

Standard 2.B.27

CMAS Wreck Diver Level 1 Training Programme

1. Aim of the training programme

- 1.1 This training programme aims to build on the skills learned during the CMAS One-Star Diver training programme and advance the skills of individuals in recreational, non-penetration, Wreck Diving. Also to provide the candidate with a clear understanding of the subject matter of;
- 1.1.1 Non-penetrating wreck diving,
 - 1.1.2 The physical, physiological and basic legal aspects of wreck diving
 - 1.1.3 Basic ship architecture and terminology
 - 1.1.4 Wreck navigation using ship architecture and the distance-reel & line technique
 - 1.1.5 Procedures for non-penetration of wreck diving.
 - 1.1.6 Laying-out navigation line technique, tying-off methods and types of reel & line
 - 1.1.7 Extent of the range of dive planning and plan enactment required for non-penetration wreck diving, including Risk Assessment, equipment selection, equipment configuration, back-up gas, escape routes for the job at hand
 - 1.1.8 Revision of basic stress recognition and basic stress recovery
 - 1.1.9 Revision of hand and torch signalling for wreck diving
 - 1.1.10 Revision of setting Red and Yellow DSMBs
 - 1.1.11 Legal aspects related to wreck diving

2. Classification

- 2.1 The CMAS Wreck Diver Level 1 Training Programme is classified as a basic level which can be undertaken after satisfying the course requirements. This classification is for non-penetration Wreck Diving.

3. Instructor and Assistant Requirements

- 3.1 The CMAS Wreck Diver Training Programme may be presented by any CMAS Instructor with a minimum of a CMAS Two Star Instructor grading that complies with the requirements as prescribed by Clause 2.1.20 of the definitions in Chapter 1.
- 3.2 The CMAS Two Star Instructor may be assisted by a CMAS One Star Instructor that complies with requirements as prescribed by Clause 2.1.16 of the definitions in Chapter 1 and/or CMAS Dive Leader that complies with Clause 2.1.15 of the definitions in Chapter 1.
- 3.3 The CMAS Instructor must hold a current CMAS Wreck Diving Instructor Level 1 or equivalent

4. Competencies of a certified CMAS Wreck Diver

- 4.1 CMAS Level 1 Wreck Divers shall be trained such that when assessed by a CMAS Instructor, they shall be deemed to have sufficient knowledge, skills and experience to procure breathing gas, equipment, other diving services. Furthermore, they must demonstrate the skill to plan, conduct, and log non-penetration wreck dives in open-water without the direct supervision of a CMAS Instructor or CMAS Dive Leader. CMAS Level 1 Wreck Divers may be partnered by another Wreck Diver of same level, provided the dive conditions are at least similar to those in which their training was received.
- 4.2 CMAS Level 1 Wreck Divers and candidates may, subject to their qualification, dive using either air or Nitrox.
- 4.3 Candidates will only use familiar equipment.

5. Prerequisites for participation in the training programme

- 5.1.1 Candidates must:
- 5.1.2 Be at least a CMAS One Star Diver or equivalent
- 5.1.3 Be at least 14 years of age
- 5.1.4 Have logged a minimum of 10, post qualifying, dives
- 5.1.5 Hold a current diving medical certificate or complete a Federation/CDC medical history/statement form

6. Requirements for certification

- 6.1 In qualify as a CMAS Wreck Diver Level 1, the candidates shall:
- 6.2 Comply with the prerequisites for participation, as prescribed by Clause 5 of this Standard:
- 6.3 Successfully complete the theoretical assessment as provided for in Clause 10.1 of this Standard;
- 6.4 Successfully complete the open water assessment as provided for in Clause 10.2 of this Standard; and
- 6.5 Successfully complete two (2) non-penetration Safety-stop wreck dives
- 6.6 Candidates will determine their own decompression obligation for both dives related to the breathing gas used. This will include determining the required primary and back-up gas as indicated in Clause 10.2 of this Standard.
- 6.7 Be in possession of the following recommended equipment:
 - The candidate will provide their own Scuba equipment, including Buoyancy Control Device (BCD). Furthermore, it is strongly recommended that candidates dives with an alternative breathing gas source, which may be a pony and DV, equal sized twin cylinders, manifolded twin set etc. Note: All Scubas shall be fitted with submersible contents pressure gauges, see Clause 4.4 in this Standard
 - In addition candidates will provide the following equipment for their personal use:
 - i. A primary torch and back-up torch
 - ii. A sharp knife for cutting entanglements and back-up cutting device
 - iii. Two delayed surface marker buoy (DSMB), one red and the other yellow, with a reels and sufficient line on each for the planned maximum operating depth (MOD), see Clause 6.1 in Chapter 1.
 - iv. A personal decompression computer (PDC) and/or timing device and depth gauge and back-up device.

7. Required theoretical knowledge and diving skills

- 7.1 The participant shall receive tuition in the theoretical knowledge and diving skills as prescribed in Syllabus 3.B.27 in Chapter 3.
- 7.2 Basic ship architecture and terminology
- 7.3 Wreck law including ancient wrecks
- 7.4 Navigation using ship architecture and a reel and line, including advantages and disadvantages
- 7.5 procedures for non-penetration of wreck diving.
- 7.6 Laying-out navigation line technique, tying-off methods and types of reel & line
- 7.7 Extent of the range of dive planning and plan enactment required for non-penetration wreck diving, including Risk Assessment, equipment selection, equipment configuration, back-up gas, escape routes
- 7.8 Basic causes of stress; stress recognition and stress control
- 7.9 Revision of both hand signal and torch signalling related to wreck diving
- 7.10 Revision of setting Red and Yellow DSMBs

8. Theoretical training parameters

- 8.1 The CMAS Instructor shall conform to the standard theoretical training parameters as prescribed by Clause 4.5 of Chapter 1.

9. Practical training parameters

9.1 The CMAS Instructor shall conform to the standard practical training parameters as prescribed by Clause 4.6 of Chapter 1.

10. Assessment

10.1 **Knowledge**

10.1.1 The student shall demonstrate to the CMAS Instructor knowledge of Wreck diving by taking and passing an oral or written examination. This examination shall test entry level theoretical knowledge and knowledge of SCUBA skills as prescribed in this Syllabus. They shall demonstrate a thorough understanding of the dive planning process.

10.2 **Open water SCUBA skills**

10.2.1 The participants shall demonstrate to the CMAS Instructor their mastery of the wreck diving skills, during two wreck dives.

10.2.2 Skills training shall also include wreck navigation using ship architecture and distance line and reel. Initially, the teaching of the basics laying line will be done on the surface.

10.2.3 In-water practical training shall be provided on the cutting of monofilament line and 15mm diameter rope.

10.2.4 In-water revision for setting DSMBs (Red) from the wreck, including anchoring the reel to the wreck before inflation. And revision of setting a yellow emergency DSMB from the Safety-stop.

11. Certification

11.1 Upon successful completion of the training programme the participant shall be awarded with a CMAS Wreck Diver Level 1 C-card.