

Specialty Course Instructor Guide Product No. 70232 (Rev. 4/07) Version 2.0





#### PADI Wreck Diver Specialty Course Instructor Guide

© PADI 2007

Portions of the Appendix of this guide may be reproduced by PADI Members for use in PADI-sanctioned training, but not for resale or personal gain. No other reproduction is allowed without the express written permission of PADI.

Published and distributed by PADI 30151 Tomas Rancho Santa Margarita, CA 92688-2125 USA

Printed in U.S.A. Product No. 70232 (04/07) Version 2.0



Table of Contents

### Introduction

How to Use this Guide	5
Course Philosophy and Goals	5
Course Flow Options	6
Program Options	7

### Section One: Course Standards

Standards at a Glance	8
Instructor Prerequisites	9
Student Diver Prerequisites	9
Supervision and Ratios	9
Site, Depths, and Hours	9
Materials and Equipment	
Assessment Standards	
Certification Requirements and Procedures	
Links to other Courses	

### Section Two: Knowledge Development

Conduc	t	
Knowle	dge Development Learning Objectives	
А.	Course Introduction	15
В.	The Appeal of Wreck Diving	
C.	Wreck Diving and the Law	
D.	Wreck Diving Hazards	
E.	Wreck Diving Techniques	
F.	Researching Underwater Wrecks	
G.	Mapping Shipwrecks	
H.	Wreck Penetration	

### Section Three: Open Water Dives

•	
Conduct	
Open Water Dives Performance Requirements	
Open Water Guidelines for Wreck Dives	
A. General Open Water Considerations	
B. Wreck Diver Open Water Dives	
1. Dive One	
2. Dive Two	
3. Dive Three	
4. Dive Four A	
5. Dive Four B	
). 21.010a 2	

### Appendix

Appendix Table of	Contents	. 49
-------------------	----------	------

# 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 Wreck 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 and/or surface training and details the open water dives. All required standards, learning objectives, activities, and performance requirements specific to the PADI Wreck 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**

Diving through 9 metres/30 feet, then 12 metres/40 feet, 15 metres/50 feet, and finally 18 metres/60 feet of silty azure blue salt water, you see her lying there like a wounded bird, one of her wings fractured and one of her engines gone. Did enemy fighters blow away her engine? Was its loss plunge her from the tropical sky more than 40 years ago?

She was a B-25, an Allied workhorse of World War II in the Pacific. You don't have to stretch your imagination too far to see her in her original state, ready to fight again. Her crumpled nose houses two machine guns - still stacked with bullets - now covered with hard coral, algae, and crimson red gorgonians. The cockpit escape hatch sits open, slid back as it had been on that fateful day in 1943. It was clear to see that the pilot had cleverly ditched his bomber in a narrow

shallow strait between Wongat Island and mainland New Guinea. Did the crew swim to the island? Did Japanese forces capture them? How old were these men? Twenty? Twenty-one?

You watch as parrotfish dine on a coral incrusted machine-gun barrel. Two angelfish casually glide through the bomb bay doors while translucent shrimp dance their way over the rusty face of the altimeter gauge.

Diving on wrecks appeals to most divers, though for many different reasons. You may find yourself attracted to the challenge of exploring the wreck, or a fascination with its historical nature. Underwater photographers love wrecks for their picture potential, while those interested in nature like the fact that wrecks quickly become artificial reefs. Wrecks are typically ships, but can include railroad cars, aircraft and automobiles. In these, you'll find wreck sites range from those open to novice to those only accessible by the most experienced technical divers.

Whether your first or your hundredth dive on a wreck, few moments in diving compare with descending on the past. Keep that thought, the philosophy of this course is to focus on *fun, safe wreck diving*. Thus, the *goal* of this course is to teach student divers a systematic, methodical approach to enjoying wreck diving. Student divers will develop the techniques involved in wreck diving within recreational limits and while avoiding disturbing delicate marine life.

The best way to learn wreck diving procedures and to apply them is by doing it. This *course philosophy* therefore, expands student diver knowledge about wreck diving law, hazards to avoid, how to research wrecks, wreck diving equipment, the basics of penetrating a wreck and how to interact responsibly with the aquatic life they'll see while wreck diving. Student divers will apply the knowledge they gain by reading the PADI *Wreck Diver Manual* and watching the companion video on at least four open water dives practicing and demonstrating the practical aspects of wreck diving.

### **Course Flow Options**



Course Flow Options provides a visual representation of how knowledge development and confined water and/or surface practice sessions support open water dives. When possible, it's preferable to have student divers complete and review Knowledge Reviews from the PADI *Wreck Diver Manual* before participating in



the open water dives. Knowledge Review - Part I is the same Knowledge Review that appears in the Wreck Diver 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 and/or surface practice sessions are not required for the PADI Wreck Diver course; however, you may choose to have practical sessions that allow student divers to practice skills such as securing, deploying and retrieving a penetration line, navigation patterns, and knot tying.

There are four 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 Wreck Adventure Dive and collect Knowledge Review – Part I (optional)	Review Knowledge Review – Part I and Part II (optional)
3	Confined Water Dive and/or Surface Practice Session (optional)	Confined Water Dive and/or Surface Practice Session (optional)	Confined Water Dive and/or Surface Practice Session (optional)
4	Open Water Dive One	Review Knowledge Review – Part II (optional)	Open Water Dive One
5	Open Water Dive Two	Open Water Dive Two	Open Water Dive Two
6	Open Water Dive Three	Open Water Dive Three	Open Water Dive Three
7	Open Water Dive Four A OR	Open Water Dive Four A OR	Open Water Dive Four A OR
	Open Water Dive Four B	Open Water Dive Four B	Open Water Dive Four B



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

## Standards at a Glance

Instructor Gruide Wreck Diver

Торіс	Course Standard	
<b>Minimum Instructor Rating</b>	PADI Wreck Diver Specialty Instructor	
Prerequisites	PADI Adventure Diver	
Minimum Age	15 years	
Ratios	Open Water 8:1 Instructor; 4:1 Certified Assistant Wreck Penetration: 2:1 Instructor	
Site, Depths, and Hours	Depth: 18 metres/60 feet recommended	
	Hours Recommended: 24	
	Minimum Open Water Dives: 4 dives over 2 days	
Materials and Equipment	Instructor: PADI Wreck Diver Specialty Course Instructor Guide Penetration line and reel	

### **Instructor Prerequisites**

To qualify to teach the PADI Wreck Diver course, an individual must be a Teaching status PADI Open Water Scuba Instructor or higher. **PADI Instructors may apply for the Wreck 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 Adventure Diver or have a qualifying certification from another training organization similar to that of a PADI Advanced Open Water Diver. Verify student diver prerequisite skills and provide remediation as necessary.
- 2. Be at least 15 years.

### Supervision and Ratios Open Water Dives

A Teaching status PADI Wreck Diver Specialty Instructor must be present and in control of all activities. On Dive One, student divers must be accompanied by either the Specialty Instructor or by a certified assistant. 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). The Specialty Instructor may *indirectly supervise* Dive Two, Three and Four, though it is recommended that a certified assistant accompany each buddy team. During wreck penetration dives, divers must be accompanied by the Specialty Instructor. 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), or 4 student divers per certified assistant (4:1). The ratio for wreck penetration is 2 student divers per instructor (2:1). These ratios may not be increased by adding certified assistants.

## Site, Depths, and Hours

#### Site

Choose sites with conditions and environments suitable for completing requirements. Special consideration should be given for wrecks that lie in deeper than 18 metres/60 feet and where there is moderate current by planning for reduced bottom time and rapid air use. It's preferable to conduct wreck penetration on a wreck surveyed on a previous dive. When possible, use shallow wrecks to allow divers more time to complete tasks and for penetration. Plan to visit different wreck sites, if possible, to give student divers experience in dealing with a variety of environmental conditions (incorporate environment friendly techniques throughout each dive) and logistical challenges. Practice skills, especially line and reel use, in confined water sessions first to better prepare divers to apply skills in open water later.

### Depths

18 metres/60 feet recommended without Deep Diver certification
30 metres/100 feet limit for Dive 1 (Wreck Adventure Dive)
40 metres/130 feet from the surface (vertical and horizontal distance included) and within the light zone for penetration dives. No out-of-air drills may be practiced in the overhead environment.

#### Hours

The PADI Wreck Diver course includes four open water dives conducted over at least two days. Dives that do not include wreck penetration may be conducted at night for divers who have completed the Night Adventure Dive or the first dive of the PADI Night Diver specialty course, or have qualifying night diving experience. The minimum number of recommended hours is 24.

### Materials and Equipment Instructor Materials and Equipment

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

#### Required

- PADI Wreck Diver Specialty Course Instructor Guide
- Specialty equipment needed for student divers to perform wreck and wreck penetration dives.
  - **Penetration line and reel** (e.g., a robust line that resists abrasion or cutting on sharp objects which is .6 centimeters/.25 inches thick for easy grasping).
  - **Safety equipment** (e.g., first aid kit, emergency oxygen, AED; flag and surface float; weighted line with contingency air supply at safety stop depth for deep dives; and descent or down line).

