

Side-Mount Diver Training
Mathew Partridge Technical Cave &
Wreck Instructor Trainer.



**Foundations of
Side-Mount Diver
Course Synopsis**

Side-Mount Diver Training Mathew Partridge Technical Cave & Wreck Instructor Trainer.

Your Course Outline:

Depending on which aspect of Side-Mount Diving you are training towards certain elements of the course timetable and structure may vary.

Day One:

Introductions & Paperwork
Academics and Video Sessions
Equipment Workshop and system setup
Confined Water Session

Day Two:

Open Water Session
Debrief

Day Three:

Open Water Session
Debrief

Recommended Reading:

Training Agency Course Specific Manual
Deeper Into Diving - John Lippman & Dr S. Mitchell
Side Mount Profiles – Jill Heinerth 2012
Pro-Tech Glossary

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THE THEORY

· 1 Terminology

· 2 · History

- 2.1 The 1960s - UK sump diving
- 2.2 The 1970s - Florida
- 2.3 The 1990s - release of first commercial rig
- 2.4 The 2000s - cave diving popularity and side-mount evolution

· 3 · Benefits

- 3.1 Flexibility
- 3.2 Accessibility
- 3.3 Streamlining
- 3.4 Safety
- 3.5 Comfort
- 3.6 Redundancy of gas

· 4 Configurations

- 4.1 Back-plate and wing harness adaptation
- 4.2 Specialised and hybrid harnesses
- 4.3 Minimalist webbing harness

· 5 Equipment

- 5.1 Cylinders setup and Buoyancy Characteristics
- 5.2 Harness systems
- 5.3 Buoyancy compensation and weighting
- Regulator Setup and configuration
- 5.4 Accessories

· 6 Training

- 6.1 Level 1: "Recreational (Rec or Basic Sidemount)"
- 6.2 Level 2: "Technical (Tec or Advanced Sidemount)"
- 6.3 Level 3 "Overhead Sidemount)

· 7 Procedures

- 7.1 Gas management
- 7.2 Critical skills
- 7.3 Compatibility in mixed configuration team diving

Understanding Sidemount Diving - In Depth

THE GEAR

- Cylinder Options
- Side-mount Harness BC Devices
- Different options in stage side-mount rigging
- Long Hose Regulator Setup
- Secondary and LPI Regulator Setup
- Oxygen Clean? (EANx Specific)
- Computers/Depth Gauges/Bottom Timers
- Reels & Spools
- Lift Bags & Surface Markers
- Lights & Torches
- Exposure Protection
- Navigation Equipment
- Gas Analyzer (EANx Specific)
- Slates & Wet Notes
- Masks & Fins
- Pockets
- Clips & Bolts
- Weight Systems
- Tools & Spares
- Signaling Devices
- First Aid & Oxygen

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THE DIVE

Pre-Diving:

- Equipment Setup
- START
- Gas Fills Gas Analysis & Labeling
- Buddy Checks – Head to Toe
- Hand Signals
- Environmental Considerations
- EMS Plans

The Dive:

- Bubble Check
- S-Drills
- Gas Awareness/Regulator Manipulation
- Navigation/Orientation
- Weighting & Trim and Manipulation of BC system
- Positioning
- Communication
- Team Diving Practices (EANx or AEANx diving)

Ascent:

- Gas Awareness
- Computer Settings
- Ascent Rate
- SMB Deployment
- Safety Stops

Post Dive:

- Repetitive Dives
- Post Day Maintenance
- Annual Servicing

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THE SKILLS

Standard Skills:

- Gear Setup & Inspections
- Gas Analysis
- Bubble Checks
- S-Drills
- Buoyancy Control
- Correct Weighting & In-water
- Trim
- Propulsion methods
- Computer Setup
- Gas Awareness
- SMB Deployment
- Navigation
- Communications
- Ascent Control

Skill Development:

- Valve Manipulation
- Gas Sharing
- Gas Switching
- Lift Bag Deployment
- Time & Gas Awareness
- Communication
- Light Management
- BOOM Drills
- Computer Failure
- Buoyancy Failure
- Cylinder Manipulation
- Finning Techniques
- Dry Suit Techniques
- Navigational Techniques
- Reel and Spool Use

Survival Skills:

- Unconscious Diver
- Tired Diver
- Suspected DCI
- Hypothermia
- Nausea
- Entanglement
- Lost Gas
- What If's...