



Australian Government

Department of Education, Employment and Workplace Relations

SISOSCB313A Complete computer aided dives

Release: 2

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Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to plan and perform a computer aided dive in open water to a maximum depth of 18 metres.

Application of the Unit

This unit applies to current or aspiring specialty SCUBA dive guides or instructors working in a range of conditions that include computer aided dives to a maximum depth of 18 metres. This may include those working for private dive schools or companies operating at coastal sites or through holiday resorts.

Licensing/Regulatory Information

No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

SISOSCB301A SCUBA dive in open water to a maximum depth of 18 metres

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the Evidence Guide.

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| 1. Plan computer aided dive. | 1.1. Identify <i>key features of dive computers.</i>
1.2. Determine potential <i>hazards of computer-aided diving</i> and implement procedures to minimise <i>risks.</i>
1.3. Devise <i>computer aided dive plan</i> according to <i>industry technical and safety criteria, relevant legislation and organisational policies and procedures.</i> |
| 2. Select and use equipment. | 2.1. Select, check and practice reading a dive computer according to manufacturer's recommendations.
2.2. Use and maintain dive computer according to industry technical and safety criteria, manufacturer's recommendations and organisational policies and procedures. |
| 3. Complete dives using a dive computer. | 3.1. Perform a single, and series of, computer aided multi-level dive or dives, according to dive plan and industry technical and safety criteria.
3.2. Monitor dive progression using dive computer throughout dive.
3.3. Log computer data after dive. |
| 4. Evaluate computer aided dive. | 4.1. Evaluate <i>relevant aspects</i> of the computer aided dive.
4.2. Identify improvements for future computer aided dives. |

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- planning and organising skills to:
 - determine computer aided dive plans for single, and a series of, multi level dives
 - check and familiarise self with dive computer prior to dive
 - devise back up plans in the case of computer failure
- self management and problem-solving skills to:
 - anticipate possible computer failure
 - implement back up plan
 - negotiate computer aided diving hazards and risks
- technology skills to use and maintain dive computer
- first aid and emergency response skills appropriate to the site to enable initial response to emergencies and personal health care.

Required knowledge

- legislation, organisational policies and procedures and industry technical and safety criteria to enable safe conduct of all computer aided diving activities
- selection, use and maintenance of computer aided dive equipment, characteristics and technology, and factors affecting appropriate selection of equipment
- key features of dive computers and potential hazards and risks commonly associated with computer aided diving to a depth of 18 metres
- no-decompression dive tables to calculate air requirements as a back up plan to computer
- emergency, first aid and rescue procedures appropriate to the location to ensure risk minimisation to self and group.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- applies relevant process to select, use and maintain computer aided dive equipment
- participates in a range of SCUBA diving activities using computer aided diving equipment according to dive plan and industry technical and safety criteria, and safely negotiates potential hazards and risks
- evaluates and reflects on own computer aided diving performance to identify strengths, weaknesses and areas that need improvement.

Context of and specific resources for assessment

Assessment must ensure participation in multiple computer aided dives to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- resources and information to plan and select appropriate equipment
- a suitable open water dive site to a maximum depth of 18 metres
- SCUBA diving and computer aided diving equipment.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of use and maintenance of computer aided diving equipment during multi level dives
- oral or written questioning to assess knowledge of computer aided diving, hazards and risks
- third-party reports from a supervisor detailing performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Key features of dive computers may include:

- no-decompression status
- time
- depth
- duration
- dive planning
- dive profile recall
- water temperature
- compass
- ascent rates programming for special considerations.

Hazards of computer aided diving may include:

- sawtooth profile, variable depth profile
- bounce dives
- strenuous activity
- cold or flu
- computer failure
- decompression diving
- altitude diving
- flying after diving
- sources of computer error.

Risks may include:

- decompression sickness
- hypothermia
- getting lost or separated from group
- barotrauma
- cramps
- exhaustion.

Computer aided dive plan may include:

- a computer assisted multi level dive
- a series of computer assisted multi level dives
- using no-decompression diving
- ascending at industry recommended rates
- pre and post dive maintenance checks of computer
- back up plan with no decompression calculations from dive tables.

Industry technical and safety

- British Sub-Aqua Club (BSAC)
- Professional Association of Diving Instructors

criteria may include:

(PADI)

- SCUBA Schools International (SSI).

Relevant legislation may include:

- occupational health and safety
- permits or permission for access
- environmental regulations
- marine regulations
- Agency Standards.

Organisational policies and procedures may include:

- occupational health and safety
- communication protocols
- code of ethics
- minimal impact codes.

Relevant aspects may include:

- objectives
- planning process
- activity site
- weather
- equipment selection
- clothing selection
- food selection
- instructional content
- instructional technique
- assessment technique
- group feedback
- directing techniques
- rescue techniques employed.

Unit Sector(s)

Outdoor Recreation

Competency Field

SCUBA