



## **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. CPR 1st or equivalent
4. CPROx or equivalent

### **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**

#### **Required forms**

1. Have the students complete the:
  - a. *ERDI Liability Release and Express Assumption of Risk Form*
  - b. *ERDI Medical History Form*
2. Communicate the schedule of the course to the students
3. Ensure that the students have the required equipment

#### **Required Manuals**

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

#### **Certification**

1. Upon successful completion of an ERDI course the instructor must 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 Student to Instructor Ratio**

#### **Academic**



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

### **Confined Water**

1. A maximum of 6 students per ERDI Instructor

### **Open Water**

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

## **5.7 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

## **5.8 Required Equipment**

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

## **5.9 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 ffm
    - 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

## **5.10 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

## **5.11 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
  - 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 ffm
- f. Underwater tour
- g. Ascent and exit
- h. Log dive