

2.3 CDS Basics Orientation

Unless otherwise noted, all requirements listed under *2.1 Standards Applying to all NSS-CDS Training Programs* apply to the course.

2.3.1 Purpose

To enroll in NSS-CDS Apprentice Cave Diver training, students must:

- A. Have prior training in sidemount or backmounted doubles, or be able to document equivalent experience.
- B. Demonstrate adequate mastery of buoyancy control, trim and propulsion for cave diving. This includes modified flutter kick, frog kick, pulling and helicopter turns.

The CDS Basics orientation provides students the opportunity to gain this training while working within the framework of the NSS-CDS Training Program. These standards define minimum program content. Instructors may add additional information and skills, or to teach this program concurrently with other non-overhead courses, such as Nitrox Diver and Sidemount Diver.

2.3.3 Course Location

The CDS Basics orientation may take place in any body of water similar in size and depth to a spring basin. This may include swimming pools and training tanks of sufficient size.

Skill demonstration and practice must take place in water too deep to stand.

2.3.4 Duration

Students must accrue at least 120 minutes of bottom time.

2.3.5 Knowledge Development

- A. Students learning sidemount must complete the Sidemount Diver academic learning materials provided by a widely recognized diver training organization.
- B. Instructors must present students learning to dive backmounted doubles with information on:
 - 1. Double cylinder features and configuration.
 - 2. Dual-orifice isolation manifold operation.
 - 3. Options and configuration of double-tank harnesses and air cells.
- C. Students must also learn the *why* behind the specialized buoyancy, trim and propulsion techniques cave divers use.

2.3.6 Dry-Land Exercises

Before entering the water, students are to practice guideline deployment and retrieval while maintaining tension on the line.

2.3.7 In-Water Exercises

To be successfully complete the CDS Basics orientation, students must be able to:

- A. Correctly assemble, test and don a sidemount or doubles system, including harness, air cell, cylinders and regulators.
- B. Enter and exit the water in a manner consistent with ease and safety.
- C. Perform a variety of common in-water, pre-dive checks, including:
 - 1. Checking for the presence of all necessary equipment.
 - 2. Ensuring all manifold and/or main gas valves are turned all the way on.
 - 3. Testing all regulators for function underwater.
 - 4. Checking pressure in all cylinders.
 - 5. Checking to ensure no hoses, cords, straps, gauges, reels or attachment hardware are accidentally trapped under other equipment.
 - 6. Testing fellow team members' primary (long hose) second stages for breathability and function.
 - 8. Inspecting fellow team members for signs of equipment problems.
 - 9. Performing a bubble check on fellow team members.
- D. Deploy and retrieve a reel or spool over a distance of at least 15 m/50 ft while maintaining tension on the guideline.
- E. Move efficiently using appropriate propulsion techniques, including modified flutter and frog kicks and pulling.
- F. Effortlessly maintain neutral buoyancy and horizontal body position while swimming, resting, deploying reels/spools and guidelines, and other common cave-diving-related tasks. Students must be able to hover with minimal movement for at least one minute while maintaining horizontal trim.
- G. Initiate and correctly respond to a variety of common hand signals.
- H. Respond within ten seconds to a diver signaling *Out of Air!* by passing the primary (long hose) second stage and deploying the full length of its hose.
- I. Assume the proper position for sharing gas with another diver, both as donor and receiver.
- J. Share air with a fellow team member for a distance of at least 15 m/50 ft. Repeat as both donor and receiver.

2.3.8 Limits of Training

- A. Successful completion of this program qualifies students for entry into the NSS-CDS Apprentice Cave Diver course.
- B. It does not qualify students for any other activity unless taught in conjunction with another non-overhead course, such as Sidemount Diver or Nitrox Diver.
- C. Instructors may issue successful course graduates with a Certificate of Completion. There is no certification card for this experience.
- D. Students have three months following successful completion of CDS Basics to enroll in an NSS-CDS Apprentice Cave Diver course. Should they fail to do so, students must re-take this program.