Boat Notes Structure Mapped to MAR20313 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal) Version 2 080115

Boat Notes	Unit	Performance criteria	Performance Evidence	Knowledge Evidence
Chartwork				
1. Marine Chart	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Appropriate charts and publications are accessed and checked for currency	Identifying navigational hazards	Basic information contained in a navigation chart Chart information (symbols and abbreviations) Coastal features
2. Depth	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Navigational hazards are identified to avoid dangers to vessel	Identifying navigational hazards	Basic information contained in a navigation chart Chart information (symbols and abbreviations) Coastal features
3. Latitude and Longitude	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Destination is identified, and course and waypoints are plotted	Plotting the position derived from global positioning system (GPS) and explaining the dangers of reliance on the use of GPS in coastal areas	
4. Chart Scale	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Destination is identified, and course and waypoints are plotted	Establishing relationship between degrees and minutes of latitude, with nautical miles	Basic information contained in a navigation chart
5. GPS Position	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Destination is identified, and course and waypoints are plotted	Plotting the position derived from global positioning system (GPS) and explaining the dangers of reliance on the use of GPS in coastal areas	Basic information contained in a navigation chart Use of a compass and compass errors
6. Direction	MARH001 Plan and	Destination is identified, and	Identifying courses to steer	

Boat Notes	Unit	Performance criteria	Performance Evidence	Knowledge Evidence
	navigate a passage for a vessel up to 12 metres	course and waypoints are plotted	between turning points Plotting visual bearings on a chart to derive a position Steering a pre-planned course.	
7. Distance	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Destination is identified, and course and waypoints are plotted	Establishing relationship between degrees and minutes of latitude, with nautical miles	Basic information contained in a navigation chart
8. Fix	MARH001 Plan and navigate a passage for a vessel up to 12 metres		Plotting visual bearings on a chart to derive a position	
9. Compass Error	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Destination is identified, and course and waypoints are plotted	Identifying courses to steer between turning points Plotting visual bearings on a chart to derive a position	Use of a compass and compass errors
10. Course	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Destination is identified, and course and waypoints are plotted	Identifying courses to steer between turning points Plotting visual bearings on a chart to derive a position Steering a pre-planned course.	Basic information contained in a navigation chart Chart information (symbols and abbreviations) Coastal features Use of a compass and compass errors
11. Buoyage	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Safe passage is plotted to comply with all navigational buoys, marks and beacons	Identifying and complying with all navigational buoys, marks and beacons	Basic information contained in a navigation chart

Boat Notes	Unit	Performance criteria	Performance Evidence	Knowledge Evidence
		Navigational buoys, marks and beacons are identified and complied with		Chart information (symbols and abbreviations) Coastal features
	MARI001 Comply with regulations to ensure safe operation of a vessel up to 12 metres			International Association of Lighthouse Authorities (IALA) Buoyage System A
12. Buoyage Codes & Symbols	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Safe passage is plotted to comply with all navigational buoys, marks and beacons Navigational hazards are identified to avoid dangers to vessel	Identifying and complying with all navigational buoys, marks and beacons	Chart information (symbols and abbreviations) Coastal features Basic information contained in a navigation chart
	MARI001 Comply with regulations to ensure safe operation of a vessel up to 12 metres			International Association of Lighthouse Authorities (IALA) Buoyage System A
Time				
1. 24 Hour Time	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Estimated time of arrival (ETA) at waypoints and final destination are calculated	Identify times and heights of high and low water from local tide tables	
2. Add and Subtract Time	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Estimated time of arrival (ETA) at waypoints and final destination are calculated		Speed, distance and time calculations
3. Decimal Time	MARH001 Plan and navigate a passage for a			Speed, distance and time calculations

