



Australian Government

**DEFWDV005 Dive using closed-circuit
breathing apparatus (N₂O₂) in open water
to a maximum depth of 40 metres**

Release: 1

DEFWDV005 Dive using closed-circuit breathing apparatus (N2O2) in open water to a maximum depth of 40 metres

Modification History

Release 1. This is the first release of this unit of competency in the DEF Defence Training Package.

Application

This unit specifies the skills and knowledge required to dive using closed circuit breathing apparatus (CCBA) (N2O2) in an open water environment to a maximum depth of 40 metres.

It includes operating the N2O2 compressor/handbooster pump, inspecting and operating CCBA (N2O2) equipment, and conducting CCBA (N2O2) specific contingency drills.

This unit applies to persons working as Defence divers but can be applied to others working in this field

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Persons undertaking this unit work independently and perform specific tasks in a range of contexts that could be unpredictable.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable

Competency Field

Work Diving

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

- | | |
|---|--|
| 1 Operate an N2O2 compressor/hand-booster pump | 1.1 Inspect compressor and associated equipment for serviceability |
| | 1.2 Fit appropriate protective equipment in accordance with organisational procedures |
| | 1.3 Connect leads and hoses to compressor |
| | 1.4 Charge gas cylinders to maximum working pressure and record details in relevant logs in accordance with operational procedures |
| | 1.5 Undertake operator level maintenance on compressor and report defects as required, in accordance with organisational procedures |
| | 1.6 Re-stow compressor after use in accordance with operational procedures |
| 2 Conduct dive operations | 2.1 Select, inspect and fit CCBA (N2O2), and conduct apparatus test prior to entering water and in water, in accordance with dive plan |
| | 2.2 Use CCBA (N2O2) during dive operations and demonstrate relevant dive contingencies in accordance with organisational procedures and dive plan |
| | 2.3 Undertake de-servicing of CCBA (N2O2) and report defects as required, in accordance with organisational procedures |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces but is not equivalent to DEFDV005B Dive using closed-circuit breathing apparatus (N2O2) in open water to a maximum depth of 40 metres.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6bdbab1e-11ed-4bc9-9cba-9e1a55d4e4a9>

Assessment Requirements for DEFWDV005 Dive using closed-circuit breathing apparatus (N2O2) in open water to a maximum depth of 40 metres

Modification History

Release 1. This is the first release of this unit of competency in the DEF Defence Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least 15 dives, with diver diving to a depth not greater than 40 metres using closed-circuit breathing apparatus (CCBA) (N2O2) in open water and include:

- applying relevant industry standards, and organisational policies and procedures
- arranging for others to check equipment
- conducting CCBA (N2O2) open water dive operations in accordance with dive plan during the day and at night
- conducting inwater apparatus checks
- handling nonfunctional equipment items
- maintaining equipment during dive operations
- monitoring CCBA (N2O2) equipment and gauges
- operating an N2O2 compressor/handbooster pump in accordance with manufacturer specifications.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- CCBA (N2O2) characteristics and limitations
- CCBA (N2O2) dive equipment specifications and limitations
- dive physics
- dive physiology and medicine including:
 - heat and cold illnesses
 - compression illnesses
 - decompression illnesses
- diving descent and ascent techniques
- general diving safety awareness including:
 - diving in harbours
 - diving in tidal waters, currents and tides

- diving on and/or near a ship's bottom
- lost/separated
- entrapment/foul lines
- marine animal threats
- pollution/weeds
- working in confined spaces
- hazards of nitrox
- relevant industry standards, and organisational policies and procedures
- relevant occupational/diving safety awareness
- safe operating ranges for airsupplies.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and protective equipment currently used in industry
- ocean with a range of oceanic, diurnal and nocturnal environments
- relevant documentation including organisational procedures, regulations, codes of practice and CCBA (N2O2) operation manuals.

When practicable, assessment should relate to the diver's vocational focus.

Links

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