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| **MSA Unit 111** | | | **QCF Ref: T/505/9338** |
| Title: | **Vessel Manoeuvring and Handling on Domestic Vessels in Non-Tidal Waters** | | |
| Level: | **2** | | |
| Credit value: | **2** | | |
| Learning outcomes - The learner will: | | Assessment criteria - The learner can: | |
| 1. Know steering systems and their function | | 1.1 Describe the different components of steering systems  1.2 Describe the functions of the different components  1.3 Describe how to deal with minor malfunctions | |
| 2. Know helm orders and steering | | 2.1 Describe the use of helm orders  2.2 Describe how a vessel is steered  2.3 Describe how to maintain a course by shore marks  2.4 Describe how to maintain a course by compass  2.5 Describe the effect of weather, ship’s speed and condition of loading on steering | |
| 3. Know how to manoeuvre a vessel in normal conditions | | 3.1 Describe how to manoeuvre a vessel under normal conditions, including stopping and going astern, the effect of transverse thrust, and the co-ordination of helm and engine movements  3.2 Compare the effects on manoeuvring, turning circles and stopping distances of single, twin, controllable pitch and fixed propellers  3.3 Describe the procedures for rigid and small tug towing  3.4 Describe the effects of wind and current on vessel manoeuvring  3.5 Describe the effects of underkeel clearance, squat and shallow water on vessel manoeuvring  3.6 Describe the effects of vessel to vessel and vessel to bank interaction | |
| 4. Know how to handle a vessel in extreme weather conditions | | 4.1 Describe the precautions and procedures required to be carried out when heavy weather is expected including the rigging of safety lines, restriction of access to the weather deck and securing of loose items  4.2 Describe how to turn a vessel in adverse weather, including manoeuvring an un-powered vessel | |
| 5. Know how to handle a vessel in response to emergency situations | | 5.1 Describe the precautions to be taken prior to and after grounding or collision to minimise damage to the vessel  5.2 Describe the manoeuvres for turning short round, emergency stop and man overboard | |
| Additional information about the unit | | This unit is designed for study by those working towards meeting the requirements for BML Tier 1 Level 1 Generic Underpinning Knowledge | |
| Unit aim(s) | | The aim of the unit is to provide the knowledge underpinning proficiency (in part) for taking charge of a domestic vessel in non-tidal waters, including the requirements (in part) for BML Tier 1 Level 1 Generic Underpinning Knowledge | |
| Unit expiry date | |  | |
| Details of the relationship between the unit and relevant national occupational standards (if appropriate) | | MSA Marine NOS 2012: B01, B02, B31 | |
| Details of the relationship between the unit and other standards or curricula (if appropriate) | | MCA syllabus for the BML Tier 1 Level 1 Generic Underpinning Knowledge | |
| Assessment requirements specified by a sector or regulatory body (if appropriate) | | Assessment will be by a combination of the following methods – assignment; knowledge based testing; project work; presentation; practical demonstration; other - as agreed in consultation with the external verifier | |
| Endorsement of the unit by a sector or other appropriate body (if required) | | Maritime Skills Alliance  Maritime & Coastguard Agency | |
| Location of the unit within the subject/sector classification system | | Transportation Operations and Maintenance | |
| Name of the organisation submitting the unit | | Skills for Logistics, for Maritime Skills Alliance | |
| Availability for use | | Unrestricted | |
| Availability for delivery | |  | |
| Guided Learning Hours | | 20 | |