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# PADI Intro & Full Cave

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Team Blue Immersion

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# Tec Rec Technical Intro Cave Diver and Tec Rec Technical Cave Diver

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## Course Overview

### Introduction

This section includes recommendations on how to use this guide, an overview of course philosophy and goals, a flow chart to show you how course components and materials work together for success, and ways you can organize and integrate student diver knowledge development and skills training.

### How to Use this Guide

This guide speaks to you, the DSAT Technical Intro Cave Diver Instructor and DSAT Technical Cave Diver Instructor. You will use it to help your the students become outstanding DSAT Technical Intro Cave Divers and Technical Cave Divers.

The guide contains four sections. The first details the standards for the course. The second section contains knowledge development modules. The third section details the practical applications that will take the knowledge they gained in the previous section into the real world. The final section is where everything comes together. DSAT Technical Intro Cave Diver consists of two Knowledge Reviews, one Final Exam, 2 Practical Applications and four Open Water Training Dives conducted over two days. DSAT Technical Cave Diver consists of two Knowledge Reviews, one Final Exam, 4 Practical Applications and Eight Open Water Training Dives conducted over four days.

All required standards, learning objectives, activities, and performance requirements specific to the PADI Recreational Twin Set Diver course appear in **boldface** print. **The boldface assists you in easily identifying those requirements that you must adhere to when you conduct the course.** Items not in boldface print are recommendations for your information and consideration. General course standards applicable to all PADI courses are located in the General Standards and Procedures section of your PADI *Instructor Manual* and the PADI Cavern Specialty Instructor Outline.

### Course Philosophy and Goals

With the recent growth in popularity of cavern and cave diving, divers with a greater variety of backgrounds and experience levels are entering the sport.

The goal of the course is to develop the skills taught during the PADI Cavern Course to a very high level and relate them specifically to the hazards, equipment and techniques encountered

during diving in a cave environment. The ultimate course goal is to teach techniques along with attitudes to dive safely in a cave environment similar to the one the diver been training in.

## **Course Integration with Other PADI and Tec Rec Course Material**

To develop the high degree of knowledge development required of a DSAT Technical Intro Cave Diver and DSAT Technical Cave Diver we are using NSS Cave Diver Manual for all training.

## **Key Standards**

### **Student Diver Prerequisites Tec Rec Technical Intro Cave Diver**

**Certified as a Tec 40 diver or qualifying certification from another training organization. For the purposes of this level, a qualifying technical certification is one that qualifies the student to make decompression dives to 40 metres using air, 18 years old.**

### **Student Diver Prerequisites Tec Rec Technical Cave Diver**

**Certified as a Tec 50 diver or qualifying certification from another training organization. For the purposes of this level, a qualifying technical certification is one that qualifies the student to make decompression dives to 50 metres using air, 18 years old.**

### **Instructor Qualifications**

- **Tec Rec Technical Intro Cave Instructor**
- **Tec Rec Technical Cave Instructor**

### **Assistant Qualifications**

**Renewed PADI Divemaster or higher level PADI Member**

- **Tec Rec Technical Intro Cave Diver or**
- **Tec Rec Technical Cave Diver**

### **Training Dive Depth DSAT Technical Intro Cave Diver**

**Dives 1 - min 5 meters max 18 meters (non-decompression)**

**Dives 2 - 4 - max 40 meters depth and 200 meters linear depth (non-decompression)**

## **Training Dive Depth Tec Rec Technical Cave Diver**

**Dives 1 - min 5 meters max 18 meters non-decompression**

**Dives 2 - 8 - max 50 meters depth**

## **Maximum Ratio Tec Rec Technical Intro Cave Diver and Tec Rec Technical Cave Diver:**

**Maximum: 4:1**

## **Minimum Time Tec Rec Technical Intro Cave Diver**

**2 days**

## **Minimum Time Tec Rec Technical Cave Diver**

**4 days**

## **Equipment Student and Instructor**

**Double cylinders of at least 12 l/70 cf each, with isolator manifold.**

**The isolator manifold is not required for divers using side mount configuration.**

**Divers known to have a very low gas consumption rate may, at the instructor's discretion, use lower capacity cylinders than specified here, provided the diver will have ample gas to assist a team mate in a gas sharing emergency in an overhead environment applying the 1/3 of gas in and 2/3 gas out.**

**Primary and secondary regulators for back mounted double manifolds, one with two metre/seven foot hose for air sharing and one with SPG. Note: In sidemount configuration, one regulator must have the two metre/seven foot hose, and both regulators must have an SPG. Stage/decompression cylinder(s) (1 for Tec 45, 2 for Tec 50) with regulator and SPG, with proper labels/markings.**

**Tec diving BCD(s) and harness (backmount or sidemount)**

**Two multigas enriched air capable dive computers, or one multigas enriched air computer and a back up single gas computer with dive tables, or one single gas enriched air computer and a backup timer and depth gauge with dive tables.**

**Exposure suit appropriate for environment and dive duration (if students will use dry suits, they should be trained/experienced in their use in recreational diving prior to using them for tec training or diving).**

**Argon dry suit inflation system (as needed for environment)**

**Weight system (if needed). Note: Students and staff should weight for the contingency of decompressing with near-empty primary cylinders and empty or absent stage/deco cylinders.**

