

CMAS RESCUE DIVER STANDARD



CMAS

BOARD OF DIRECTORS VISA NO:

1. AIM OF THE TRAINING PROGRAMME

- 1.1. This training programme aims at developing the rescue skills of certified CMAS divers which will enable them to have a better understanding of the common causes of diving emergencies, how to avoid diving incidents/accidents, how to assist and/or rescue a diver during an emergency and how to manage a diving incident/accident in an effective and efficient manner.

1.2. THE SPECIFIC OBJECTIVES OF THE PROGRAMME ARE THE FOLLOWING:

- 1.2.1. To develop the participant's knowledge of the common causes of diver stress and diving emergencies;
- 1.2.2. To develop the candidate's ability to more readily recognise a diving emergency or a diver in need of assistance;
- 1.2.3. To develop the participant's knowledge of rescue procedures and the treatment of diving injuries;
- 1.2.4. To introduce the participant to the value and use of first aid supplies and dive rescue equipment;
- 1.2.5. To introduce the participant to the basic principles of rescue management;
- 1.2.6. To introduce the participant to the basic principles of rescuer health and safety;
- 1.2.7. To introduce the participant to further career development opportunities;
- 1.2.8. To develop the participant's rescue skills with regard to a number of prescribed essential rescue skills that are utilised on land or in the "dry";
- 1.2.9. To develop the participant's rescue skills with regard to a number of prescribed essential rescue skills, in the safety of the confined water environment, which will enable the participant to safely utilise these skills in the open water section of the training programme.

2. CLASSIFICATION

- 2.1. The CMAS Rescue Diver Training Programme is classified as an intermediate level speciality diver training programme.

3. INSTRUCTOR AND ASSISTANT REQUIREMENTS

- 3.1. The CMAS Rescue Diver Training Programme may be presented by a minimum of a CMAS Two Star Instructor in active status that complies with the requirements of the national federation.
- 3.2. The CMAS Two Star Instructor may be assisted by a CMAS One Star Instructor in active status that complies with the requirements of the national federation.

4. COURSE STRUCTURE AND DURATION

- 4.1. The CMAS Rescue Diver Training Programme consists of the following Sections:
 - 4.1.1. **KNOWLEDGE DEVELOPMENT SECTION:** The minimum is 8 hours
 - 4.1.2. **PRACTICAL SKILLS DEVELOPMENT SECTION:** The minimum is 12 hour
- 4.2. The participants must complete a minimum of two (2) open water rescue dives/exercises under the direct supervision of a CMAS two stars Instructor at depths between five (5) to maximum fifteen (15) meters.
- 4.3. The participants must conduct at least two (2) missing diver procedures and considerations, including search patterns.

CMAS RESCUE DIVER STANDARD

- 4.4. All assisted ascent exercises shall be terminated at a depth of 6 meters and shall be directly supervised by the CMAS Instructor.
- 4.5. All rescue skills in open water shall be taught, directly supervised and evaluated by a CMAS two stars Instructor, who shall be in the water during each open water training dive. The CMAS two stars Instructor shall be in direct control of the students throughout all open water rescue training activities.
- 4.6. All dives must be completed during daylight hours, or under conditions that simulate daylight conditions;
- 4.7. All open water dives shall be conducted in water that allows direct vertical access to the surface.
- 4.8. Open water dives therefore shall not be conducted in underwater caves, inside wrecks or below ice;
- 4.9. CMAS allows instructors to structure courses according to the number of students participating, their skill level and the diving environment.

