Changing lives through learning

Qualification Unit

This unit forms part of a regulated qualification.

Unit Title: Manoeuvre a Tug

Unit Reference Number: K/652/4168

Level: Four (4)

Credit Value: Six (6)

Minimum Guided Learning Hours: 32

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Be able to manoeuvre a tug	1.1 Select and use the most suitable control position and steering mode to maintain the required heading and speed, while ensuring propulsion and steering systems remain within safe operating limits
	1.2 Evaluate meteorological data, tides, and local conditions to adapt manoeuvring for near-coastal waters and heavy weather, ensuring the tug is handled in accordance with safety guidelines
	1.3 Manage the safety of the tug and surrounding traffic by strictly adhering to Collision Regulations (COLREGs), Vessel Traffic Services (VTS) monitoring, and the correct application of lights, shapes, and sound signals
	1.4 Conduct safe passage navigation to meet customer and operational requirements, using all available navigational information and autopilot systems to effectively manage the tug's track
	1.5 Ensure tug safety by monitoring stability and load-line calculations consistent with tug design and specification, while implementing regular performance checks of navigation and control systems

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2.	Be able to direct external communications	2.1	Explain types and forms of maritime communication including importance of back-ups and contingencies
		2.2	Maintain effective communication with all relevant parties including the assisted vessel
		2.3	Make radio communications in accordance with regulations
		2.4	Maintain appropriate communication records
3.	Demonstrate understanding of the principles of tug handling	3.1	Explain manoeuvring characteristics of different tugs
		3.2	Explain the effects of different hull forms on manoeuvring
		3.3	Describe different propulsion control systems
		3.4	Explain the tug handling characteristics of different propulsion systems
		3.5	Explain the likely effects of different environmental factors including: • winds • sea state • tides • currents • heavy weather
		3.6	Describe the cause and effects of interaction
4.	Be able to direct response to tug handling emergencies	4.1	Anticipate problems to avoid disruption to the operation
		4.2	Resolve identified problems to avoid disruption of operation
		4.3	Take corrective action to minimise risk to all aspects of the operation

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