21. Search and Recovery Diver

21.1 Introduction

This specialty is designed to acquaint the diver with the special skills and techniques necessary to successfully plan, execute and evaluate a search and recovery dive.

21.2 Who May Teach

1. An active SDI Instructor that has been certified to teach this specialty.

21.3 Student to Instructor Ratio

Academic:

1. Unlimited, so long as adequate facilities, supplies and time are provided to ensure comprehensive and complete training of subject matter.

Confined Water (swimming pool-like conditions):

1. N/A.

Open Water (ocean, lake, quarry, spring, river, or estuary):

- 1. A maximum of 8 students per instructor; it is the instructor's discretion to reduce this number as conditions dictate.
- 2. The instructor has the option of adding 2 more students with the assistance of an active Assistant Instructor or Divemaster.
- 3. The total number of students an instructor may have in the water is 12 with the assistance of 2 active Assistant Instructors or Divemasters.

21.4 Student Prerequisites

- 1. SDI Open Water Scuba Diver or equivalent.
- 2. Minimum age 18, 15 with parental consent.

21.5 Course Structure and Duration

Open Water Execution:

1. Two dives are required with complete briefs and debriefs by the instructor.

2. The Dive plan must include surface interval, maximum no decompression time, etc. to be figured out and logged.

Course Structure:

1. SDI allows instructors to structure courses according to the number of students participating and their skill level.

21.6 Administrative Requirements

Administrative Tasks:

- 1. Collect the course fees from all the students.
- 2. Ensure that the students have the required equipment.
- 3. Communicate the schedule to the students.
- 4. Have the students complete the:
 - a. SDI Liability Release and Express Assumption of Risk Form
 - b. SDI Medical Statement Form.

Upon successful completion of the course the instructor must:

1. Issue the appropriate SDI certification by submitting the *SDI Diver Registration* Form to SDI Headquarters or registering the students online through member's area of the SDI website.

21.7 Required Equipment

- 1. Basic open water scuba equipment as described in section three of this manual.
- 2. All lines, lift bags, reels, etc must be provided by the instructor.

21.8 Approved Outline

Instructors may use any additional text or materials that they feel help present these topics.

The following topics must be covered.

- 1. Navigation:
 - a. Compass use
 - b. Estimating distances:
 - i. Kicking techniques.
- 2. Natural navigation.

- 3. Limited Visibility Diving:
 - a. Factors affecting visibility.
 - b. Hazards of limited visibility:
 - i. Salt water.
 - ii. Fresh water.
 - c. Techniques of diving.
- 4. Search Techniques:
 - a. Shotgun:
 - i. When to use.
 - ii. How to control.
 - b. Circular search:
 - i. When to use.
 - ii. How to control.
 - iii. Advantages.
 - c. Grid search:
 - i. When to use.
 - ii. How to control.
 - iii. Advantages.
 - d. Current (Overlap) search:
 - i. When to use.
 - ii. How to control.
 - iii. Advantages.
 - e. Signals for search diving:
 - i. Hand signals.
 - f. Line signals.
- 5. Salvage Techniques:
 - a. Depth considerations.
 - b. Lift bags.
 - c. Lifting drums.
 - d. Necessary qualities of lifting devices.
 - e. Knots and rigging.

- f. Fill techniques.
- g. Mud/silt suction considerations.

21.9 Required Skill Performance and Graduation Requirements

Students are required to successfully complete the following:

- 1. Open Water Dive I:
 - a. Compass review.
 - b. Search techniques.
 - c. Lifting techniques.
 - d. Have students practice and perform a few different search patterns.
 - e. Recover an object from depth.
 - f. Log dive.
- 2. Open Water Dive 2:
 - a. Simulated scuba emergency.
 - b. Minimum of 2 searching techniques
 - c. Salvage and recovery of an object with a water weight of between 11 and 33 kg/25 and 75 lbs.
 - d. Log dive.