5. COMPETENCIES OF A CERTIFIED CMAS RESCUE DIVER

- 5.1. A CMAS Rescue Diver shall be trained such that when assessed by CMAS two stars instructor, he shall be deemed to have sufficient knowledge, skill and experience to avoid diving emergencies, to recognise the common causes of diving emergencies, to lend assistance to another diver in need, to act appropriately during a diving emergency and to manage a diving incident/accident in an effective and efficient manner.
- 5.2. A CMAS Rescue Diver is qualified to help prevent a diving emergency and, if necessary, to perform a rescue, provide basic life support and basic first aid treatment to a diving casualty and/or manage a diving incident/accident in an effective and efficient manner until such time that the diving casualty can be handed over to the Emergency Medical Services by using a variety of rescue techniques and resources.
- 5.3. The parameters within which the CMAS Rescue Diver is qualified to dive are those applicable to the other diver training certifications he already holds.

5.4. LIMITATIONS OF THE CMAS RESCUE DIVER CERTIFICATION

- 5.4.1. The CMAS Rescue Diver is only certified to dive within the limits of his other diving certifications and in diving conditions and diving areas that are similar, equal or better to those in which training was received.
- 5.4.2. Any rescue technique or similar activity that is beyond the scope of this training programme and that is reserved for appropriately trained members of the Emergency Medical Services;
- 5.4.3. Any medical intervention or similar activity that is beyond the scope of this training programme and that is reserved for appropriately trained and certified members of the Emergency Medical Services;
- 5.4.4. Any medical intervention or similar activity that is beyond the scope of this training programme that is reserved for an appropriately trained and certified medical physician; and
- 5.4.5. Any rescue, basic life support, first aid technique or similar activity that is prohibited by law.

CMAS RESCUE DIVER STANDARD

6. PREREQUISITES FOR PARTICIPATION IN THE TRAINING PROGRAMME

- 6.1. Minimum age 15 with written parental or a legal guardian consent ;
- 6.2. Complete the medical history/statement form required by the CMAS Federation prior to participating in any in-water activities; and
- 6.3. Sign the appropriate form(s) as required by the CMAS Federation acknowledging and assuming the risks of SCUBA diving prior to participating in any in-water activities.

7. EXPERIENCE / KNOWLEDGE/CERTIFICATION.

- 7.1. Hold CMAS one star Diver or equivalent;
- 7.2. Have at least twenty (20) dives in the Logbook;
- 7.3. Hold CMAS Oxygen Administration or equivalent if not prohibited by law of the national federation;
- 7.4. Hold a valid First -Aid and Cardiopulmonary Resuscitation (CPR);
- 7.5. Ability to swim a continuous two hundred (200) meter surface distance and;
- 7.6. A ten (10) minute survival swim/float without the use of a mask, fins, snorkel or with any other swimming aids.

8. RATIO PARTICIPANTS/ INSTRUCTOR

SKILLS	MAXIMUM PARTICIPANTS	INSTRUCTOR
THEORY	12	1
CON. WATER	8	1
OPEN WATER	6	1

9. REQUIREMENTS FOR CERTIFICATION

In order to be certified as a CMAS Rescue Diver, the student shall:

- 9.6.1. Successfully complete the theoretical assessment of this Standard;
- 9.6.2. Successfully complete the confined water training of this Standard and;
- 9.6.3. Successfully complete the practical knowledge application assessment of this Standard;
- 9.6.4. Having successfully completed a minimum of two (2) open water Rescue dives/exercises under the direct supervision of a CMAS two stars Instructor at depths between five (5) to maximum fifteen (15) meters.

10. REQUIRED THEORETICAL KNOWLEDGE AND DIVING

10.1. COMMON CAUSES OF DIVER STRESS AND DIVING EMERGENCIES

- 10.2. The participant shall have an appropriate knowledge concerning the common causes of diver stress and diving emergencies, including the following:
 - 10.2.1. Equipment related problems (including overweighting and when it's appropriate to ditch the weighting system).