#### Recommended

- PADI *Wreck Diver Manual.* Use the student diver manual for detailed content explanation.
- PADI Wreck Diving video.
- Project AWARE *Responsible Wreck Diving Considerations* and Project AWARE *Ten Tips for Underwater Photographers* located at www.projectaware.org

- Project AWARE Respect Our Wrecks brochure
- As needed: backup wreck line and reel, extra lights, and navigational aids for divers.

#### **Student Diver Materials and Equipment**

#### Recommended

- PADI Wreck Diver Manual
- PADI Wreck Diving video
- Project AWARE *Responsible Wreck Diving Considerations* and Project AWARE *Ten Tips for Underwater Photographers* located at www.projectaware.org
- Project AWARE Respect Our Wrecks brochure
- Access to support equipment as necessary, including but not limited to: dive light, Nav-Finder<sup>™</sup> or slate, and line and reel.

### **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 Wreck Diver (see Appendix). To qualify for certification, by completion of the course, student divers must complete all performance requirements for Wreck Diver Open Water Dives One, Two, Three and Four.

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

### Links to Other Courses

The Wreck 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 Wreck Diver Open Water Dive One and Knowledge Review Part 1 may receive credit as an Adventure Dive toward the PADI Advanced Open Water Diver certification. They may also credit the specialty certification toward the PADI Master Scuba Diver rating.

## Section Two Knowledge Development Conduct

Diving on wrecks appeals to most divers, though for many different reasons. You may find yourself attracted to the challenge of exploring the wreck, or a fascination with its historical nature. Not all wrecks will be B-25s out of World War II, nor will they hold the same fame as the passenger liner the *Titanic*, infamous for its collision with an iceberg and dramatic sinking in 1912. However, whether your first or your hundredth dive on a wreck, few moments in diving compare with descending on the past. The philosophy of this course is to focus on *fun, safe wreck diving*. This means to introduce student divers to wreck diving law, to discuss the hazards to avoid while wreck diving, to talk about how to research wrecks, to establish the basics of wreck diving equipment, the fundamentals of penetrating a wreck, how to interact responsibly with the aquatic life they'll see while wreck diving and protect the wreck for future dives.

Student divers complete independent study of the course by reading the PADI *Wreck Diver Manual* and by watching the PADI *Wreck Diving* video. Work hand-in-hand with the student diver manual to address prescriptively student diver misconceptions or for clarification on certain points of 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 Wreck Diver course.

The result should be student divers with theoretical knowledge and pragmatic experience who can adapt what they've learned to future wreck diving opportunities. **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.



Kn*owledge Developme*ni

### **Learning Objectives**

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

Reasons why people wreck dive, the origin of shipwreck laws, important information about artifact removal and the implementation of laws that govern artifacts of historical interest.

- What are four common reasons why people wreck dive?
- What two primary considerations have led to the development of shipwreck laws?
- Why should only a trained archaeologist disturb artifacts on an historical wreck?
- What are the two main arguments given against recreational divers removing objects and artifacts from nonhistorical wrecks?
- What are the two main arguments given in favor of recreational divers removing, restoring and collecting objects and artifacts from nonhistorical wrecks?
- Why does recovering an object require special training beyond the scope of the Wreck Diver course?
- What is your responsibility with regard to laws that apply to the wrecks on which you dive?

Common problems and hazards of wreck diving and the planning, organization, procedures, and techniques for fun and safe wreck diving.

- What are five potential hazards common to wrecks, and how do you avoid them?
- What are five hazards of entering (penetrating) a wreck, and what causes these hazards?
- What are four aspects of a wreck to evaluate when diving on it?
- What are three ways to navigate on a wreck?
- Why may a compass be inaccurate on a wreck?
- What five dive planning and equipment considerations should be made for wreck dives deeper than 18 metres/60 feet?
- What are the general techniques for wreck diving in a current?
- What are two reasons why you should obtain a local orientation for an unfamiliar wreck?

## Instructor Gruide Wreck Diver

Researching the ship's past and mapping shipwrecks for planning future wreck dives and wreck penetration.

- What are three reasons for researching the history and condition of a wreck?
- What two sources provide quick, basic information about diving a popular wreck?
- What possible sources can you check when researching more in-depth, detailed wreck information?
- What are two benefits of mapping a wreck?
- What four tools can you use when mapping a wreck, and what is each used for?

Wreck penetration equipment, limits, limited-visibility diving techniques and wreck penetration emergency procedures.

- What four pieces of equipment should be used for a penetration dive, and what is each piece used for?
- What are the four penetration limits to observe when inside a wreck?
- What are the proper techniques for:
  - Entering a wreck?
  - Moving through a wreck?
  - Using a penetration line in a wreck?
- What are the proper responses and actions for:
  - Loss of visibility due to silting?
  - A lost or cut penetration line?
  - Light failure?
  - Air supply loss?

### Knowledge Development Teaching Outline

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

#### A. Course Introduction

1. Staff and student diver introductions

#### Nəte:

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

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

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

Review with student divers other skills they'll want as a PADI Wreck Diver. These opportunities, through additional specialty course training, may include, but are not limited to: PADI Enriched Air Diver, PADI Deep Diver, PADI Diver Propulsion Vehicle (DPV) Diver, PADI Digital Underwater Photographer, PADI Peak Performance Buoyancy Diver, PADI Dry Suit Diver, and DSAT TecRec.

- 2. Course goals -this course will help:
  - a. Develop your practical knowledge of wreck diving.
  - b. Increase your diving skills.
  - c. You plan, organize, and make wreck 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 and/or surface practice sessions.
  - b. Open water dives. There will be four open water dives.

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

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 Appeal of Wreck Diving

- What are four common reasons why people wreck dive?
  - People have different reasons for being interested in wreck diving, so people you dive with may have different motivations for diving on wrecks. You and your buddy may both enjoy the dive more if you understand common reasons why people dive on wrecks.
    - a. Curiosity Divers are fascinated by wrecks and want to know what is inside them. You may find yourself curious about what you'll find on a wreck, or about what made the wreck sink in the first place. Curiosity may prompt you to research the wreck to understand what they were as you explore what they've become.

b. History – Some divers engage in research or work with archaeologists and historians. Wrecks are tangible historical resources that you have direct access to; a strong interest in history may motivate you to wreck dive.

#### Note:

Remind student divers that artifact removal is just not done except in very specific circumstances (such as artifact documentation and historical archiving etc.) where authorities incorporate time consuming and very expensive controlled conditions that use extensive conservation techniques. Inform divers about the Project AWARE Responsible Wreck Diving Considerations found at www. projectaware.org. Divers are encouraged to preserve our maritime cultural heritage and protect the fragile artificial reef habitat and aquatic life around wrecks. The Considerations are part of the Respect Our Wrecks campaign that advocates a hands-off, takenothing-but-photos approach to wreck diving. Local laws and regulations that govern wreck diving will be addressed in more detail later in the course.

- c. Aquatic life Wrecks become man-made reefs that attract aquatic life. In some areas, wrecks may be the only dive sites with appreciable concentrations of life. Some divers are attracted to wrecks more by their role as a reef than as an artifact or challenge.
- d. Photography Wrecks make dramatic backgrounds for photos of divers and wildlife, and wrecks themselves are photogenic. This makes photography on wrecks interesting and rewarding. Photograph with care. Dive carefully as many aquatic creatures and wrecks are fragile. Improper techniques while taking or editing photos underwater can damage sensitive aquatic life and damage wrecks with the bump of a camera or cylinder, swipe of a fin or even the touch of a hand.

Describe popular local wrecks, best access and pertinent information about their background. If possible, give divers references to local wreck dives. For example, organizations such as the Artificial Reef Society of British Columbia, Canada (ARSBC) deliberately create artificial reefs to provide features for divers to explore, as well as substrates for marine life to thrive upon. Reference

www.artificialreef.bc.ca for more information.

Since the student divers have not yet learned about assessing a wreck and potential hazards, your descriptions should raise interest by emphasizing what a diver can expect to see and do, and by giving vivid historical backgrounds.

Refer student divers to Project AWARE's Ten Tips for Underwater Photographers located at www.projectaware.org for further tips on taking photos in marine environments.

#### C. Wreck Diving and the Law

#### What two primary considerations have led to the development of shipwreck laws?

- 1. Origin of shipwreck laws: two main sources
  - a. Salvage laws These laws determine who owns something lost in the sea. These items include wrecks and other craft such as sailboats, houseboats, railroad cars, automobiles, aircraft and military rafts. Salvage laws, developed before scuba diving, define when a lost object is still the original owner's, and when anyone can salvage it. In most countries, salvage law says its finders-keepers once owners have abandoned lost property, however:
    - 1. Different areas have different salvage laws.
    - 2. Many owners and insurance companies do not regard their ships as abandoned and still claim title.
    - 3. Laws, other than salvage laws, protect virtually all historical wrecks, and many other lost items.

