-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

Hanover House
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- **0068675** **-Session-1986-87**
-Superclass- **ZF**

-Title- **SIMULATION OF REAL TIME ELECTRONIC NAVIGATION**

-DESCRIPTION-

Type and Purpose

A specialist module which, by combining the use of electronic navigation systems, chartwork, International Regulations for Preventing Collisions at Sea and bridge team work, enables the student to operate in a manner which simulates the bridge of a ship in a marine environment.

Preferred Entry Level

Completion of ENS Theoretical Studies.

Learning Outcomes

The student should:

1. plan the use of bridge equipment for a particular passage;
2. assess the proper action to take in a hazardous encounter between ships in restricted visibility;
3. control the vessel when a hazard has been further escalated;
4. co-ordinate the activities of bridge personnel to obtain a desired objective;
5. communicate in the prescribed manner.

Content/ Context

Corresponding to the Learning Outcomes:

1. When, and how, the bridge equipment is to be used in the watch period plus methods of monitoring the accuracy of the equipment.

2. Radar plotting using a reflection plotter, plotting sheet, ARPA and chart plotting to determine the appropriate methods given a specific traffic condition.

3. Manoeuvring a simulated ocean going vessel in accordance with the International Regulations for Preventing Collisions at Sea.

4. Manoeuvring, navigating, radar plotting and communicating in close proximity to another vessel.

5. Communicating effectively using all relevant methods available on the bridge.

Suggested Learning and Teaching Approaches

A pre-exercise briefing should set the scene and the objectives. The exercise should proceed from a basic phase to advanced conditions and situations depending on the students' learning rate and experience. At the end of the exercise the students should be de-briefed with the assistance of graphical and VDU recordings, showing the progress of the student manned ship.

Conclusions should be drawn and alternative strategies discussed.

Assessment Procedures

Checklists should be used for formative assessment of learning outcomes 1-5 inclusive. The student should be kept informed of progress throughout and remedial tuition should be provided in a suitable form when appropriate. Learning outcomes 1-5 inclusive should be summatively assessed by the following checklist. A tick or cross should be used to record satisfactory/unsatisfactory performance. Satisfactory performance in all items of the checklists on two occasions should be considered as adequate evidence that the student has achieved the learning outcomes.

Checklist

The student correctly:

1. recognises the available bridge equipment;

2. assesses the particular problems and /or hazards associated with a particular voyage;

3. plans the use of bridge equipment for a particular voyage;

4. informs bridge personnel of planned use of equipment;

5. allocates tasks to bridge personnel in accordance with planned use of equipment;

6. assesses and takes appropriate action in a hazardous encounter between two ships in restricted visibility;

7. recognises a state of extreme danger;

8. orders appropriate action in a state of extreme danger;

9. takes steps to ensure that orders are carried out;

10. takes steps to ensure that the manoeuvre is satisfactorily completed.