10.3. TEMPERATURE RELATED PROBLEMS

- Heat exhaustion
- Heat Stroke
- Shock
- Hypothermia (including rewarming procedures)

10.4. OVEREXERTION

10.5. PANIC

10.6. PRESSURE-RELATED INJURIES

- Decompression sickness
- Arterial gas embolism
- Other lung overexpansion injuries

10.7. NEAR DROWNING AND DROWNING

10.8. AQUATIC LIFE

10.9. ENVIRONMENTAL CONDITIONS

10.10. IDENTIFYING A DIVE EMERGENCY OR DIVER IN NEED

10.10.1. The participant shall have an appropriate knowledge concerning the identification of a dive emergency or a diver in need, both on the surface and underwater, including the following:

10.11. RECOGNISING SIGNS OF STRESS

- Physical stress
- Psychological stress
- Perceptual narrowing
- Recognising characteristics of a tired diver
- Recognising characteristics of a panicked diver

10.12. DIVE RESCUE PROCEDURES AND TREATMENT OF INJURIES

10.12.1. The participant shall have an appropriate knowledge concerning dive rescue procedures as well as the treatment of diving injuries, including the following:

- Self-rescue techniques
- First Aid for common Aquatic Life injuries
- Non-swimming assists/rescues
- Critical Incident Stress
- First aid for pressure-related injuries
- Decompression sickness
- Arterial gas embolism
- Other lung overexpansion injuries
- Near-drowning, drowning and treatment
- Assisting a responsive diver at the surface and underwater
- Surfacing an unresponsive diver
- Egress with a responsive and unresponsive diver
- Equipment removal considerations
- in-water rescue breathing techniques for the non-breathing diver
- Missing Diver procedures and considerations, including search patterns.

10.13. FIRST AID SUPPLIES AND DIVE RESCUE EQUIPMENT

- The participant shall have an appropriate knowledge of the value and use of first aid supplies and dive rescue equipment, including the following:
- First Aid kit
- Pocket mask/barrier devices

10.14. EMERGENCY OXYGEN

- Benefits to the diver
- Various oxygen delivery systems
- Legality and oxygen use risks
- Automated External Defibrillator (not compulsory and if not prohibited by law of the national federation)

10.15. RESCUE MANAGEMENT

- Site safety assessment
- Scene management (including rescue team management)
- A professional treatment
- Helicopter procedures
- Emergency Medical Services
- Hyperbaric chamber--value to the victim of a dive accident

10.16. RESCUER HEALTH AND SAFETY

- Risks to the rescuer
- Physical conditioning
- The need for keeping your rescue and emergency care skills up-to-date

11. PRACTICAL TRAINING PARAMETERS

11.1. REQUIRED RESCUE SKILLS

11.1.1. The participant shall master the following skills on land:

- Hazard identification
- Rescue breathing and CPR
- Use of a pocket mask/barrier devices
- Oxygen administration techniques (were not prohibited by law)
- Automated External Defibrillator (not compulsory and were not prohibited by Law)
- Use of the first aid kit and other specialised equipment to treat diving injuries
- Assessment of a diving casualty
- Performing a neurological examination
- Completion of relevant accident reporting slates/documentation
- Summoning the Emergency Medical Services by telephone/radio

11.2. CONFINED WATER SKILLS

- The participant shall demonstrate and be assessed with regard to the following skills, whilst using all the equipment he intends to use in the open water section of the training programme, in order to determine whether he requires any remedial training before continuing with the teaching of the rescue skills listed in the present standard.

- Pre-dive checks
- Entry techniques
- Regulator removal and replacement
- Mask clearing
- Buoyancy control
- Exit techniques

11.2.1. The participant shall master the following rescue skills in confined water before that skill is performed in open water:

- Use of both visual and audible signaling devices
- Cramp release
- Establishing buoyancy at the surface (self and for another diver)
- Airway control
- Supplying air to a diver simulating an out-of-air emergency (i.e., alternate air source use)
- Overcoming vertigo
- Responding correctly to a tired diver at the surface and underwater
- Responding correctly to a panicked diver at the surface and underwater
- Non-swimming assists (e.g., with a throwing bag and rope)
- Water entry when responding to an emergency
- Swimming assists
- Surfacing an unconscious/incapacitated diver by at least three (3) different techniques at least two methods of diver tows
- Egresses (both responsive and unresponsive diver)
- Responding to a diver simulating overexertion
- Conducting underwater search patterns (if the confined water environment is suitable to the teaching of these skills)

