

**SDI Instructor Manual  
Part 3 – Standards and  
Outlines for Specialties**

**Date: 11/13/2007**

**Revision: 8.0**

**SDI Instructor Manual - Part**

**3v8 Page 32 of 103**

## **11. SDI – Diver Propulsion Vehicle (DPV) Specialty**

### **11.1 Introduction**

This course is designed to train divers in the use of a DPV and familiarizes them with the skills, knowledge, planning, organization, procedures, techniques, problems and hazards of using a DPV in non-overhead environments.

### **11.2 Who May Teach**

Who may teach this course?

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

### **11.3 Student – Instructor Ratio**

Academic:

1. Unlimited, so long as adequate facility, supplies and time are provided to insure comprehensive and complete training.

Confined Water (Swimming pool-like conditions):

1. N/A.

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

1. A maximum of two (2) students per Instructor. However, it is the instructor's discretion to reduce this number as conditions dictate.

### **11.4 Student Pre-Requisites**

1. Open Water Diver.
2. Be a minimum age of eighteen (18).
3. Be a minimum age of fifteen (15) with parental consent.

### **11.5 Course Structure And Duration**

Open Water execution:

1. Two (2) dives are required with complete briefs and debriefs by the Instructor.
2. Dive plan must include Surface interval, Max no-deco 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.

**SDI Instructor Manual  
Part 3 – Standards and  
Outlines for Specialties**

**Date: 11/13/2007**

**Revision: 8.0**

**SDI Instructor Manual - Part**

**3v8 Page 32 of 103**

## **11. SDI – Diver Propulsion Vehicle (DPV) Specialty**

### **11.1 Introduction**

This course is designed to train divers in the use of a DPV and familiarizes them with the skills, knowledge, planning, organization, procedures, techniques, problems and hazards of using a DPV in non-overhead environments.

### **11.2 Who May Teach**

Who may teach this course?

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

### **11.3 Student – Instructor Ratio**

Academic:

1. Unlimited, so long as adequate facility, supplies and time are provided to insure comprehensive and complete training.

Confined Water (Swimming pool-like conditions):

1. N/A.

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

1. A maximum of two (2) students per Instructor. However, it is the instructor's discretion to reduce this number as conditions dictate.

### **11.4 Student Pre-Requisites**

1. Open Water Diver.

2. Be a minimum age of eighteen (18).

3. Be a minimum age of fifteen (15) with parental consent.

### **11.5 Course Structure And Duration**

Open Water execution:

1. Two (2) dives are required with complete briefs and debriefs by the Instructor.

2. Dive plan must include Surface interval, Max no-deco 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.

## **SDI Instructor Manual**

### **Part 3 – Standards and**

### **Outlines for Specialties**

**Date: 11/13/2007**

**Revision: 8.0**

**SDI Instructor Manual - Part**

**3v8 Page 33 of 103**

### **11.6 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 Liability Release and Medical history forms.

5. The Instructor must review the Liability Release and Medical Forms before starting on the course.

Upon successful completion of this specialty the instructor must issue the SDI Diver Propulsion Vehicle Diver specialty experience card. The Instructor must:

1. Issue the following card:

A. Use either a SDI diver registration form or a Pre-paid Diver certification form to file for the specialty certification card if a SDI certification card is requested.

2. Award card.

### **11.7 Required Equipment**

1. Basic SDI Open Water SCUBA equipment as prescribed earlier in this manual.

2. Diver Propulsion Vehicle.

### **11.8 Approved Outline**

Instructors may use any additional text or materials that they feel help present these topics. The following topics must be covered:

1. Physics

A. Pressure review.

B. Review of air embolisms and decompression theory.

C. Review of ascents/descents with regards to pressure changes.

D. Review dive tables and computers.

E. DPV consideration.

2. Advantages of using a DPV

A. Features to consider when choosing a DPV.

B. Types of DPVs.

C. Accessories.

3. Overview of DPVs used for this course

A. Maximizing battery life.

B. Battery safety tips.

C. Maintenance – Storing and transporting.

D. Dive Planning and Safety Considerations.

E. Air consumption and decompression.

F. Battery endurance.

G. Determining the “turnaround time” point.

- 4. Safety considerations
  - A. Vehicle Failure.
  - B. Depth and descent/ascent considerations.

## **SDI Instructor Manual**

### **Part 3 – Standards and**

### **Outlines for Specialties**

**Date: 11/13/2007**

**Revision: 8.0**

**SDI Instructor Manual - Part**

**3v8 Page 34 of 103**

- C. Avoiding propeller entanglements and obstructions.
- 5. Using the buddy system.
- 6. DPV use
  - A. Pre-dive preparation.
  - B. Water entries.
  - C. DPV use at the surface.
  - D. Riding tandem.
  - E. Orientation and descent procedures.
  - F. Ascent and Exit procedures.
  - G. Post dive Maintenance.

### ***11.9 Required Skill Performance And Graduation Requirements***

Students are required to successfully complete the following:

- 1. Open Water – Dive one (1)
  - A. Dive plan.
  - B. Proper entry.
  - C. Surface use of DPV.
  - D. Descent with DPV.
  - E. Monitor DPV and Air consumption.
  - F. Ascent and exit.
  - G. Log dive.
- 2. Open Water – Dive two (2)
  - A. Dive plan.
  - B. Entry and Descent.
  - C. “Underwater Tour”.
  - D. Ascent and Exit.
  - E. Log dive.