

## **PILOTAGE ADVISORY COMMITTEE**

### **Revised Examination Syllabuses for Class I and Class II Pilots**

#### **Purpose**

The purpose of this paper is to seek members' endorsement on the Revised Examination Syllabuses for Class I and Class II Pilots.

#### **Background**

2. The current examination syllabuses for Class I and Class II pilots (Appendices I and II) had been used for many years. To tie in with changes of the pilotage environment and in response to the recommendations made in the IMO Resolution A960, a revision of the syllabuses was considered necessary. PAC Paper No. 1/2005 on this subject was therefore prepared and discussed at the PAC meeting held on 7 February 2005. Comments from members were received at the meeting. The syllabuses were then further studied and revised.

#### **Consultation**

3. The further revised examination syllabuses for Class I and Class II pilots in Appendices III and IV were discussed and endorsed by all members after the fifth meeting of the Working Group on Training and Certification for Pilots held on 14 June 2005.

#### **Recommendation**

4. Members of the Pilotage Advisory Committee are recommended to endorse the revised syllabuses in Appendices III and IV.

*Marine Department  
June 2005*

Appendix I

Class I Pilots

Examination Syllabus

Practical Examination

The practical examination should consist of one berthing of a Class IIA type vessel at a dry cargo, container berth and one daylight berthing of an oil tanker.

The parameters to be used for upgrading to Class I :

- (i) The range of container vessel should be between 200 metres and 229 metres in length and to berth at Kwai Chung wharf.
- (ii) The range of dry cargo vessel/bulker should be between 200 metres and 229 metres in length and to any wharf.
- (ii) The range of oil tanker should be between 168 metres and 229 metres in length and any oil tanker berth.

Oral Examination

A comprehensive knowledge of :-

- (a) Tidal streams, depths and shoals throughout the waters of the Colony.
- (b) Characteristics of all lights, buoys and beacons throughout Hong Kong waters.
- (c) Depths and scope of berth at all Government mooring buoys.
- (d) Prohibited areas, anchorages and areas of restriction of any kind. (These will be indicated by the candidate on a blackboard plan of Hong Kong waters.)
- (e) Berthing at various wharves, piers, buoys etc. in Hong Kong. (Models will be used for demonstration.)
- (f) Port signals and International signals by means of lights or sound.
- (g) Emergency measures.

NOTE

- (i) It is assumed the candidate will be the holder of a VHF operators certificate of competency.
- (ii) Candidates who are not holders of F.G. Certificates of Competency as Master will also be thoroughly examined on Rule of the Road.
- (iii) Candidates will be expected to achieve a higher standard in the oral examination than Class II candidates.

Class II Pilots

Examination Syllabus

Written Examination - Pilotage Principles

- (a) General handling characteristics of various types of vessels including the limitations imposed by different types of machinery.
- (b) Precautions to be taken when passing close to other vessels underway or at moorings.
- (c) The effects of and the uses to which transverse thrust may be put. The effects when used in conjunction with a bow thruster.
- (d) Turning short round. The use of the anchor when manoeuvring or berthing.
- (e) The effects of wind, current, shallows and draught on manoeuvring.
- (f) The use of tugs and precautions to be taken.
- (g) Precautions to take when using lines to mooring buoy.

Relationship with Masters

- (a) Information which pilot should obtain from the Master upon boarding e.g. Handling characteristics of ship, type of cargo, (D.G. etc.) damage to ship which might affect handling.
- (b) Information which the pilot should offer to Master upon boarding e.g. Preparations for mooring, berthing, anchoring, signals required, use of VHF etc.
- (c) Advice to Masters riding out typhoons in Hong Kong harbour or anchorages.
- (d) Undue interference from the Master.

Oral Examination

A comprehensive knowledge of :-

- (a) Tidal streams, depths and shoals throughout the waters of the Colony.
- (b) Characteristics of all lights, buoys and beacons throughout Hong Kong waters.
- (c) Depths and scope of berth at all Government mooring buoys.

- (d) Prohibited areas, anchorages and areas of restriction of any kind. (These will be indicated by the candidate on a blackboard plan of Hong Kong waters.)
- (e) Berthing at various wharves, piers, buoys etc. in Hong Kong. (Models will be used for demonstration.)
- (f) Port signals and International signals by means of lights or sound.
- (g) Emergency measures.

NOTE

- (i) It is assumed the candidate will be the holder of a VHF operators certificate of competency.
- (ii) Candidates who are not holders of F.G. Certificates of Competency as Master will also be thoroughly examined on Rule of the Road.

**Class I Pilots  
Examination Syllabus  
(Revised Version, June 2005)**

Practical Examination

The practical examination should consist of three berthings as follows:

- (i) Berthing a container vessel of not less than 260m in length to Kwai Chung terminal.
- (ii) Berthing a dry cargo vessel/bulker of not less than 260m\*<sup>1</sup> in length to any dry cargo vessel/bulker berth.
- (iii) Berthing an oil tanker of not less than 260m\*<sup>2</sup> in length to any oil tanker berth.

