specific to the environmental conditions and the planned drift techniques.

Open Water Guidelines for Drift Diver

A. General Open Water Considerations

1. Involve student divers in dive-planning activities. Have student divers help prepare drift equipment including floats, lines and reels.

2. Conduct the PADI Drift Diver course dives from a boat whenever possible.

3. It is recommended, though not required, that you conduct the course dives using a buoyant entry technique with a surface float and line that you, an assistant or a student controls. This is a common drift diving technique with the benefits of providing the boat with a clear indication of where the group is, providing students with a reference line for ascents and descents, and a simplified way to keep everyone together if someone has difficulty equalizing.
The buoyant entry gives you a chance to handle problems that may arise after getting in, but before starting the dive. If possible, however, it is advantageous to provide divers with the opportunity to participate in all three general types of drift dives.

4. Conduct a thorough briefing. The better the briefing, the more smoothly the drift dives will proceed. Besides discussing the profiles, conditions and the facilities at the dive site, predive briefings should detail entry and exit techniques, drift techniques, how the group will stay

together, planned and unplanned stops, and when the group will ascend.
Drift dives are not complicated, but require detailed planning to assure the group dives in a closely coordinated manner.

5. The use of certified assistants is highly recommended. Assistants can help keep the group together while allowing you to focus on individual performances. A common technique in drift diving is to have an assistant in front or behind the group. An assistant at the surface assisting the boat crew, if appropriate, can help with check in, check out procedures, and be prepared to help in an emergency.

6. Remind students to use the line as a visual reference and not to pull up on it. It may be acceptable and appropriate to make a loose "okay" with their hands around it as they follow it.

7. Assign logistical duties to staff and review emergency protocols.

B. Drift Diver Open Water Dives

Dive One and Two

Note:

Since both dives in the PADI Drift Diver course follow the same sequence and have the same general performance requirements, this single dive outline applies to Dive One and to Dive Two. If possible, it is recommended that you vary the drift diving environment and hence the techniques and procedures used.

- **Within the overall group and with a buddy, plan a drift dive accounting for appropriate techniques for the environment, conditions, depth and other variables.**
- **Demonstrate an entry specific to the environmental conditions and the planned drift technique(s).**
- **Demonstrate how to maintain buddy contact throughout the drift dive using techniques appropriate to the environment and the planned drift techniques.**
- **Demonstrate how to maintain contact with the group and guide/line handler throughout the drift dive using techniques appropriate to the environment and the planned drift techniques. An exception would be for techniques with planned separation from the group, such as individual buddy team ascents.**
- **Demonstrate appropriate buoyancy control throughout the dive, including neutral buoyancy, streamlining, and avoiding accidental/damaging contact with the environment.**
- **Make a safety stop for three minutes at 5 metres/15 feet at the end of the drift dive.**
- **Demonstrate an exit from the water that is specific to the environmental conditions and the planned drift techniques.**

a. Briefing
    1. Dive sequence – review Dive One/Two tasks
b. Predive procedures
c. Dive One/Two tasks
    1. Plan the drift dive - the drift entry, descent, tour, ascent, and exit techniques and why they are appropriate for the situation. In instances where these techniques may be the standard operating procedure for the vessel or area, discuss why they are standard there.
    2. Enter water using appropriate technique
    3. Maintain buddy awareness
    4. Descend in a manner that will avoid unintended or destructive contact with bottom
    5. Follow directions of instructor/dive leader
    6. Execute proper ascent procedures
    7. Make a safety stop
d. Post-dive procedures
e. Debriefing
    1. Encourage student divers to discuss their drift dive entry, their descent, how they were able to control their buoyancy and their methods for maintaining buddy/group contact, their ascent (as a group or in individual buddy teams) and safety stop, and the exit they used. Guide discussions to address what worked, what didn't work, and how things may be done differently the next time. Discuss any possible hazards, problems, and solutions in detail. Discuss the procedures they planned to use in case of separation from the group. Talk about the aquatic life/interesting scenery/reefs/wrecks seen on the dive.
    2. Guide the discussion to address what you and your staff observed working or not working. Make a point of correcting environmentally unfriendly behaviors, if observed.
f. Log dive (instructor signs log)

Appendix

Table of Contents

Drift Diver

Knowledge Review Part I Answer Key

1. List and explain four advantages and four concerns of drift diving.

Advantages:

1. Saves energy.
2. Allows diving in strong current.
3. Lets you see more area than you would swimming.
4. You often don't need to find a particular exit point.

Concerns:

1. Requires close coordination during entry, descent, ascent and tours.
2. Extra vigilance to maintain buddy contact.
3. Surface support and coordination.
4. Requires a long extensive bottom.

2. Explain why some form of surface supervision is recommended for most forms of drift diving.

Surface support can warn away boat traffic, provide assistance in case of problems and simplify the dive by picking up divers at the end.

