Surface Supplied Air
Course Objectives

Surface-Supplied Air is Dive Rescue International’s renowned three-day (24 hour) training program for certified divers and surface support personnel.

Participants will learn the basics of tethered umbilical diving for public safety dive applications. Topics include operation and maintenance of surface-supplied air systems, search patterns, and emergency procedures. Successful completion of this program requires class participation, passing a final written exam and completing in-water skills.

Key training topics and the associated objectives include:

SURFACE-SUPPLIED AIR SYSTEMS

- Advantages of using a Surface-Supplied Air System
- Characteristics and components of a Dive Control System
- Describe redundant air supply vs. unlimited air supply
- Discuss topics such as: accurate depth and time control, communications, efficiency, and safety

EVOLUTION OF SURFACE-SUPPLIED AIR

- History of Surface-Supplied Air Systems from before SCUBA to modern day
- Air Supply System and Communications System used with Surface-Supplied Air
- Characteristics of the Umbilical
- Kirby Morgan and M & J Blocks
- Interspiro DP1 System

PERSONNEL

- Personnel needed when utilizing a Surface-Supplied Air System
- Dressing the Diver
- Responsibilities of Tender, Air Panel Operator, and Diver
- Attributes of Operational Planning and Pre-Dive Checklist

EMERGENCY PROCEDURES

- Communication Failure
- Loss of Primary Air
- Equipment Malfunction including Free Flow Valve Malfunctions on Superlite 27B or 17A/B Helmet
- Out of Air Emergencies
- Flooded Superlite Helmets

BE SURE TO BRING

All students must bring: US Coast Guard approved PFD with knife and whistle, adequate clothing and protection from the environment and pen and paper for note-taking and sketching. Diving students must provide their own equipment: Scuba regulator: recently serviced and environmentally protected with alternate air source (i.e.: octopus, Air II, etc.), timing device, depth and submersible pressure gauges, BC with oral/power inflator, two tanks with current Hydro & VIP, mask, snorkel, fins, weight belt and two cutting tools (knife, wire cutters, or trauma shears.)
### Surface Supplied Air Schedule

**DAY 1**
- 8:00 - 8:30: Registration, Introductions and Course Review
- 8:30 – 12:00: Classroom Lecture
- 12:00 - 1:00: Lunch Break
- 1:00 - 5:00: Pool Skills and Exercises

**DAY 2**
- 8:00 - 12:00: Field Exercises
- 12:00 - 1:00: Lunch
- 1:00 - 5:00: Field Exercises and Scenarios

**DAY 3**
- 8:00 - 12:00: Field Exercises and Scenarios
- 12:00 - 1:00: Lunch Break
- 1:00 - 5:00: Review, Final Exam, and Closing

### PREREQUISITES
All students must be a member of a public safety agency and at least 18 years of age. Students must read and complete a RSTC medical statement prior to attending class. Any diver answering yes to any contraindication must have the form signed by a physician. Diving students must have proof of open water certification.

This program is designed for personnel who are physically fit. Participants are encouraged to participate after successfully completing the IADRS Watermanship Test or testing to a fitness level of 13 MET (Metabolic Equivalents) or greater. Participants with aerobic fitness questions or concerns should consult their physician prior to in-water training. Participants who have poor aerobic fitness may attend this program as surface support personnel with the approval of the instructor.