\*<sup>1</sup> If a dry cargo vessel/bulker of not less than 260m is not available within 3 months prior to the date of upgrading, the candidate may take the practical examination with a dry cargo vessel/bulker of less than but as far as practical close to 260m in length.

\*<sup>2</sup> If an oil tanker of not less than 260m is not available within 3 months prior to the date of upgrading, the candidate may take the practical examination with an oil tanker of less than but as far as practical close to 260m in length.

Oral Examination

A comprehensive knowledge of:

- (i) Tidal streams, depths and shoals throughout Hong Kong waters.
- (ii) Characteristics of all lights, buoys, beacons, bridge lighting system and harbour facilities throughout Hong Kong waters.
- (iii) Depths and scope of berth at all Government mooring buoys.
- (iv) Limits of local pilotage areas including prohibited areas, anchorages and areas of restriction of any kind.  
(These will be indicated by the candidate on a plan of Hong Kong waters.)

- (v) Berthing and unberthing at various wharves, piers, buoys, etc. in Hong Kong under the influence of wind, current and tide. (Models will be used for demonstration.)
- (vi) Manoeuvring behaviour of the types of ships expected to be piloted and the limitations imposed by particular propulsion and steering systems
- (vii) Use and limitation of various types of tugs
- (viii) The bridge equipment and navigational aids used for navigation, i.e. radar, Automatic Identification System (AIS), Electronic Chart Display and Information System (ECDIS), etc.  
(It is assumed the candidate is able to transmit distress signal by using VHF Digital Selective Call (DSC).)
- (ix) Systems of radio navigational warning broadcasts in Hong Kong and the type of information broadcast.
- (x) International Regulations for Preventing Collisions at Sea 1972 as amended, and port regulations and pollution prevention rules.
- (xi) Use of VHF in accordance with the International recognized standards
- (xii) Hong Kong Merchant Shipping Notice and Hong Kong Merchant Shipping Information Note
- (xiii) Handling emergency conditions, i.e. collision with other vessel, grounding, loss of steering, loss of propulsion, failure of vital systems and automation etc., in a narrow channel or fairway.

Note

- (i) *Examination Syllabus of Class II Pilots may be included in Class I examination.*
- (ii) *Candidates will be expected to achieve a higher standard in the oral examination than Class II candidates.*
- (iii) *Candidates will be required to produce their training record to the examiners, including a record of any internal and external training and courses attended.*

**Class II Pilots  
Examination Syllabus  
(Revised Version, June 2005)**

Written Examination

- (i) Knowledge of Pilotage Ordinance (Cap. 84) and the Berthing Guidelines
- (ii) Navigational knowledge of the Hong Kong waters:
  - (a) Tidal streams, depths and shoals throughout Hong Kong waters.
  - (b) Characteristics of all lights, buoys, beacons, bridge lighting system and harbour facilities throughout Hong Kong waters.
  - (c) Depths and scope of berth at all Government mooring buoys.
  - (d) Limits of local pilotage areas including prohibited areas, anchorages and areas of restriction of any kind.
- (iii) Knowledge of ship handling:
  - (a) Berthing and unberthing at various wharves, piers, buoys, etc. in Hong Kong under the influence of wind, current and tide.
  - (b) Manoeuvring behaviour of the types of ships expected to be piloted and the limitations imposed by particular propulsion and steering systems.
  - (c) Precautions to be taken when passing close to other vessels underway or at moorings.
  - (d) The effects of and the uses to which transverse thrust may be put. The effects when used in conjunction with a bow thruster.
  - (e) Turning short round. The use of the anchor when manoeuvring or berthing.

- (f) Use and limitation of various types of tugs
- (g) Precautions to be taken when using lines to mooring buoy.
- (iv) Relationship with Master:
  - (a) Information which pilot should obtain from Master upon boarding e.g. Handling characteristics of ship, type of cargo, (D.G., etc.) damage to ship which might affect handling.
  - (b) Information which pilot should offer to Master upon boarding e.g. Preparations for mooring, berthing, anchoring, signals required, use of VHF etc.
  - (c) Advice to Master riding out typhoons in Hong Kong harbour or anchorages.
  - (d) Undue interference from Master.
- (v) Handling emergency conditions, i.e. collision with other vessel, grounding, loss of steering, loss of propulsion, failure of vital systems and automation etc., in a narrow channel or fairway.

### Oral Examination

A comprehensive knowledge of:

- (i) Syllabus contained in the written examination
- (ii) The bridge equipment and navigational aids used for navigation, i.e. radar, Automatic Identification System (AIS), Electronic Chart Display and Information System (ECDIS), etc.  
(It is assumed the candidate is able to transmit distress signal by using VHF Digital Selective Call (DSC).)
- (iii) Systems of radio navigational warning broadcasts in Hong Kong and the type of information broadcast.



- (iv) International Regulations for Preventing Collisions at Sea 1972 as amended, and port regulations and pollution prevention rules.
- (v) Use of VHF in accordance with the International recognized standards
- (vi) Hong Kong Merchant Shipping Notice and Hong Kong Merchant Shipping Information Note
- (vii) Collection of evidence in incidents

Note

- (i) *Candidates will be required to produce their training record to the examiners, including a record of any internal and external training and courses attended.*