

# CAVERN DIVER COURSE

## PURPOSE:

To teach the safe exploration of the cavern environment within specified limits. This course is an extension of recreational diving designed for the use of single tanks. The course develops and establishes minimum skills, knowledge, dive planning abilities, problem solving procedures and the basic abilities to safely cavern dive. Unlike the other NACD courses, prospective students may be encouraged to enroll in the Cavern Diver Course. The NACD feels that this course is comparable to other open water specialty classes and will have a significant safety benefit for all active scuba divers who enroll, even if they do not continue to dive in the overhead environment.

## COURSE DURATION

This course may be taught over a period of two days.

## PRE-REQUISITES:

- Open water certification.
- Minimum age 16, with signed parental consent. Provisional status certification for younger divers with written approval of NACD training director only.

**NOTE: Nitrox certification is recommended.**

## LECTURES: Minimum of four (4) hours to cover listed topics.

- Definition and purpose of safe cavern diving.
- Review of medical aspects of diving.
- Review of dive tables.
- Use and misuse of dive computers.
- The cavern environment.
- Buoyancy control and body/attitude positioning.
- Cavern diving techniques.
- Communications.
- Accident Analysis.
- Psychological aspects of cavern diving (stress, attitude, awareness, reaction to stress in self/others, building tolerance, etc.).
- Equipment and equipment configurations.
- Lines and line technique.
- Diver planning and air management.
- History and philosophy of NACD.
- Emergency prevention and procedures.

## LAND DRILLS:

- Proper use of guidelines and reels.
- Techniques in following guide lines.
- Touch contact procedures.

## 6. OPEN WATER OR POOL SKILLS:

- Use of guidelines.
- Following line with blacked out mask or loss of visibility.
  - Repeat sharing air, first with vision and then with eyes closed.
  - Touch contact.

- III. Following the line without a mask.
- Use of reel.
- Use each of the following techniques for sufficient distance to satisfactorily demonstrate proficiency to the instructor: modified flutter kick, modified frog kick, and modified dolphin. Each technique to be combined with correct body attitude and buoyancy control.

#### **CAVERN DIVES:**

- Minimum four cavern dives (five recommended), to be conducted in two or more cavern zones.
- All dives to include:
  - Pre dive briefing-
  - Bubble check
  - "S" Drill
  - Good dive team skills
  - Post dive critique
- Exercises to include: touch contact, use of reel and guideline, air sharing, and equipment matching.
- Proper finning and propulsion skills.
- Proper use of BC and body positioning/ buoyancy.
- Communications with both light and hand signals.
- Familiarization with cavern zone.
- A recommended three (3) minute safety stop on all dives.

#### **SKILLS/EXERCISES** – to be performed in the overhead (cavern) environment:

- Use of guide reel and line
- Touch contact drill while following guideline
- Share air while exiting cavern zone

**NOTE: No removal of life support equipment shall be permitted within the overhead environment.**

#### **LIMITS:**

- Natural sunlight.
- Maximum 200 feet penetration distance.
- No decompression diving.
- No restrictions.
- Maximum depth - 100 feet.
- Minimum visibility - 30 feet.
- Minimum starting psi - 2000 psi or 58 cubic feet.
- 1/3 air rule on singles, 1/6 on doubles.

#### **MINIMUM EQUIPMENT:**

- Mask, low volume type recommended.
- Power fins-straps taped together, if applicable.
- 72 cubic foot single cylinder. Recommended: Single cylinder with dual valve orifice.
- Single hose regulator with an octopus as the alternate air source and submersible pressure gauge.
- Exposure suit, suitable for diving location.
- Buoyancy compensator with auto inflator, CO2 devices rendered inoperative.

- Submersible dive tables or computer must be used
- Knife, preferable small and sharp, or line cutter acceptable to instructor.
- Slate and pencil.
- Watch or bottom timer and depth gauge. A dive computer may be used in place of these.
- Weight belt or other instructor approved weights.
- Battery powered dive lights, at least two per diver. These lights should have a suitable burn time for the dive being planned.
- Minimum of one safety reel per diver.
- One primary reel per team.

**CERTIFICATION REQUIREMENTS:**

- Perform all skills listed.
- Perform the minimum number of specified dives.
- Maintain an appropriate awareness of safety procedures and the protection of the cavern zone. A cavalier attitude may constitute grounds for denying certification, regardless of proficiency.
- Demonstrate knowledge of pertinent information by passing a written Cavern examination with a minimum score of 80%.
- Submit all appropriate records.
- Payment of appropriate fees.
- Recommendation for certification by instructor.

**NOTE: Certification may be denied if it is determined that the course was not conducted according to established NACD course standards.**