

5. Full Face Mask Ops

5.1 Introduction

The ERDI Full Face Mask Ops Component is designed to develop the knowledge and skills necessary for full face mask operations in emergency response diving.

5.2 Student Prerequisites

1. Minimum age 18.
2. Certified as ERD I or equivalent.
3. Current CPR, first aid and oxygen administration certification.

5.3 Qualifications of Graduates

Upon successful completion of the ERD Full Face Mask Ops Component, students will have developed the knowledge and skills necessary to plan and execute full face mask diving operations.

5.4 Who May Teach

An active ERDI Instructor that has been certified to teach this ops component.

5.5 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. *ERDI Liability Release and Express Assumption of Risk Form.*
 - b. *ERDI Medical Statement Form.*

Upon successful completion of the course the instructor must:

1. issue the appropriate ERDI certification by submitting the ERDI Diver Registration form to ERDI Headquarters or registering the students online through member's area of the ERDI website.

5.6 Training Materials

Required Materials:

1. *ERDI Full Face Mask* Student Manual or eLearning.
2. *ERDI Full face Mask* Knowledge Quest or eLearning.
3. *ERDI Full Face Mask* Instructor Guide.

5.7 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. A maximum of 6 students per ERDI Instructor.

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

1. A maximum of 6 students per ERDI Instructor.
2. It is the instructor's discretion to reduce this number as conditions dictate.

5.8 Course Structure and Duration

Course Structure:

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

Duration:

1. Classroom and briefing: Approximately 3 hours.
2. Open water dives (required): Two dives are required with complete briefs and debriefs by the instructor. Dive plan must include surface interval, max no-decompression time, etc. to be figured out and logged.

5.9 Required Equipment

1. Same equipment required for ERD I Diver.
2. Full face mask with communication capabilities.

5.10 Approved Outline

Encapsulation

Environmental Issues:

1. Nuclear, Biological, Chemical:
 - a. Medical concerns:
 - i. Water sample.
 - ii. Team health and safety.
 - iii. Sources.
2. Dangers to Diver, Scene, Team Members, Family.
3. Suit Permeation.
4. Protecting Potable Water Supply.
5. Post Dive Observations.
6. Decontamination Procedures.

Full Face Mask:

1. Purpose
 - a. Diver safety.
 - b. Communications.
2. Advantages:
 - a. Increased diver safety:
 - i. Contaminated water.
 - ii. Winter diving.
 - b. Communications.
 - c. Corrective lenses.
3. Disadvantages:
 - a. Increased air consumption.
 - b. Buoyancy.
 - c. Bulky.
4. Types:
 - a. Appropriate/Inappropriate.
 - b. Scuba Quick connect/disconnect.

- c. Surface supplied.
- 5. Techniques/Procedures:
 - a. Donning:
 - i. In water vs. out of water.
 - ii. Strap adjustment.
 - iii. Skirt seal.
 - b. Diving with a full-face mask:
 - i. Equalization.
 - ii. Buoyancy.
 - iii. Removal and replacement underwater.
 - iv. Alternate air source use:
 - 1. Spare mask.
 - v. Surface options:
 - 1. Surface valve.
 - vi. Decontamination procedures prior to doffing.
 - vii. Positive pressure in a full-face mask.
 - viii. Causes of free flow.
 - ix. Mask removal underwater.
 - x. Free flow while inverted/while diving/ use and how to resolve.
 - xi. Low Pressure Inflator when disconnected.
- 6. Underwater Communications:
 - a. Types of communication equipment:
 - i. Push to talk (PTT).
 - ii. Voice activated (VOX).
 - iii. Hardwire/Tether.
 - iv. Battery failure.
- 7. User/Field Maintenance and Care:
 - a. Authorized servicing/preventive maintenance.
 - b. After use.

5.11 *Confined Water Outline*

Students are required to successfully complete the following skills:

Scuba Skills:

1. Instructor evaluation of basic scuba skills including redundant air source use.

Full Face Mask Skills:

1. Equipment set up.
2. Proper donning and adjustment.
3. Entry techniques.
4. Proper weighting.
5. Equalization.
6. Clearing partially flooded mask.
7. Remove and replace mask underwater.
8. Remove mask and utilization of redundant air source.

5.12 *Required Skill Performance and Graduation Requirements*

Students are required to successfully complete the following:

1. Open Water Dive 1:
 - a. Dive plan.
 - b. Equipment set up.
 - c. Proper donning and adjustment.
 - d. On the surface switching from open to close.
 - e. Communications on surface and underwater (hand signals, push to talk, com unit, line signals, talking etc).
 - f. Proper weighting.
 - g. Equalization techniques.
 - h. Establish buoyancy and demonstrate buoyancy control.
 - i. Clearing a partially flooded mask.
 - j. Ascent and exit.
 - k. Log dive.
2. Open Water Dive 2:

ERDI Standards and Procedures
Part 3: OPS Component Standards

- a. Dive plan.
- b. Remove and replace full face mask underwater.
- c. Successfully switch to a back up mask.
- d. Remove mask and utilization of alternate air source.
- e. Free flowing full-face mask.
- f. Underwater tour.
- g. Ascent and exit.
- h. Log dive.