

Unit PSSPO104.2 Navigate port craft (SQA Unit Code-H782 04)

Performance Criteria

You must be able to

Navigate port craft

1. determine the craft's position, course and speed using the available navigation equipment
2. set the craft's course and speed using the available equipment and taking into account the current and required position, weather conditions, water depth and currents, tides and the craft's construction
3. set up and use the available navigation equipment, in line with recommended practice and the manufacturers' instructions, and interpret the resultant information
4. communicate the craft's position, course, speed and destination as required
5. report any defective equipment
6. monitor navigational broadcasts and warnings, taking the appropriate actions in response where necessary

Knowledge and understanding

You need to know and understand

1. the legal responsibilities for maintaining own and others' health and safety in the workplace
2. the requirements placed upon the individual and the organisation by current international and national legislation, port regulations and bye-laws, as they affect operations within ports, including the importance of the 'International Regulations for the Prevention of Collisions at Sea'
3. current industry guidance relevant to port vessel operations
4. own organisation's policies, procedures and working practices relevant to port vessel operations
5. the operating procedures, capabilities (including manoeuvring characteristics) and limitations of the types of vessel(s) within own area of operations
6. the effects of differing engine control positions on twin and single propeller craft
7. the effects of different rudder positions on the craft
8. the effects of using bow and stern thrusters, where these are fitted
9. how to use anchoring and mooring equipment
10. the importance of keeping a safe lookout
11. the importance of maintaining a safe speed, and the impact of restricted visibility when identifying a safe speed
12. the meaning of alarms on board vessels
13. how to interpret tidal and weather information and how different types of adverse weather can impact upon vessel movements within port areas
14. the importance of applying speed limits and the effect of the craft's speed upon other vessels, property and persons

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15. the impact of the motion of craft and tidal range upon berthing operations, and the effects of their interaction for other vessels
16. the role and responsibilities of those on board the vessels
17. organisational procedures for carrying out and recording pre-sailing checks, including those for recording difficulties and faults found
18. organisational manoeuvring procedures for craft within the port environment
19. the design specifications relating to the use of engines and helm within the craft operated
20. workplace procedures for dealing with emergency situations on board craft, including person overboard
21. local geography and water conditions, including navigable channels and tides, and their impact upon manoeuvring craft within own port
22. the use and location of safety equipment on board the vessel, including the operation of emergency/bilge pumps and CO2 smothering equipment
23. the importance of set and leeway, in setting course and the different types of courses, including true, magnetic, compass and gyro and the impact of deviation and variation
24. how to select and interpret information within charts and navigation techniques
25. how to use electronic navigation aids, such as GPS, chart plotter and radar, and the limitations of navigation equipment
26. the use of buoyage systems and navigation lights
27. how to use tidal stream atlases, tide tables, Nautical Almanacs and pilot/sailing directions
28. organisational procedures for reporting defective equipment
29. the organisations requirements relating to recording the movements of craft within own port
30. techniques for surviving in the water, techniques for rescuing a person from water and basic first-aid, including resuscitation and the basic recognition and treatment for the onset of hypothermia
31. procedures for raising fire alarms, and for isolating areas on board vessels
32. firefighting techniques to be used on different types of fire
33. the functions of the various parts of unpowered craft, and methods of manoeuvring
34. the procedures for making up a tow –alongside, astern and pushing, both for single and multiple craft
35. how to use towing equipment, and the importance of the equipment's breaking strains
36. the principal dangers associated with towing operations and the actions appropriate to minimising these
37. organisational requirements for addressing and reporting difficulties and faults in craft, gear and equipment
38. organisational procedures for gaining access to craft as they apply to self and any passengers
39. the location of, and how to use, the first-aid, safety and emergency equipment within the port

Glossary

Hazard: something with potential to cause harm

Risk: a risk is the likelihood of the hazard's potential being realised