Site to student divers local salvage laws. Where possible, site references (library and internet) for local salvage laws. For example, around the coast of the United Kingdom (UK) there are currently approximately 93 wreck sites designated as protected wrecks of one level or another. Reference www.mcga.gov.uk and www.english-heritage.org.uk for more information. There are three main pieces of legislation under which wreck sites have been protected in the UK.

- 1. Protection of Wrecks Act 1973: certain designated, charted, historic or dangerous sites may not be dived without a license.
- Protection of Military Remains Act 1986: military aircraft and designated ship (controlled sites), are considered war graves that can only be dived with a license. Other designated ships (protected sites), may be dived providing the divers do not enter, disturb or remove artifacts.
- Merchant Shipping Act 1995: all wrecks and cargoes are owned – each artifact removed must be reported to the Receiver of the Wreck.

Another example is the US where the Sunken Military Craft Act protects vessels, aircraft and space vessels, including foreign vessels in US waters from unauthorized disturbance while allowing divers to have non-intrusive access. Reference http://www.history.navy. mil/branches/org12-12.htm and http://www.projectaware.org/ americas/english/smca.asp for more information.

For information on wrecks in Australia, reference the National Shipwreck Database for Australia at http://eied.deh.gov.au/ nsd/public/welcome.cfm. For information on laws and heritage for wrecks in Australia, reference the Department of Environmental and Heritage Shipwreck at www.environment.gov.au/heritage/ shipwrecks/index.htm.

 b. Antiquity protection laws – These laws protect historical resources. After recreational diving began to grow in the 1950s and 1960s, divers discovered many wrecks. Often divers ignorantly or uncaringly destroyed wreck sites before study by archaeologists. Most countries have laws now to prevent divers from removing or even moving objects when visiting historical wrecks. Some of the rationales for these laws are:



- 1. The definition of historical varies regionally. As a rule of thumb, consider a wreck historical if it has been declared historical by law (the *Dartmouth*, for example), if it has known historical significance (the *Titanic*, for example), or if it is over approximately 100 years old (such as the remains of a Roman cargo ship), or if it is designated as a war grave.
- Why should only a trained archaeologist disturb artifacts on an historical wreck?
  - 2. A disturbed wreck site has less value to an archaeologist. Archaeologists learn a great deal from how objects lie in relation to each other on a wreck. Important information about the past is lost when an artifact and its resting place are disturbed improperly. The physical relationship between artifacts in a site reveals patterns of human use and behavior that no single artifact can. Removing artifacts and disturbing wrecks from their original context loses valuable information, information that is lost forever. Therefore, only a trained archaeologist should disturb a historically important wreck.
    - a. Many wrecks are not historically significant, especially recent ones. However, you should be sure you're not violating any laws or regulations before disturbing anything. If in doubt, leave everything as you find it.

Inform student divers that while it is not common to come across human bones while wreck diving, it does happen, particularly when making penetration dives on war wrecks. If you ever discover human bones on a wreck:

- Don't disturb them. In effect, you are visiting someone's final resting place, whether you intended to or not. Show the same respect you would when visiting a cemetery or any other final resting place.
- 2. If you think you're the first to discover remains on a particular wreck, report your find to the proper authorities. If it is an older historical wreck, the remains may have archaeological significance. If it is a more recent wreck, authorities may want to recover the bones for reburial elsewhere.

# Wreck Diver Instructor

- b. Even when divers don't disturb wrecks, storms, fishing nets, line and other destructive fishing practices slowly deteriorates wrecks. Divers aren't the only source of wreck damage.
- c. Dumping and litter may put nonhistorical objects amid historical objects. For example, a soda can lying on a Roman wreck isn't an historical artifact.
- 3. Historical objects and wrecks are cultural resources that should benefit the public. Most governments believe historical objects from a wreck belong in public museums rather than private collections.
- 4. Undisturbed wrecks will remain attractive to future generations of divers.
- 2. Controversy over removing artifacts and objects from nonhistorical wrecks
  - a. Two schools of thought challenge recreational divers collecting objects from wrecks that are not historically significant. This controversy also involves legal decisions as to what wrecks are not historically significant.

#### What are the two main arguments given against recreational divers removing objects and artifacts from nonhistorical wrecks?

- b. Those against removing objects from wrecks argue:
  - 1. An artifact removed from the water deteriorates rapidly if not given proper treatment. Artifact removal can therefore lead to total loss of the artifact.
  - 2. A wreck stripped bare is less interesting, therefore, artifact removal eventually reduces the number of interesting wrecks to dive.

#### What are the two main arguments given in favor of recreational divers removing, restoring and collecting objects and artifacts from nonhistorical wrecks?

- c. Those who believe removing objects from nonhistorical wrecks is acceptable, if done responsibly, argue:
  - 1. Many underwater environments rapidly destroy objects anyway; therefore, if an object removed and responsibly treated, will be saved from eventual loss, and if displayed properly, these artifacts will be seen by many nondivers who could never otherwise see them.



2. The desire to collect artifacts is a primary motivation for private individuals to look for and research wrecks. Without this motivation, many wrecks would remain undiscovered because neither the government nor museums have sufficient money to locate and research them.

## • Why does recovering an object require special training beyond the scope of the Wreck Diver course?

d. Regardless, recovering objects often requires special training in rigging and lift bag use, and in artifact preservation and documentation. Those interested in artifact removal should work with trained underwater archaeologists or other sources to learn and apply the techniques for artifact recovery and proper artifact treatment. To learn proper rigging and lift bag use, enroll in a PADI Search and Recovery course. You may have already learned basic lift bag use if you completed the elective Search and Recovery Dive in the PADI Adventures in Diving program.

#### Note:

Once again, remind student divers that artifact removal is just not done except in very specific circumstances (such as artifact documentation and historical archiving etc.) where authorities incorporate time consuming and very expensive controlled conditions that use extensive conservation techniques.

## • What is your responsibility with regard to laws that apply to the wrecks on which you dive?

3. Local laws and wreck diving – your responsibility as a wreck diver includes finding out what laws apply before you go diving, and obeying those laws while you dive.

Shipwrecks offer adventure and are often included among the best dive sites in the world. Divers must be responsible when exploring these submerged sites, looking after themselves, the environment and the cultural heritage. Describe and explain laws and regulations affecting diving on local wrecks. Refer student divers to references (library or the internet) for more detailed information. Some excellent references include www.projectaware.org, www. visit-fsm.org, www.scapaflow.co.uk, www.mcga.gov.uk, www. artificialreef.bc.ca, www.nationalgeographic.com, www.englishheritage.org/maritime and www.discoverychannel.co.uk.

#### **D. Wreck Diving Hazards**

#### What are five potential hazards common to wrecks, and how do you avoid them?

- 1. Potential wreck hazards. Some wrecks may have hazards unique to that wreck, but there are five potential hazards that are common to most.
  - a. Sharp objects Rusted metal objects, jagged steel plates, broken glass, splintering wood and rough or sharp coral encrustations pose potential injury sources. You avoid these by wearing exposure suits and protective gloves. It is also wise to keep tetanus immunizations current in the event of an accidental cut.
  - b. Entanglement Wrecks may have old line present on them. Because wrecks attract fish they are popular fishing sites, and you may find monofilament fishing line or nets on them. You avoid these by watching where you go. Look up as well as around as you progress to prevent swimming under entangling objects. Carry a sharp knife with a smooth and a serrated edge to handle entanglement too difficult to untangle by hand.

#### Note:

Inform student divers that many experienced wreck divers wear two or more cutting devices – a large, general-purpose knife or tool, and a smaller, very sharp backup, emergencies-only tool such as a z-knife or dive shears. For additional security, suggest to divers to wear cutting tools widely separated, such as one inside the calf and the other on the BCD, to help ensure reaching at least one if entangled. c. Aquatic life – A wreck quickly becomes an artificial reef that attracts aquatic life. Watch for the same creatures you would on a natural reef, such as those that can defensively sting or bite or are fragile and can be easily disturbed. Avoid these as you would on a natural reef: fine-tune your buoyancy and streamline your equipment to avoid disturbing or damaging fragile habitant, watch where you put your hands, feet and knees; wear protective clothing; and do not touch the aquatic life.

#### Note:

As time allows, detail aquatic life on wrecks. Explain to the student divers that wrecks can serve as important habitats for fish and other aquatic life because their substrate acts as an artificial reef for entire ecosystems. Invertebrates, such as mussels, sponges, scallops and sea fans, attach themselves to the hard surface of the wreck. Since these organisms often support higher levels of the food web, fish populations often congregate and propagate in the safe haven of the structure. The abundance of life and biodiversity found on wrecks can be similar to that of the world's most pristine coral reefs. To learn more about aquatic life, do not touch -take a photograph, and research the animal as part of your PADI Underwater Naturalist specialty course. The PADI Peak Performance Buoyancy specialty course helps divers fine-tune their buoyancy skills, helping to prevent disturbing underwater environments and silt-outs when penetrating wrecks.

