



Australian Government

DEFMIL084 Operate an inland tug boat

Release: 1

DEFMIL084 Operate an inland tug boat

Modification History

Release	Comments
1	This unit was released in DEF Defence Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to DEFCA328B Operate an inland tug boat. • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice

Application

This unit describes the skills required to operate an inland tug boat, specifically a purpose built motorised vessel up to ten metres in length capable of manoeuvring pontoons and rafts, with a maximum of five crew. It covers the operation of the tug while towing/pushing unloaded pontoons of up to thirty ton. The watercraft will normally be driven in an environment of protected or inland waterways, while conducting a range of tasks including transporting personnel and/or equipment.

While the technical aspects of this competency are concerned with ‘operating a boat’, the specialisation of the skill, and safety issues associated with waterborne operations confer additional responsibilities upon the operator.

To operate an inland tug boat, relevant state/territory and Commonwealth licensing requirements must be met.

This unit was developed for combat engineer personnel required to operate an inland tug boat in a deployed operational environment, but is applicable to any individual in this field of work.

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.

The individual will usually operate the boat independently or under indirect supervision and may command a crew of up to five persons. The individual must demonstrate sound judgement in the use of authority, and where possible, work within the existing lines of authority. They use discretion and judgement, and take responsibility for the quality of their outputs while performing routine tasks in a broad range of unpredictable contexts.

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

Competency Field

Military Skills

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Prepare for tug boat operations	1.1 Interpret operating instructions to determine the task, the cargo, the destination and route, and compile navigation data. 1.2 Check cargo weight is within the safe operating limit of the craft and complete manifests to ensure passengers and cargo are safe to move. 1.3 Check equipment for serviceability and replace or reject and report unserviceable items. 1.4 Conduct shore preparation and prepare watercraft for launch and watercraft operations. 1.5 Select and wear personal protective equipment.
2. Drive tug boat	2.1 Brief passengers and crew on safety issues prior to embarking. 2.2 Launch tug in accordance with local conditions. 2.3 Load and trim tug to ensure safety of crew and craft. 2.4 Drive tug consistent with hazards and environmental conditions. 2.5 Provide directions to passengers in order to maintain safety and efficient boat operation. 2.6 Conduct contingency and emergency drills to minimise threat to personnel and equipment.
3. Manoeuvre pontoon using tug boat	3.1 Direct crew to assist with securing and manoeuvring of pontoon. 3.2 Capture, secure and control uncontrolled pontoons. 3.3 Manoeuvre and assemble pontoons. 3.4 Comply with supervisor's directions/commands to control the movement and momentum of the pontoon.
4. Recover and restore tug boat	4.1 Disembark personnel and unload equipment. 4.2 Recover tug from a ramp or expedient landing site. 4.3 Check tug and associated equipment for serviceability, clean and service, report defects and complete documentation. 4.4 Complete debriefings. 4.5 Complete post activity reports and documentation.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning					Reading					Writing					Oral communication					Numeracy				

Performance variables:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Unit Mapping Information

This unit supersedes and is equivalent to DEFCA328B Operate an inland tug boat.

Links

Companion Volume implementation guides are found in VETNet -

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

Companion Volume implementation guides are found in VETNet -

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Assessment Requirements for DEFMIL084 Operate an inland tug boat

Modification History

Release	Comments
1	These Assessment Requirements were released in DEF Defence Training Package release 1.0 and meet the Standards for Training Packages. • Assessment Requirements created drawing upon specified assessment information from superseded unit

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- applying launch and recovery procedures
- applying pre start, start and stop procedures
- calculating and record number and weight of passengers, stores and equipment
- capturing and controlling free launched pontoons without damage to equipment
- monitoring hazards and applying safety principles to operations
- reading and interpreting navigation charts
- using clear interpersonal communication as operator of the vessel
- using communications equipment
- using knots and lashings to secure watercraft
- providing directions to personnel within the boat concerning specific safety matters such as seating, movement and actions on incidents such as 'man overboard' and 'capsize'
- managing the contingency and emergency drills:
 - abandon ship drills
 - action on capsize
 - diagnosing and rectifying minor engine faults
 - fire drills
 - man overboard drills
 - propeller replacement
 - towing vessels
 - use of improvised rudder
 - use of oars/improvised oars
- manoeuvring a pontoon, with a minimum weight of five ton, by:

- towing
- pushing
- effectively directing crew

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- anchorage methods and systems
- applicable statutory waterways rules for watercraft operation
- boat orders
- boat specific safety requirements and fire suppressant system
- complete equipment schedule list and locations
- controls and indicators
- effects of water moving over objects and obstacles
- emergency procedures
- environmental hazards of refuelling over water
- forces acting on boats
- hasty buoyancy/floation calculations
- launch and recovery procedures
- legal responsibilities
- methods for towing/pushing pontoons
- methods of connection/securing to pontoons
- night operation constraints
- operating boundaries
- pre start, start, stop procedures

Assessment Conditions

Competency should be demonstrated over a time frame that allows for the preparation, launch, recovery, driving and maintenance of watercraft under a range of water operating conditions carrying personnel and cargo.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

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