3. List seven considerations that should be part of planning a drift dive.

1. Surface conditions and current intensity
2. Depth and visibility
3. Dive objective
4. Number and size of dive teams
5. Diver experience levels
6. Bottom topography
7. Availability of surface support

4. Describe the differences between buoyant and negative drift diving entries, and identify when you would use each.

Buoyant entries:

Divers enter water with BCDs partially inflated. Used to sort out problems at surface before descending.

Negative entries:

Divers enter water with BCDs deflated and continue descent without stopping at surface. Use to begin dive at a relatively specific point or when surface conditions are rough.

5. Explain the procedure for descending with a float so the group stays together on a drift dive.

Follow the line using it as a visual guide (don't hang onto it). Stay with the line and your buddy as you descend. If you have trouble equalizing, stay with the line and ascend as necessary, pause and try again.

6. Describe techniques you can use to stay together during the tour portion of a drift dive.

Stay behind (up current) of the guide/line handler. If the guide/line handler stops or slows, do the same. If you get ahead of the guide/line handler, slow until they catch up. If you get behind, swim with the current to catch up. Watch for and follow direction changes.

7. Describe the techniques for ascending as a group and as individual buddy teams. Describe when buddy teams may be allowed to ascend individually from a group drift dive.

Group ascent:

Ascent begins when first diver reaches agreed air or time limit. All divers ascend together, with guide/line handler coming up last. Group makes safety stop together and exit water together.

Buddy team ascent:

Buddy teams ascend individually when they reach air or time limit. They signal guide/line handler, ascend together along line (if used) and are picked up by the boat.

8. Describe the procedures for exiting the water into a boat after a drift dive.

Stay in the group and visible at the surface. Do not approach the boat until signaled to do so by the captain/crew. There may be a line to hang onto while you wait your turn to exit. Stay well away from the ladder until it's your turn to exit. If you become separated, relax, remain buoyant, deploy surface signal devices if necessary to remain visible and wait for the boat to pick you up.

9. Explain how to avoid exhaustion in a current.

Keep exertion below levels that induce heavy breathing. Stay well within your physical limits. Underwater stay at or near the bottom. Don't fight the current. At the surface inflate your BCD and rest.

10. Define being lost when drift diving and explain the procedures for rejoining the group while boat diving.

You're lost when you can't see the float line or the dive group - even if you're with your buddy. Look for the group for no more than one minute before making a normal ascent. Look for the group's float and bubbles as you ascend. Be cautious surfacing. After surfacing, signal the boat and wait to be picked up. You may or may not rejoin the group depending upon the circumstances.

Adventure Dive: Drift Diver Skills Overview

- Knowledge Review
- Briefing
- Suiting Up
- Predive Safety Check (BWRAF)
- Entry
- Group Descent
- Drift Dive for Fun and Pleasure
- Ascent – Safety Stop
- Exit
- Debrief
- Log Dive – Complete Training Record

Drift Diver

Knowledge Review Part II Answer Key

11. How does current intensity vary from the surface to the bottom in most circumstances? If you need to swim against the current, where is the best place to do so?

Current is usually faster at the surface and slower as you near the bottom. If you need to swim against the current, the bottom is usually the best place to do so.

12. What are the three common types of surface reference floats for drift diving? What are the advantages and disadvantages of each?

1. Oval-shaped, international-orange boat fenders (float balls). At 45-60 cm/18-24 inches in diameter, they're easy to see from a distance. They're also buoyant enough to support several divers pulling down on the line during ascents or safety stops. However, Because of their size, boat fenders are strenuous to tow if you have to swim across or against the current.

2. A delayed surface marker buoy (DSMB) is a long sausage-like marker buoy, with an opening at one end for inflation (like a lift bag). About 2 metres/6 feet tall when inflated and bright orange-red in color they're easily seen from a distance, even in choppy conditions. The primary advantage of using a DSMB is that you don't have to tow the float until the end of the dive. An inflated DSMB on a reel can support a small group of divers while making a safety stop. The primary disadvantages of DSMBs are that they can spill and deflate if you don't maintain tension on the line (though some types won't), and that they take a bit more skill to use.

3. Conventional dive flag/buoy setup (inner tube). This type of float can support a dive flag which can be easily seen from a distance. Local requirements may require a dive flag to be flown to alert boat traffic. Larger dive flag/buoy setups work well, though small ones (such as the compact Styrofoam type) may be less desirable because you can pull them underwater easily by accident.

13. What type of line should you use while drift diving, and how should you control it?
4-1.25 cm/1/8 - 1/2 inch diameter nylon or polypropylene is suitable line for towing the float. Line should be on a reel or line caddy, with approximately twice as much line as the depth.

14. What are the two basic types of surface signaling devices? Why should you have at least one of each?
The two types are visual and audible. You should have at least one visual and one audible signaling device so you can be seen over long distances, and so you can attract attention.