- d. Unstable structure Many wrecks have unstable frames, ceilings, hatches and other structures. Avoid diving around wrecks with unstable structures. War wrecks may have munitions lying in unstable areas, or the munitions themselves may be unstable. Divers have lost their lives moving and disturbing unstable munitions do not touch, move or disturb munitions found underwater. Avoid structures that move in the current or surge, give easily when touched, or simply appear unstable.
- e. Surge pockets and suction The movement of surge through a wreck may cause periodic suction at restricted entranceways (hatches and holes in hulls, etc.). Watch for this type of water movement, even when diving on a wreck's exterior.

#### What are five hazards of entering (penetrating) a wreck, and what causes these hazards?

2. Cavern diving, cave diving and ice diving necessarily involve entering an overhead environment, whereas in wreck diving, penetrating the wreck is optional. You'll decide whether to explore the inside or to swim on the outside of a wreck for your final course dive. It may be a challenge you enjoy, but for some it may be something you do not particularly enjoy. In that case, don't do it. You can enjoy a lifetime of wreck diving without ever venturing inside – there's plenty to see outside. In the future, if you decide to give wreck penetration diving a go, it's a good idea to seek further experience and an orientation with a PADI Instructor before entering the wreck for the first time. There are five hazards specific to wreck penetration.

#### Nəte:

Remind student divers that entering a wreck or any overhead environment presents significant hazards not found in open water. By discussing the following information, it will be clear that penetrating a wreck safely (or any overhead environment) requires special equipment, training and procedures. Without these, divers should never enter an overhead environment. Even with the proper equipment, training and procedures, divers should realize that wreck penetrations raises stress and potential risk, which can reduce fun and enjoyment.

- a. Loss of direction Merely entering a wreck can cause disorientation. A wreck leaning on its side magnifies loss of direction. Collapsed passages and debris block logical avenues of travel and open others. It's very easy to lose your sense of direction inside a wreck.
- b. No direct access to surface Loss of air (or other problems) requires exiting before beginning ascent. An emergency swimming ascent or a buoyant emergency ascent are no longer options.
- c. Restricted passages Movement may be limited in restricted passages, making turning difficult. There is greater possibility of hitting sharp or abrasive objects. Avoid these types of passages completely.
- d. Falling objects Your movement can knock loose objects that can fall on you or in your way. If there is even a remote possibility of something falling from overhead, stay out of that area.

e. Silt – Most wrecks have a layer of silt or particulate matter spread over them – on the bottom, sides and ceilings. Disturbing this material with fins, hands, or equipment can cause dangerously reduced visibility in moments. Exhaled bubbles often cause silt and particulate matter to dislodge from wreck walls and ceilings.

#### Note:

Give Student divers a final reminder that proper equipment and procedures, and staying within appropriate limits, make it possible to enter wrecks without significant risk. However, never enter a wreck or other overhead environment without the proper training and equipment, and without following the proper procedures.

#### E. Wreck Diving Techniques

- What are four aspects of a wreck to evaluate when diving on it?
  - 1. When you dive on a wreck for the first time, it is a good idea to look the wreck over and get to know it. Four main aspects of a wreck's condition should be evaluated each time you visit.
    - a. Possible hazards Look for the hazards described previously, and any that may be unique to the wreck.
    - Points of interest Look for those parts of the wreck that stand out as the most interesting and unique. A ship's wheel, telegraph, anchor or bell may tell you something about the wreck. This is what gives the wreck its personality.
    - c. General condition The wreck's condition affects the way you explore it, areas to avoid and your safety - particularly if you plan a penetration dive. Is the wreck strong and intact or is it weak and likely to have walls or objects break and fall? Has it generally held its structure, or is it scattered over a wide area? What is it made of - wood or steel?
    - d. Entryways For reasons previously discussed, you may find it more enjoyable to remain outside a wreck. However, if you will be planning to enter on a future dive, look for large, unobstructed openings that let in a lot of light. You should never have to squeeze through an opening or tie back a hatch or door. The entry way should be large enough to swim through comfortably with all equipment in place. Avoid any openings with sharp edges; be sure there is no immediate blockage or hazard.

#### What are three ways to navigate on a wreck?

- 2. You'll find wreck navigation influenced by how familiar you are with the wreck, your dive objective and how much of the wreck you plan to explore. Depending on what you find when you evaluate the wreck there are three basic ways to navigate. Sometimes you may find it advantageous to use different techniques on different parts of the wreck, or to combine the techniques of all three at once.
  - a. Following the wreck's layout On a fairly intact wreck in clear water, you can often navigate by following the ship's hull or rail. This is one of the easiest ways to navigate on a wreck. Apply the natural navigational techniques learned in your Advanced Open Water Diver program.
  - b. Feature reference On a more broken-up wreck, and sometimes on intact wrecks in limited visibility, it is important to note unique features and their relative positions to help you know where you are. If necessary, note these on a slate as you start the dive, then refer to the notes for your return.
  - c. Base line A base line is used on a very scattered, broken-up wreck. It is a straight line through the wreckage used as a base for navigation, commonly through the wreck center.
    - In clear, currentless water, the base line may be as informal as the general direction the wreckage lies. In less clear water, you may use a compass heading. In poor visibility or with a current, you may lay out a rope as a base line.
    - 2. You use a base line by swimming along it, leaving it only short distances to explore the wreck. The base line forms a known general heading back to the boat anchor or exit that you constantly keep track of.

#### Why may a compass be inaccurate on a wreck?

3. Keep in mind that iron and steel objects may affect compass readings by attracting the magnetic needle away from north. Don't expect your compass to read as accurately as usual.

#### What five dive planning and equipment considerations should be made for wreck dives deeper than 18 metres/ 60 feet?

3. Many wrecks lie in water deeper than 18 metres/60 feet primarily because large ships cruise oceans and major lakes well away from shore to avoid striking reefs. If diving on a wreck dive deeper than 18 metres/60 feet:

- a. It's recommended that you be trained as a PADI Deep Diver. The PADI *Deep Diver* course provides hands-on experience with the techniques and equipment of deeper diving. It's also very useful to be certified as a PADI *Enriched Air Diver* to maximize your no stop dive time.
- b. Leave a high capacity cylinder or hang an extra cylinder at 5 metres/15 feet to ensure sufficient air for a safety stop or emergency decompression stop. Some recreational wreck divers choose high capacity cylinders (2.8 litre/100 cubic foot at 240 bar/3400 psi or larger) and reserve one-third of their air for emergency use only. Be sure to have any other equipment necessary for a deep dive in the local environment, and that you can return to the line for your ascent and safety stop.
- c. Take the effect of narcosis into account when planning the dive; keep your objectives simple, avoid task loading and give yourself ample time.
- d. Plan for reduced bottom time caused by short no decompression limits and rapid air use. Plan a computer-assisted multilevel dive that begins by descending to the deepest point followed by gradually working your way upward in levels as you explore.
- e. Become trained as a PADI Enriched Air Diver. Using EANx with an EANx computer can further increase how much time you get to explore by crediting you both for a multilevel profile and enriched air use.

## • What are the general techniques for wreck diving in a current?

- 4. Just as you commonly come across wrecks in deeper depths, you also commonly find them in areas with current. Moderate currents are common around many wrecks, calling for special techniques.
  - a. The dive begins when the dive boat anchors on the wreck or attaches to a permanent mooring; divers use lines to keep from being carried away (trailing float line and swim line) and descend the anchor or mooring line. At the end of the dive, return to the anchor line and ascend along it. Constant contact with the anchor line when not on the wreck keeps divers from being carried away from the dive boat, so be sure you know where the line is at all times. Remember: a wreck often provides a haven or shelter from currents.

# Wreck Diver Instructor

#### Note:

Caution student divers to watch where they put their hands as permanent mooring lines are generally encrusted with aquatic growth. Suggest wearing gloves for protection.

b. Continue to explore the wreck on the lee side, where the wreck shelters you from the current. You may find it easier to pull yourself along by hand rather than swim. Wear gloves and be cautious where you grab things.

#### Note:

Explain to student divers the techniques used in the local area for wreck diving in a current. Remind divers that devices used to gain attention at the surface should be a standard piece of equipment for every diver, regardless of certification level. 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, include a visual signaling device like a signal mirror or surface marker buoy (safety sausage) in your equipment.

#### What are two reasons why you should obtain a local orientation for an unfamiliar wreck?

- Wreck diving varies from region to region and from wreck to wreck. Whenever possible, get a local orientation when visiting an unfamiliar wreck.
  - a. Optimum techniques may differ locally from the ones you've used. A local orientation provides a good way to learn the appropriate techniques.
  - b. All wrecks have their unique points of interest, potential hazards, and regulations or community practices that apply. A local orientation helps you know about these in advance.

#### F. Researching Underwater Wrecks

- What are three reasons for researching the history and condition of a wreck?
  - 1. For many divers, wreck diving encompasses much more than visiting the remains of a ship. It includes visiting the ship's past through research.

Researching a wreck's history benefits you in three basic ways.