**Knife and cutting device**

**Wet notes or wrist slate**

**Three flashlights (one primary and two backups)**

**One primary reel and two safety reels**

**Mask and Back up mask**

**Three directional arrows and three cookies**

**Compass**

**Backup buoyancy control – the student must have a reliable means for controlling buoyancy and maintaining decompression stops in midwater with a failed primary BCD. This is usually accomplished with a backup BCD (double wings) or, when using light weight cylinders, the use of a dry suit is permitted.**

## **Instructor Materials**

*PADI Instructor Manual*

*PADI Guide to Teaching*

**PADI Cavern Instructor Outline**

**Tec Rec Technical Rescue Distinctive Speciality Outline**

**Medical Statement for Technical Diving**

**Liability Release and Express Assumption of Risk for Technical Diving**

**Tec Diver Statement of Understanding and Learning Agreement**

**Tec Rec Technical Intro and Cave Diver Knowledge Review**

**Tec Rec Technical Intro Cave and Cave Diver Answers**

**PADI Cavern Instructor Outline**

## **Student Materials**

**1. NSS Cave Student book or equivalent**

## **2. PADI Cavern Instructor Outline**

### **Course Flow Options**

**The sections of this outline must be completed in order. Related Knowledge reviews and Practical Applications must be completed before each Cave Training Dive.**

## **Course Content**

### **Welcome and Staff and Student Introductions**

- **Teach technical divers to dive safely in a cave environment by introducing internationally accepted standards and techniques using guidelines, team work, contingency plans, back up equipment and gas management.**
- **Teach technical diving the important of sounds judgement and attitude when diving in a cave environment.**
- **Introduce technical divers to local cave systems**

### **Course overview Tec Rec Technical Intro Cave Diver**

#### Knowledge Development

- Review Knowledge review one prior dive one and two.
- Review Knowledge review two prior dive three and four.
- **The Practical Applications**
  - Prior to dive 1 and 2 conduct practical application one including use of guide lines on land (including blindfolded), equipment configurations for cave diving and out of air situations in a cave environment.
  - Prior to dive 3 and 4 conduct practical application two including techniques for lost buddy, lost line and entanglement.



- In Water Skill Development – open water with increasing levels of simulated stress
  - Dives 1 Review of skill from PADI Cavern or equivalent, check of each divers equipment configuration, familiarization of guideline, fin kicks and trim.
  - Dives 2 Use of guidelines and out of air drill (both with mask and without)
  - Dive 3 Lost diver techniques and entanglement situations
  - Dive 4 Lost line techniques (without mask)

## **Certification**

**Students are issued the DSAT Technical Intro Cave Distinctive Speciality Diver certification card upon successful completion of the course.**

## **What Certification Recognizes and qualifies The Tec Rec Technical Intro Cave Diver too:**

You have mastered use of guidelines, team work in a cave environment, proper preparation including configuration, equipment matching, gas management and how to deal with out of air situations, lost buddy and line and entanglement in the guideline.

The certification qualifies you to dive to a maximum 40 meters depth and 200 meter linear depth in a cave or cave system similar to the one used during your training.

## **Course overview Tec Rec Technical Cave Diver**

### Knowledge Development

- Review Knowledge review one prior dive one.
  - Review Knowledge review two prior dive five.
- The Practical Applications
    - Prior to dive 1 and 2 conduct practical application one including use of guide lines on land (including blindfolded), equipment configurations for cave diving and out of air situations in a cave environment.

- Prior to dive 3 and 4 conduct practical application two including techniques for lost buddy, lost line and entanglement.
  - Prior to dive 5 and 6 conduct practical application three including techniques complex navigation like gaps and jumps.
  - Prior to dive 7 and 8 conduct practical application four including techniques for diving in restrictions, staging of deco cylinders out of air drill blindfolded in restrictions.
- In Water Skill Development – all dives and skills are to be conducted in a cave environment\.
- Dives 1 Review of skills from DSAT Technical Cave Diver or equivalent, check of each divers equipment configuration, familiarization of guideline, fin kicks and trim.
  - Dives 2 Use of guidelines and out of air drill (both with mask and without)
  - Dive 3 Lost diver and entanglement situations
  - Dive 4 Lost line techniques
  - Dive 5 Gaps and Jumps
  - Dive 6 Gaps and Jumps
  - Dive 7 Restriction and staging of deco cylinders
  - Dive 8 Restrictions, staging of deco cylinders and out of air situation blindfolded.

## **Certification**

**Students are issued the DSAT Technical Cave Distinctive Speciality Diver certification card upon successful completion of the course.**

## **What Certification Recognizes and qualifies The Tec Rec Technical Intro Cave Diver too:**

You have mastered use of guidelines, team work in a cave environment, proper preparation including configuration, equipment matching, gas management and how to deal with out of

air situations, lost buddy and line and entanglement in the guideline, complex navigation like gaps and jumps, diving in restrictions staging deco cylinders.

The certification qualifies you to dive to a maximum 50 meters depth and unlimited linear depth in a cave or cave system similar to the one used during your training.

### **Class Requirements DSAT Technical Intro Cave and Full Cave Course**

1. Cost of course (be sure to explain all costs)

2. Equipment needs

Required materials

Attendance requirements

Level of knowledge mastery and skill development required for certification

### **How the Students Will Gain Mastery of Knowledge Reviews**

1. Homework involving studying assigned parts of the *NSS Cave Manual or equivalent*.

In class discussions

Knowledge Reviews

### **Administration.- complete paperwork**

1. Enrolment forms

2. **Standard Safe Diving Practices Statement of Understanding,**

3. **DSAT Medical Statement**

4. **Liability Release and Express Assumption of Risk For Technical Intro Cave and Cave Distinctive Speciality**