15. Under what circumstances would it be appropriate to use a diver-carried PLB (personal locator beacon)? When do you not use a PLB?
PLBs are appropriate for situations in which there is an unusually high risk of not being located by the boat or being able to reach shore. You would only activate if it is the only reasonable way to expect to be rescued. You would not use a PLB as your first option, but would get the boat's attention instead.

16. Why must the boat operator you choose for a drift dive be familiar with drift diving procedures? What is the most important factor in preparing for a drift diving entry?
Drift diving involves live boating, which means the boat is not at anchor but under power with propellers engaged with divers in the water. The operator must know how to avoid endangering divers. The deck crew must be familiar with drift diving entries, exits and communicating with the operator during drift dives. Drift divers and the operator must coordinate and communicate their activities before and after the dive. The most important factor in preparing for a drift dive entry is for all divers to be ready to enter together.

17. How does the line handler avoid entanglement in the float line? What is the procedure if a diver becomes entangled?
The line handler prevents entanglement by maintaining tension against the float, reeling in slack as necessary so it remains taut. If entangled, a diver should avoid turning and signal a buddy to assist. If severely entangled, the group surfaces, taking the diver and the line up together. It may be necessary to cute the line.

18. What concerns and considerations do you have while deep diving on a drift dive? How do you address them?
Your primary concerns involve safety stops and emergency air supply because you may not have a line for physical contact and you may be unable to suspend emergency breathing equipment. Practice making stops without visual references. Plan adequate reserve and consider a high capacity cylinder or pony bottle.

19. What is the primary challenge in underwater photography or videography on a drift dive?
The primary challenge is the difficulty or impossibility of stopping.

20. What are the challenges of attempting a search and recovery on a drift dive?
Searches while drift diving are complicated because you cannot easily control your speed or direction. This greatly limits the types of searches you can conduct with a reasonable expectation for success. It can be difficult to secure a lift bag in a current and difficult to control one as you bring it up.

PADI Adventure Dive Training Record

Adventure Dive: Drift Dive

Skills Overview

- Knowledge Review
- Briefing
- Suiting Up
- Predive Safety Check (BWRAF)
- Drift diving entry
- Drift diving descent
- Tour
- Drift diving ascent and safety stop
- Drift diving exit
- Debrief
- Log Dive - Complete Adventure Dive Training Record

Instructor Statement

"I verify that this student diver has satisfactorily completed the Knowledge Review and Performance Requirements (as described in PADI's Adventures in Diving Program Instructor Guide) for this PADI Adventure Dive. I am a renewed, Teaching status PADI Instructor for the current year."

Instructor Name: _____

Instructor Signature: _____

PADI #: _____Completion Date: _____
Day/Month/Year

Instructor Contact Information (Please Print)

Instructor Mailing Address: _____

City: _____State/Province:_____

Country: _____Zip/Postal Code: _____

Phone/Fax/email: _____

Student Diver Statement

"I verify that I have completed all of the Performance Requirements for this Adventure Dive. I realize that there is more to learn about drift diving and that completion of a PADI Drift Diver course is highly recommended. I also agree to abide by PADI Standard Safe Diving Practices."

Student Diver Signature: _____

Completion Date: _____
Day/Month/Year

PADI Specialty Training Record

Drift Diver

Instructor Statement:

"I verify that this student diver has satisfactorily completed all academic or any confined water training sessions as outlined in the PADI Specialty Course Instructor Guide for Drift Diver. I am a renewed, Teaching status PADI Instructor in this specialty."

Instructor Name: _____

PADI #:_____Instructor Signature: _____

Completion Date: _____

Day/Month/Year

Open Water Dives

Dive One

I verify that this student diver has satisfactorily completed Dive One as outlined in the PADI standardized guide for Drift Diver, including:

- Planning drift dives
- Effective entries, exits, ascents, descents, safety stop and tours for drift diving
- Maintaining group contact as appropriate while drift diving

I am a renewed, Teaching status PADI Instructor in this specialty.

Instructor Name: _____

PADI #: _____ Instructor Signature: _____

Completion Date: _____

Day/Month/Year

Dive Two

I verify that this student diver has satisfactorily completed Dive Two as outlined in the PADI standardized guide for Drift Diver including:

- Planning drift dives
- Effective entries, exits, ascents, descents, safety stop and tours for drift diving
- Maintaining group contact as appropriate while drift diving

I am a renewed, Teaching status PADI Instructor in this specialty.

Instructor Name: _____

PADI #: _____Instructor Signature: _____

Completion Completion Date: _____

Day/Month/Year

Student Diver Statement:

"I verify that I have completed all performance requirements for the PADI Drift Diver Specialty course. I am adequately prepared to dive in areas and under conditions similar to those in which I was trained. I agree to abide by PADI Standard Safe Diving Practices."

Student Diver Name: _____

Student Diver Signature: _____

Completion Date: _____
Day/Month/Year