- a. Researching the wreck's history may explain the wreck's location and condition.
- b. Research reveals or confirms a wreck's identity, which plays an important role in determining whether the wreck has historical/archaeological significance, and whether it may have some unusual hazard to avoid, such as munitions.
- c. Research helps you uncover unique points of interest, the suitability of the wreck as a dive site, and potential hazards.
- What two sources provide quick, basic information about diving a popular wreck?
  - 2. Sources for basic, easy-to-get information about a popular wreck in a local area include:
    - a. Dive stores and dive boats can usually give a few facts about popular wrecks in their area, as well as general conditions and what to watch for while diving on a specific wreck.
    - b. Dive magazines, guidebooks and the internet can be excellent sources for articles and web pages about popular wrecks. These tend to be more detailed and have more background information than what a dive store or dive boat can tell you.
- What possible sources can you check when researching more in-depth, detailed wreck information?
  - 3. Some divers want to know more than a local dive store or boat can tell them, that a newer wreck may have little known about it, or that local lore may be inaccurate. In this case, a longer time and effort commitment will be required. Although the internet can get you started, for in-depth wreck information you are likely to end up at sources of records that may not be online.

These include:

- a. Libraries Look up local papers from the time the wreck sank.
- b. Museums Write or visit war museums or maritime museums for specific information.
- c. Archives Write or visit archives of insurance, lighthouses, harbors or national history for specific information.
- d. Historical/archaeological groups Often know the history of regional events and wrecks in surprising detail.
- e. Maritime societies Usually maintain records of members and their ships.

- f. Maritime insurance companies Keep records on every ship, past or present, floating or sunk, that they insure.
- g. Universities Archeology or history departments have information and can offer research advice.

Inform student divers of any other local resources for researching wrecks. Mention to divers that most institutions, as the ones mentioned, operate on tight budgets and that they may be required to cover the cost of photocopying, duplicating microfilm, etc. Be prepared to do the research; most organizations, although very interested in working with you, do not have financial resources to do this work for you.

#### **G.** Mapping Shipwrecks

#### What are two benefits of mapping a wreck?

- 1. There are two primary reasons to map a wreck:
  - a. To record the general layout of potential hazards and points of interest for future dive planning.
  - b. To assist in planning penetration dives. A wreck map points out possible entry areas and helps you judge possible routes within the wreck.

#### What four tools can you use when mapping a wreck, and what is each used for?

- 2. Divers have come up with dozens of methods for mapping wrecks from archaeological methods to sketching from memory. Something in between suffices. Four tools used for mapping wrecks include:
  - a. Large slate used for drawing a map. As you sketch, try to draw everything to scale.
  - b. Compass used to determine the relative angle between different wreck features. Beware of possible compass deviation around steel or iron.
  - c. Marked rope or measuring tape used when distance accuracy (more precise than kick cycles or body measurement techniques) is desired.
  - d. Navigational aids (Nav-Finder, slates with grids, etc.) used to assess bearing and distances more accurately. These aids are also used for general navigation on the wreck.

Recommend to student divers that they complete the PADI Underwater Navigator course and consult the PADI Underwater Navigator Manual and Underwater Navigation video for more information about navigation, mapping and the use of navigational aids such as the Nav-Finder.

#### **H. Wreck Penetration**

#### Note:

Remind student divers that there are many hazards related to penetrating a wreck. Because of those hazards, divers are generally encouraged to remain on the outside of wrecks. If, however, you desire to enter a wreck, you must do it properly or you face unacceptable risk. One of the most common causes of fatal dive accidents is entering overhead environments without the proper equipment and without applying the proper techniques. Wreck penetration should: 1) only be done in a wreck that is stable and secure, 2) be restricted to the light zone, 3) be done only when environmental conditions are excellent, and 4) be done only when all the appropriate equipment and procedures the particular environment calls for can be applied. The following discussion covers wreck penetration equipment, techniques and limits suitable for recreational divers. More involved wreck penetration diving requires training in technical, research or commercial diving and is beyond the scope of this course. Do not exceed the limits of your training.

## • What four pieces of equipment should be used for a penetration dive, and what is each piece used for?

- 1. Specific equipment is required for all penetration dives. This equipment, as well as special training, is necessary to offset the potential hazards of being inside a wreck safely. Under no circumstances should you try to perform a penetration dive without the necessary equipment.
  - Dive lights Even though you will remain in the light zone of the wreck, the ambient light dims as you move away from the entry. Therefore, a light source is necessary during penetration. You should have at least two dive lights, a primary and a backup.

1. Carry your backup dive lights so that they are out of the way and don't dangle, yet remain accessible with one hand. This makes it possible to switch lights while using the other hand for maintaining buddy contact or penetration line contact.

#### Note:

Ensure student divers understand light zone- the area from which you can still see the natural light at the entrance. Discuss and show divers appropriate lights available in the local market. Reinforce the fact that many wreck divers carry no fewer than three dive lights during penetration dives. If you have three lights, the chances are one in 320, and with four, chances are only one in about 6,450 that you'll have all four lights fail on the same dive within 25 dives.

- b. Penetration line and reel The penetration line and the visual reference that the light zone provides help you avoid being lost or disoriented inside the wreck. Do not make a penetration dive without a line. The line must be stored on a reel that can be used to easily deploy and retrieve the line while moving through the wreck. Inspect the line for wear before every use.
  - 1. Line Wrecks frequently have sharp or abrasive surfaces than can sever your line, so use a strong, durable line made from a nonbio-degradable material.
    - a. Standard line A braided nylon line (generally #36 line) is more like a string than rope, so it tangles and jams reels if not handled with care. Place it properly so it doesn't cause entanglement or is cut by abrasion.
    - b. Beginner's line Line .6 centimetres/.25 inches thick or thicker, made of a nonbiodegradable material such as nylon, stored on a large reel. The beginner's line is very durable and less prone to tangling due to its thickness. However, the reel is bulky and awkward and requires two-handed use most of the time. Good choice for training and inexperienced wreck divers making very limited penetrations.
  - Reel A standard reel with standard line is preferred because it only requires one hand (except when reeling the line back up). Most reels clip to your BCD, and lock so they don't unreel when you're not using them.

Show student divers different line and reel types available in the local market. Also, have a look at accessory clips for attaching to BCDs and accessory equipment directly. Make available for student divers various brands of clips (brass, plastic and stainless steel) and have divers try sliding gate clips. Discuss pros and cons of clipping accessory equipment to BCD D rings versus placing the clip directly onto accessories.

- c. Slate Sketch a wreck map on your slate for reference during the penetration. You can make an interior map with notes to aid planning future penetration dives, and as a secondary reference to help find your way out if necessary. Slates are also handy for communicating with your buddy.
- d. H-valve, Y-valve or pony bottle Although they're not considered mandatory within recreational wreck penetration limits, you'll find that local divers consider redundant valves or air supplies standard equipment. Both H- and Y-valves and pony bottles add a safety margin for the overhead environment because, in the event of an air supply problem, it's easier to exit a wreck using your own regulator than sharing air with your buddy's alternate.
  - 1. H- and Y-valves are special cylinder valves that allow you to attach two separate regulators. If one were to fail (and freeflow), you or your buddy would close the portion of the valve supplying that regulator, and you would end the dive using the other.
  - 2. A pony bottle is a totally independent air source The primary drawback (compared to the H- or Y-valve) is that it's bulkier and not as streamlined.

#### Note:

Ask student divers to refer to the side bar "Optional Penetration Equipment Configurations" in their PADI Wreck Diver Manual for ideas to set up their equipment for penetration dives. As time allows, have student divers review each other's equipment set up and if practical, provide time in confined water for divers to practice accessing and using their equipment (line, reel, dive lights, two buckle weight belts, head lights, canister HID lights, foldable snorkels and snorkel quick release clips, H- and Y-valves, pony bottles, and single cylinder TecRec configurations.

#### What are the four penetration limits to observe when inside a wreck?

2. The overhead environment poses four limits beyond the normal open water constraints of depth, air supply and no decompression limits.

#### Note:

Remind student divers that limits coupled with equipment and training keep them within reasonably manageable risk limits. Acknowledge that tec divers and other divers with considerably more equipment and training have more liberal limits in penetrating a wreck, but these don't apply until their level of equipment and training is reached.

- a. Edge of light zone You should never penetrate a wreck past the point where you can see the natural light of the entrance. For this reason, you do not make penetration dives at night or in water so deep and murky that there is little or no natural light visible from inside the wreck.
- b. Linear distance of 40 metres/130 feet -- The maximum total distance you enter a wreck should not exceed 40 metres/130 feet from the surface, even if you're still in the light zone. Example: If the wreck is 30 metres/100 feet deep, the absolute maximum penetration is 10 metres/30 feet. At 40 metres/130 feet, you should not enter a wreck at all. By marking your penetration line in 1.5-metre/5-foot or 3-metre/10-foot intervals, you can track the distance of your penetration to keep from exceeding 40 metres/130 feet linear to the surface.
- c. One-third of air supply Wreck penetration uses the rule of thirds for air planning. Use one-third of your air to penetrate (which starts when you descend), one-third to exit and keep one-third in reserve. Saving two-thirds of your air for exiting gives you more of the most important factor you need to handle a problem inside a wreck time. The Rule of Thirds gives you about twice as much time to get out of a wreck as it took to get in.