11.3. OPEN WATER SCUBA SKILLS

11.3.1. RISK ASSESSMENT

11.3.2. The CMAS two star instructor shall ensure that a risk assessment is conducted before each confined and open water dive, and shall adopt procedures to ensure that all risks are controlled as far as is reasonably possible. The following factors shall be considered as part of this assessment taking into account the capability of participants:

- Water movement (e.g., current, wave action)
- Depth
- Underwater visibility
- Pollution
- Entry/exit methods
- Restricted zones
- Suitability of the site of the planned activities
- Emergency action plan

11.4. EMERGENCY EQUIPMENT AND PROCEDURES

11.4.1. EMERGENCY EQUIPMENT

11.4.2. For all locations where confined or open water activities take place, the CMAS two stars Instructor shall ensure the availability of the following:

- A first aid kit suitable for the planned diving activities;
- An emergency oxygen unit with a capacity of delivering at least 15 litres/min of pure oxygen for at least 20 minutes; and
- A communication system suitable for alerting the Emergency Medical Services.

11.5. EMERGENCY PROCEDURES

11.5.1. The CMAS Instructor shall ensure that, at each dive site where confined or open water diving activities take place, a documented emergency plan comprising at least the following information is available:

- Procedures for casualty recovery, resuscitation and evacuation;
- Procedures for the use of the emergency oxygen supply; and
- Information about the nearest medical resources (including data about the availability of the nearest hyperbaric recompression chamber).

11.6. PRACTICAL TRAINING PARAMETERS

11.6.1. The participant shall be able to demonstrate the following skills in the open water environment:

- Cramp release
- Establishing buoyancy at the surface (self and for another diver)
- Airway control
- Supplying air to a diver simulating an out-of-air emergency (i.e., alternate air source use)
- Overcoming vertigo
- Responding correctly to a tired diver at the surface and underwater
- Responding correctly to a panicked diver at the surface and underwater
- Non-swimming assists
- Water entry when responding to an emergency
- Swimming assists
- Surfacing an unconscious/incapacitated diver by at least three (3) different techniques
- At least two methods of diver tows
- Egresses (both responsive and unresponsive diver)
- Responding to a diver simulating overexertion
- Conducting at least two (2) underwater search patterns

CMAS RESCUE DIVER STANDARD

12. ASSESSMENT

12.1. KNOWLEDGE

- 12.1.1. The participant shall demonstrate to the CMAS two stars Instructor knowledge of rescue diving principles and practices by taking and passing an oral and written examination. This examination shall test rescue diving theoretical knowledge according to knowledge of rescue skills of this standard.

12.2. PRACTICAL KNOWLEDGE APPLICATION

- 12.2.1. The participant shall demonstrate to the CMAS two stars Instructor his mastery of the rescue skills, as prescribed in this standard, during at least one or more practical knowledge application lessons.

12.3. CONFINED WATER RESCUE SKILLS

- 12.3.1. The participant shall demonstrate to the CMAS Instructor his mastery of the confined water rescue skills, as prescribed on this standard, during at least one or more confined water lessons.

12.4. OPEN WATER RESCUE SKILLS

- 12.4.1. The participant shall demonstrate to the CMAS Instructor his mastery of the open water rescue skills, as prescribed in this standard, during at least two (2) open water rescue training dives/exercises.
- 12.4.2. Each one of the open water rescue training dives/exercises shall consist of the activities as prescribed in this standard.

13. CERTIFICATION

- 13.1. Upon successful completion of the training programme the participant shall be awarded with a CMAS Rescue Diver C-card.