Boat Notes	Unit	Performance criteria	Performance Evidence	Knowledge Evidence
	vessel up to 12 metres			
Speed Distance Time				
1. SDT Calculations	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Estimated time of arrival (ETA) at waypoints and final destination are calculated	Specifying fuel consumption and time at turning points	Speed, distance and time calculations
2. Fuel Consumption	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Estimated time of arrival (ETA) at waypoints and final destination are calculated	Specifying fuel consumption and time at turning points	Speed, distance and time calculations
	MARC005 Operate inboard and outboard motors		Estimating fuel consumption	
	MARC006 Operate main propulsion unit and auxiliary systems		Estimating fuel consumption	
	MARH001 Plan and navigate a passage for a vessel up to 12 metres		Specifying fuel consumption and time at turning points	
Tides				
1. How Tides Work	MARH001 Plan and navigate a passage for a vessel up to 12 metres			
2. Tide Charts	MARH001 Plan and navigate a passage for a vessel up to 12 metres		Identifying times and heights of high and low water from local tide tables	Use of local tide tables
3. Tidal and Depth	MARH001 Plan and navigate a passage for a vessel up to 12 metres		Explaining impact of tidal variation on chart depths	basic information contained in a navigation chart
Weather				
1. Synoptic Chart	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Weather information is accessed to determine expected weather pattern for intended passage	Obtaining weather information applicable to an intended passage	Local weather patterns including features on a synoptic weather chart

Boat Notes	Unit	Performance criteria	Performance Evidence	Knowledge Evidence
			Applying weather information during passage planning and explaining expected weather patterns Correctly interpreting weather information received Relating information in forecasts to conditions expected for small vessels	Basic meteorological terms Sources of weather reports and warnings
2. Marine Weather Forecast	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Weather information is accessed to determine expected weather pattern for intended passage	Obtaining weather information applicable to an intended passage Applying weather information during passage planning and explaining expected weather patterns Correctly interpreting weather information received Relating information in forecasts to conditions expected for small vessels	Basic meteorological terms Sources of weather reports and warnings
3. Wind Warnings	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Weather information is accessed to determine expected weather pattern for intended passage	Obtaining weather information applicable to an intended passage Applying weather information	KE basic meteorological terms

Boat Notes	Unit	Performance criteria	Performance Evidence	Knowledge Evidence
			during passage planning and explaining expected weather patterns Correctly interpreting weather information received Relating information in forecasts to conditions expected for small vessels	
Navigation Maths				
1. Fraction Decimal Percent	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Fuel consumption for passage, including a reserve, is calculated		Speed, distance and time calculations
2. Rounding Numbers	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Fuel consumption for passage, including a reserve, is calculated		Speed, distance and time calculations
3. Degrees	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Destination is identified, and course and waypoints are plotted	Identifying courses to steer between turning points Plotting visual bearings on a chart to derive a position Steering a pre-planned course.	Use of a compass and compass errors
4. Gauges and Scales	MARB002 Perform basic servicing and maintenance of main propulsion unit and auxiliary systems		Reading and interpreting gauges	
5. Ratios for Fuel	MARC006 Operate main propulsion unit and auxiliary systems	Fuel consumption for passage, including a reserve, is calculated	Measuring and calculating volumes, consumption and servicing requirements	
6. Volume	MARC006 Operate main	Fuel is checked to ensure there	Measuring and calculating	

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	propulsion unit and auxiliary systems	is adequate fuel on board for intended passage	volumes, consumption and servicing requirements	
Passage Plan				
This area can contain assessment tools that encompass all of the previous sections to comply with the following: MARH001_R1 Range Statement- Passage Plan must include: • *anticipated weather conditions* • *courses to steer or knowledge of navigation markers during the passage* • *depths of water throughout the passage* • *ETA at destination* • *tidal information*	MARH001 Plan and navigate a passage for a vessel up to 12 metres	Destination is identified, and course and waypoints are plotted Estimated time of arrival (ETA) at waypoints and final destination are calculated Safe passage is plotted to comply with all navigational buoys, marks and beacons Fuel consumption for passage, including a reserve, is calculated	Applying weather information during passage planning and explaining expected weather patterns Correctly interpreting weather information received Identifying and complying with all navigational buoys, marks and beacons Identifying courses to steer between turning points.	Basic information contained in a navigation chart Local weather patterns including features on a synoptic weather chart Speed, distance and time calculations

Units mapped MAR20313 Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal)

- MARH001 Plan and navigate a passage for a vessel up to 12 metres
- MARB002 Perform basic servicing and maintenance of main propulsion unit and auxiliary systems
- MARC005 Operate inboard and outboard motors
- MARC006 Operate main propulsion unit and auxiliary systems
- MARI001 Comply with regulations to ensure safe operation of a vessel up to 12 metres