#### Note:

Explain to student divers that on many wrecks, if other limits permit, the one-third reserve may be used on the outside of the wreck, and the dive ended with the usual 34 bar/500 psi or other appropriate reserve.

- d. Space too narrow for two divers to pass together Don't go past any area that is so narrow that you and your buddy couldn't move through it together while sharing air with a conventional alternate air source.
- 3. You shouldn't find basic wreck penetration techniques difficult, but they do take some practice. This is why you learn them initially outside the wreck.
  - a. Tying off the penetration line
    - 1. Penetration begins by tying a line to a sturdy piece of wreckage outside the entry point.
    - The tie-off point must not be movable, weak or have sharp edges. It must provide a firm attachment that will not cut the line. Where possible, thread the line through a hole and then tie the end to the line itself.
      - a. In general, use a knot that will release quickly, even after being pulled hard, such as a figure eight knot.
      - b. Divers using standard reels usually tie a permanent loop in the line end big enough to pass the reel through. The line is passed around an object, and then the reel is pulled through the loop, securing the line without tying any knots.
    - 3. Immediately inside the wreck, wrap the line around an object to create a secondary anchor point. This is in case the outside tie off is accidentally cut or comes free. You want to make this secondary tie and all subsequent ties in a way that's quick and secure, yet comes loose easily when you exit. With practice, you'll be able to do this quickly with using one hand.
    - 4. While moving inside the wreck, the line should occasionally be looped around some elevated, nonsharp object (like a round pipe) as necessary, to prevent it from being tangled.

#### • What are the proper techniques for entering a wreck?

- b. Entering the wreck
  - 1. An opening through a door or hatch that can close is not a suitable entry location. Enter a wreck only where the opening is large, void of closing covers or doors and sharp edges.
  - 2. The diver with the reel goes first.
  - 3. Sweep your light in a circle as you enter. Check all areas in front, above, below and to the side of you.
  - 4. Check where your bubbles hit the ceiling. If they cause a severe rain of silt that could limit visibility, it may be appropriate to abort the penetration.

5. Wrap the line around nonsharp objects from time to time as necessary to route the line where your buddies can follow it, to avoid slack, and to keep the line from blocking passage.

## What are the proper techniques for moving through a wreck?

- c. Moving through the wreck requires the use of proper technique to prevent stirring up silt, accidental cuts or stings, and damage to the penetration line.
  - 1. Maintain neutral buoyancy to keep off the bottom inside the wreck.
  - 2. When swimming, stay level or with your legs slightly above your head. Use shorter, gentler sculling kicks that don't kick up much silt. Never allow your kicks to stir up silt from the bottom.
  - 3. When practical, gently pull yourself by hand through the wreck. However, to prevent cuts or contact with aquatic life, look closely before you grab anything.
  - 4. Do not use the penetration line to pull yourself along. This can cut or fray the line, or may pull the reel out the hands of the reel diver.
  - 5. All activity should be slow, smooth and deliberate.

## • What are the proper techniques for using a penetration line in a wreck?

- d. Using the penetration line Proper techniques with the penetration line ensure that you will maintain contact with the line and that neither you nor your buddies will become entangled.
  - 1. The maximum is three divers penetrating the same area and/or on the same line.
  - 2. The reel diver goes first with his buddy(ies) following single file.
  - 3. Swim near the line in a position where you can easily reach it with one hand, but do not actually hold it (except for turns or during emergencies – discussed in a moment). Know where the line is at all times. You should be able to reach out and grasp it at any time. Preferably, swim with the line just below chest level and to one side, wreck configuration allowing.
  - 4. To turn around on the line, grasp with hand closest to line. Turn toward line, holding it away to prevent entanglement. Grasp with other hand to complete turn.



5. Upon reaching penetration, air supply, light zone or another limit, divers turn around. The last diver becomes the leader, following the penetration line to exit. The reel diver is last, taking up the line. Note: You will have somewhat reduced visibility during exit because kicking up some silt on the way in is inevitable.

## • What are the proper responses and actions for loss of visibility due to silting?

- 4. As long as you observe the penetration limits you've learned, you should have adequate time and resources to handle wreck penetration emergencies. During the wreck penetration you may need to handle problems associated with silt-out, a lost or cut penetration line, light failure, or loss of air supply. It's always important to stop, breathe, think and then act, just as you would handling any problem.
  - a. Silt-out is caused by kicking up the bottom, or by your bubbles dislodging particles of sediment on the sides and ceiling of the wreck. Because a silt-out makes seeing (with or without a light) impossible, you need to use the penetration line to avoid disorientation. In case silt begins to destroy visibility:
    - 1. Immediately stop, reach out and loosely grasp the penetration line. Give the silt a moment to settle.
    - If visibility does not improve quickly (depends on coarseness of sediment), you will have to abort the dive. Make a normal turn, but do not release the line. In silt-out conditions, never release the penetration line. Instead, make a loose "O" around the line with your hand.
    - 3. Exit the wreck, using the line as a guide. Do not pull on the line.
    - 4. If you're the reel diver and you can't see whether all divers make line contact and exit, lock the reel, leave it, and follow the line out.
- What are the proper responses and actions for a lost or cut penetration line?
  - b. Lost or cut line If you lose contact with it, or your line is accidently cut:
    - 1. Stop and allow any silt to settle.
    - 2. Find the natural light at the entrance. If you must turn to do this, use great care not to stir up silt. You may need to cover your light and let your eyes adjust to the dark.
    - 3. Swim to the exit. If you have been keeping track of your progress on a slate, use it to help you retrace your path.

4. If you're the reel diver and you can't see whether all divers make line contact and exit, lock the reel, leave it, and follow the line out.

#### Note:

Caution student divers about trapped air left by previous divers, and trapped fuel, oil, or other chemicals in the wreck. Divers should avoid these pockets even those thought to contain air. Over time oxygen dissolves out of trapped air, so if breathed the diver could lose consciousness.

## What are the proper responses and actions for light failure?

- c. Light failure If your light fails:
  - 1. Stop and make loose contact with the line.
  - 2. Using your free hand, locate and turn on your backup light.
  - 3. Signal your buddies and abort the penetration. Under no circumstances should you continue the penetration on your backup light. Use the backup to allow a safe exit. This is another reason why experienced wreck divers carry three or more lights - they can continue the penetration after a single failure.
  - 4. If your backup light doesn't work or has been lost, signal to borrow your buddy's. Abort the penetration.

## What are the proper responses and actions for air supply loss?

- d. Air supply loss This should be unlikely if you follow the rule of thirds. If it does occur:
  - 1. If you're using an H or Y valve system shut down the free flowing regulator and exit the wreck using the other. If you didn't lose much air, make a normal ascent.
  - 2. If you're using a pony bottle switch to it and exit the wreck. You may not have enough air for a normal ascent, so make contact and secure you're buddy's alternate airsource and ascend together.
  - 3. In either case, don't cause a silt-out while rushing to make the switch and shut down the free flowing regulator move slowly and deliberately.
  - 4. If you're not using an H or Y valve or a pony bottle secure your buddy's alternate second stage. Calmly, deliberately but immediately, exit the wreck.

5. If you're the reel diver, whether you're the donor or the receiver, in an air supply emergency leave the line and reel in place and exit.

#### Note:

The techniques for exiting the wreck using a buddy's alternate airsource depend upon the wreck and the alternate air source hose length. You should be able to swim side-by-side or over-under all the way out. If necessary, with a standard 1 metre (39 inch), the donor can go through a tighter area first with the receiver behind, gently holding onto the donor's cylinder to prevent separation. When using the TecRec configuration with the two metre/seven foot hose, the protocol is for the receiver to go first with the donor immediately behind. Inform divers they will practice using their buddy's alternate airsource (either in confined water or by doing a dry-run on the surface) before they attempt a wreck penetration dive.

5. Inside a wreck, the "thumbs up" signal to surface takes on more authority than in open water. In the overhead environment, the "surface" signal from any diver turns the penetration immediately. Because there are potentially more hazards in an overhead environment, the rule is that you do not use any time or air questioning or modifying the command to exit. When the thumb goes up, the divers go out, period.

## Section Three Open Water Dives Conduct

There are no required confined water and/or surface practice sessions for the PADI Wreck Diver Specialty Diver course, however, developing student diver abilities in conditions that doesn't add complexity to learning new skills such as basic wreck mapping and navigation techniques before progressing to more challenging conditions, is sound instruction. Some of the underwater skills, such as knot tying, line and reel use, signaling, and navigation, are much easier to learn if you have student divers practice them in a confined water session or on the surface first. You may add confined water and/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 navigation techniques, wreck penetration procedures, and reel and line use before commencing wreck dives.

On the first dive, student divers mainly use their navigation skills to locate the wreck, practice using their diving equipment, communicating underwater, and maintaining neutral buoyancy. On the second dive, student divers swim along outside the wreck identifying and avoiding potential hazards, map the wreck marking points of interest, and survey the wreck for a future penetration dive. On the third dive, student divers practice the deployment and retrieval of a penetration line on the outside of the wreck. On the fourth dive, student divers plan and perform an actual wreck penetration dive or they organize and conduct a wreck dive outside the wreck identifying and avoiding potential hazards with their dive buddy. Divers who finish exercises with sufficient air remaining may continue to dive for pleasure and experience, at your discretion. 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.**  Instructor Gruide Wreck Diver

Open Water Dives

### **Performance Requirements**

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

Wreck Diver Open Water Dive One

- Swim on the outside of a wreck, maintaining proper buoyancy control, and identifying and avoiding potential hazards, under the direct supervision of a Teaching Status PADI Instructor.
- Navigate on a wreck so that the ascent point can be located without surfacing, with the assistance of the instructor.
- Maintain neutral buoyancy and body position that avoids the bottom.

Wreck Diver Open Water Dive Two

- Swim along the outside of a wreck, in a buddy team, identifying and avoiding potential hazards.
- With a buddy, map a wreck (or portion of a wreck), determining approximate size and marking points of interest.
- Survey a wreck for a penetration dive and evaluate possible entrances.
- Navigate on a wreck, returning to the ascent point without surfacing.

Wreck Diver Open Water Dive Three

- Demonstrate the deployment and retrieval of a penetration line, for practice, on the outside of a wreck, while working in buddy teams.
- Swim along the deployed penetration line so as to maintain contact with the line without kicking up silt and holding on to a dive light.
- Navigate on a wreck so as to locate the ascent point without surfacing.

Wreck Diver Open Water Dive Four A

- Plan and perform an actual wreck penetration under the direct supervision of a Teaching status PADI Instructor:
  - Determining air supply and penetration limits.
  - Swimming without causing excessive silt disturbance.
  - Maintaining contact with the line.
  - Using a dive light while following a penetration line.
- Navigate on a wreck so as to locate the ascent point without surfacing.

Wreck Diver Open Water Dive Four B

- Organize and conduct a wreck dive with a buddy, but with only minimal instructor assistance.
- Swim on the outside of a wreck, identifying and avoiding possible hazards.
- Navigate on a wreck so as to locate the ascent point without surfacing.



#### A. General Open Water Considerations

- 1. Involve student divers in dive-planning activities. Have student divers prepare training buoys and reference lines, penetration lines and emergencydecompression breathing equipment as appropriate.
- 2. Conduct a thorough briefing. The better the briefing, the more smoothly the wreck dive will proceed. Assign buddy teams according to ability (weak with strong). Penetration dives may be psychologically stressful to some individuals. Pay close attention to stress levels and behavior. Never force a student diver to make a penetration into a wreck; complete training with Wreck Dive Four B instead.
- 3. The use of qualified assistants is highly recommended. Assistants can help keep track of buddy teams and watch student divers waiting to complete an exercise with the instructor. An assistant at the surface can help with check in, check out procedures and be prepared to help in an emergency. It's useful to have an assistant outside the wreck supervising student divers waiting their turn to penetrate the wreck if you elect to make the penetration with all student divers in one dive. Note that all groups should be able to complete their dive within the rule of thirds. It may be feasible to have groups of two descending to the wreck in shifts, supervised by assistants.
- 4. It is recommended that when feasible, Wreck Dives Two and Three be conducted on the same wreck. This allows student divers to become familiar with the wreck on Wreck Dive Two (by mapping it) prior to the simulated penetration exercises in Wreck Dive Three. If you will be conducting Wreck Dive Four A, it's recommended that Wreck Dives Two and/or Three be conducted on the same wreck also so student divers can become familiar with the wreck prior to actual penetration exercises.
- 5. Penetration line use requires practice. Use confined water and/or surface practice sessions to practice using the penetration line. Ensure that all students have the opportunity to practice securing, deploying, following and retrieving the line.
- 6. Conduct penetration dives so that you (the instructor) never violate the rule of thirds, even when completing multiple penetrations with student diver groups. Doing so increases your own risk, and depletes emergency air you may need to assist a student diver. It also serves as a bad role model. High-capacity cylinders or double cylinders may help, but do not exceed your no decompression limits.



#### **B. Wreck Diver Open Water Dives**



- Swim on the outside of a wreck, maintaining proper buoyancy control, and identifying and avoiding potential hazards, under the direct supervision of a Teaching Status PADI Instructor.
- Navigate on a wreck so that the ascent point can be located without surfacing, with the assistance of the instructor.
- Maintain neutral buoyancy and body position that avoids the bottom.
  - a. Briefing
    - 1. Dive sequence review Dive One tasks
  - b. Predive procedures
  - c. Dive One Tasks
    - 1. Navigation: The instructor leads, using navigation techniques appropriate for the wreck chosen. Buddy teams follow, using the same navigation techniques. During this exercise, provide student divers with an overview of the exterior of the wreck.
    - Student divers control their buoyancy and remain neutrally buoyant as appropriate. Student divers avoid silting problems through buoyancy and fin control and watch for wreck and aquatic life hazards.
    - 3. With student divers following and observing, instructor navigates on the wreck so class reaches the ascent point without surfacing.
  - d. Post-dive procedures
  - e. Debriefing
    - Student divers discuss the wreck condition and features, possible structure and/or aquatic life, hazards observed, and the navigation of the wreck. Guide discussions to address what worked, what didn't work, and how things may be done differently the next time. Discuss any possible hazards in detail.
  - f. Log dive (instructor signs log)



- Swim along the outside of a wreck, in a buddy team, identifying and avoiding potential hazards.
- With a buddy, map a wreck (or portion of a wreck), determining approximate size and marking points of interest.
- Survey a wreck for a penetration dive and evaluate possible entrances.
- Navigate on a wreck, returning to the ascent point without surfacing.
  - a. Briefing
    - 1. Dive sequence review Dive Two tasks
  - b. Predive procedures
  - c. Dive Two Tasks
    - 1. Student divers explore the wreck site, using navigation techniques appropriate for the site.
    - 2. Mapping: Each buddy team maps the wreck (or a portion of the wreck), noting points of interest, potential hazards and potential penetration entries.
    - 3. Assessment of limited penetration: Each team examines potential penetration entries for size and safety. Student divers should be prepared to discuss later whether there are appropriate openings on the wreck for limited penetration. If possible and appropriate openings are found, have student divers use underwater lights to examine the immediate interior of the openings, looking for obstructions, sharp edges and other possible hazards. Student divers are not to enter the wreck.
  - d. Post-dive procedures
  - e. Debriefing
    - Student divers discuss and review their mapping of the wreck. Discuss with student divers possible penetration locations and the suitability of penetrating the wreck. Guide discussions to address what worked, what didn't work, and how navigating the wreck may be done differently the next time.
  - f. Log dive (instructor signs log)



Instructor Gruide Wreck Diver

- Demonstrate the deployment and retrieval of a penetration line, for practice, on the outside of a wreck, while working in buddy teams.
- Swim along the deployed penetration line so as to maintain contact with the line without kicking up silt and holding on to a dive light.
- Navigate on a wreck so as to locate the ascent point without surfacing.
  - a. Briefing
    - 1. Dive sequence review Dive Three tasks
  - b. Predive procedures
  - c. Dive Three Tasks
    - 1. Practice penetration on outside of wreck. Student divers practice securing, properly deploying and retrieving the penetration line.
    - Student divers swim along the penetration line while holding on to a dive light and moving in such a manner as to not kick up silt.
  - d. Post-dive procedures
  - e. Debriefing
    - Student divers discuss how they dealt with the simulated penetration on the outside of the wreck. Ask student divers to comment on swimming along the penetration line while holding a dive light. Guide discussions to address what worked, what didn't work, and how they may conduct their simulated penetration dive differently the next time.
  - f. Log dive (instructor signs log)

## Wreck Diver Instructor Gruide

## Dive Four A

- Plan and perform an actual wreck penetration under the direct supervision of a Teaching status PADI Instructor:
  - Determining air supply and penetration limits.
  - Swimming without causing excessive silt disturbance.
  - Maintaining contact with the line.
  - Using a dive light while following a penetration line.
- Navigate on a wreck so as to locate the ascent point without surfacing.
  - a. Briefing
    - 1. Dive sequence review Dive Four A tasks
  - b. Predive procedures
  - c. Dive Four A Tasks
    - 1. Student divers make an actual wreck penetration with instructor's supervision.
    - 2. Student divers use correct penetration techniques. During the penetration exercise, student divers:
      - a. use the penetration line as a guide.
      - b. swim in such a manner as to avoid kicking up silt.
    - 3. Return to ascent point without surfacing.
  - d. Post-dive procedures
  - e. Debriefing
    - 1. Student divers discuss techniques used and how they felt making an actual wreck penetration. Ask student divers to comment on the use of the penetration line as a guide and how they avoided kicking up silt. Guide discussions to address what worked, what didn't work, and how they may conduct their penetration dive differently the next time.
  - f. Log dive (instructor signs log)



Instructor Gruide Wreck Diver

- Organize and conduct a wreck dive with a buddy, but with only minimal instructor assistance.
- Swim on the outside of a wreck, identifying and avoiding possible hazards.
- Navigate on a wreck so as to locate the ascent point without surfacing.
  - a. Briefing
    - 1. Dive sequence review Dive Four B tasks
  - b. Predive procedures
  - c. Dive Four B Tasks
    - 1. Instructor accompanies student divers on their planned dive.
    - 2. Student divers navigate on the wreck so class reaches the ascent point without surfacing.
  - d. Post-dive procedures
  - e. Debriefing
    - Student divers discuss the wreck condition and features, possible structure and/or aquatic life, hazards observed, and the navigation of the wreck. Guide discussions to address what worked, what didn't work, and how things may be done differently the next time. Discuss any possible hazards in detail and review how the planning of the dive may be done differently next time.
  - f. Log dive (instructor signs log)

Appendix

### **Table of Contents**

Wreck Diver Specialty Knowledge Review – Part I Answer Key	. 50
Wreck Diver Specialty Knowledge Review – Part II Answer Key	. 52
PADI Adventure Dive Training Record	.54
PADI Specialty Training Record – Wreck Diver	.55

Wreck Diver Instructor

## Wreck Diver Knowledge Review Part I Answer Key

#### Note:

Instructor Gruide Wreck Diver

> To assess knowledge you may review the Knowledge Review from the student diver's manual with the diver, ideally prior to participating in skill practice. Prescriptively teach answers to questions student divers may have missed or have answered incorrectly or incompletely. Ensure student divers understand what they have missed.

- 1. List two reasons why artifact recovery is discouraged when wreck diving:
  - 1. Wrecks that are stripped are much less interesting.
  - 2. Historical wrecks must be left undisturbed for research purposes.
- 2. Explain why divers must pay close attention to local laws before planning a wreck dive. A permit may be required, and it may be illegal to either dive on the wreck or remove artifacts.
- 3. Describe how to avoid the following potential hazards common to wrecks: Sharp objects:

Wear protective coverings and use good buoyancy control.

**Entanglement:** 

Watch where you go, avoid swimming into or under potential entanglement. Carry a knife.

- 4. List five dive planning and equipment considerations for wreck diving deeper than 18 metres/ 60 feet.
  - 1. PADI Deep Diver training
  - 2. Extra tank at 5 metres/15 feet
  - 3. Nitrogen narcosis
  - 4. Short time limits
  - 5. Become trained as a PADI Enriched Air Diver
- 5. List two reasons for obtaining a local orientation to an unfamiliar wreck before diving on it.
  - 1. Dive techniques vary on wrecks
  - 2. Unique hazards or points of interest
- 6. Explain why special training and equipment are necessary for shipwreck penetration. In your explanation, include the five hazards of entering a wreck.

Special training is necessary because it is extremely hazardous. You can lose direction, there's no direct access to surface, restricted passages, falling objects and silt.

- 7. List three aspects of a wreck that should be evaluated when diving on it.
  - 1. Possible hazards
  - 2. Points of interest
  - 3. General condition
- 8. Describe the three methods of navigating on a shipwreck.
  - 1. Following the wreck's layout
  - 2. Feature reference
  - 3. Using a base line

### **Adventure Dive: Wreck Diver**

### **Skills Overview**

- Knowledge Review
- Briefing
- Suiting Up
- Predive Safety Check (BWRAF)
- Entry
- Descent
- Navigating the Wreck
- Returning to Ascent Point
- Ascent and Safety Stop
- Exit
- Debrief
- Log Dive Complete Adventure Dive Training Record

## Wreck Diver Knowledge Review Part II Answer Key

#### Note:

Instructor Gruide Wreck Diver

> To assess knowledge you may review the Knowledge Review from the student diver's manual with the diver, ideally prior to participating in skill practice. Prescriptively teach answers to questions student divers may have missed or have answered incorrectly or incompletely. Ensure student divers understand what they have missed.

- 9. Describe the general techniques for wreck diving in a current. Anchor the dive vessel by the wreck or to the mooring line, secure trail and swim line, enter water and pull yourself along swim line, descend hand over hand down to wreck, stay close to the lee side or bottom of wreck, and ascend up anchor/mooring line at end of dive.
- 10. List three reasons for researching the history and condition of a wreck.
  - 1. To determine the wreck's historical significance.
  - 2. To determine the wreck's identity.
  - 3. To determine points of interest and potential hazards before the dive.
- List two sources that provide quick, basic information about diving on a popular wreck.
   *Dive stores/boats*
  - 2. Dive magazines/guide books
- 12. List two benefits of mapping a shipwreck.
  - 1. To note points of interest and potential hazards.
  - 2. To assist in planning penetration dives.
- 13. List four pieces of equipment for wreck penetration and state what each is used for.
  - 1. Light and backup light provides additional light as the ambient light dims when moving away from the entry point.
  - 2. Penetration line and reel provides a visual/tactile reference to the exit point.
  - 3. Slate mapping the wreck, write notes on for future reference, communication.
  - 4. Pony bottle provides an alternative air source and an extra margin of safety.

Wreck Diver Instructor

- 14. List the four limits for wreck penetration:
  - 1. The edge of the light zone.
  - 2. Linear distance of 40 metres/130 feet.
  - 3. One-third of your air supply (use Rule of Thirds).
  - 4. Space too narrow for two divers to pass together sharing an alternate air source.
- 15. Describe the proper techniques for entering, moving through and using a penetration line in a wreck.

Tie off penetration line outside the wreck. The diver with the reel enters first, stopping, looking up, and around for hazards before proceeding. Secure line to a second point. Maintain neutral buoyancy with gentle kicks and/or by holding on to nonsharp parts of the wreck and pulling yourself around. Maintain light tension on the line and wrap it around nonsharp objects as necessary to route it. Follow the line single file, keeping the line at chest level and off to one side. Don't use line to pull yourself along. Reel diver is last to start exiting and removes line along the way.

16. Describe the proper responses and actions for each of the following during wreck penetration:

Loss of visibility due to silting:

Stop, maintain or make contact with penetration line by making a loose "O" around it with your hand. Follow the penetration line to the exit point without pulling on the line.

A lost or cut penetration line:

Stop, allow the silt to settle, cover flashlight, look for natural light. Head slowly toward the natural light.

Light failure:

Stop, maintain loose contact with the penetration line, turn back up light on, abort dive and head for the exit.

Air supply loss:

Immediately switch to pony bottle or buddy's alternate air source, abort dive and head for exit point. Make a normal accent, if possible.

## PADI Adventure Dive Training Record Adventure Dive: Wreck Diver

### **Skills Overview**

• Knowledge Review

Instructor Gruide Wreck Diver

- Briefing
- Suiting Up
- Predive Safety Check (BWRAF)
- Entry
- Descent

- Navigating the Wreck
- Returning to Ascent Point
- Ascent Safety Stop
- Exit
- Debrief
- Log Dive Complete 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: Dav/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 wreck diving and that completion of a PADI Wreck Diver course is highly recommended. I also agree to abide by PADI Standard Safe Diving Practices."

Student Diver Signature	Date:
0	Dav/Month/Year

## Wreck Diver Instructor Gruide

## PADI Specialty Training Record Wreck Diver

#### **Instructor Statement**

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

Instructor Name:	PADI #:	
Instructor Signature: _	Completion Date	e: 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 Wreck Diver, including:

- Navigate wreck
- Control buoyancy and avoid stirring bottom silt
- Return to ascent point
- Perform safety stop for 3 minutes at 5 metres/15 feet

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

Instructor Name:	PADI #:
Instructor Signature:	Completion Date:
0	Day/Month/Year

#### **Dive Two**

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

- Explore wreck
- Map wreck
- Penetration assessment locating potential entry points
- Return to ascent point
- Perform safety stop for 3 minutes at 5 metres/15 feetI am a renewed, Teaching status PADI Instructor in this specialty.

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

Instructor Name:	PADI #:

Instructor Signature: \_\_\_\_



#### **Dive Three**

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

- Deploy penetration line on outside of wreck
- Swim along penetration line with light without kicking up silt
- Retrieve penetration line from outside of wreck
- Perform safety stop for 3 minutes at 5 metres/15 feet

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

Instructor Name:	PADI #:	
Instructor Signature: _	Completion Dat	e: Dav/Month/Year

### **Dive Four A or B**

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

Four A

- Find penetration entry point
- Deploy penetration line into wreck
- Penetrate wreck to safe limits
- Retrieve penetration line and exit wreck
- Navigate to ascent point
- Perform safety stop for 3 minutes at 5 metres/15 feet

Four B

- Have students organize and conduct their own wreck dive
- Navigate to ascent point
- Perform safety stop for 3 minutes at 5 metres/15 feet

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

Instructor Name:	PADI #:	
Instructor Signature: _	Completion Date:	 Dav/Month/Year

#### **Student Diver Statement**

"I verify that I have completed all performance requirements for this Wreck Diver specialty. 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:	D	Date:
0 -		Day/Month/Year