

PILOTAGE ADVISORY COMMITTEE

Proposed Amendment to the Examination and Training of Pilots

Purpose

The purpose of this paper is to seek members' endorsement on the proposed training requirements, practical assessments and experience requirements for different classes of pilots.

Background

2. At the Pilotage Advisory Committee (PAC) meeting held on 15 December 2010, due to the increase of vessel sizes calling the port, members agreed to review the demarcation of the classes of pilots and the associated training and experience requirements. Members further suggested that a working group should be set up to discuss and set out the training requirement, practical assessment arrangement as well as the experience required for the proposed new classes of pilots at the PAC meeting held on 18 May 2012.

3. The PAC Working Group (WG) then held a meeting on 26 June 2012 to discuss the issues. The WG has fully examined the existing examination requirement which was endorsed by the PAC in 1995 as at Annex 1. The experience requirements as stipulated at Schedule 1 and 3 to Cap 84C at Annex II and the internal training and assessment at Annex III that conducted by Hong Kong Pilots Association (HKPA) were also studied. The review revealed that the service experience for upgrading of individual class of pilot and examination requirement for apprentice and Class IIA pilots are appropriate and in order.

4. In view of the provision of pilotage service to mega size vessels calling the port, the WG further reviewed the demarcation of the classes of pilots; the maximum length of vessels to be handled by each class of pilot; the experience and training requirements as well as assessment arrangement and identified the problem as described in the ensuing paragraphs.

Problems

Gap between Class IIA and Class I Pilots

5. The current Class IIA pilot only covers vessels of up to 260m in length while there is no length restriction for Class I pilot. However, today's ultra large container ships (ULCS) visiting Hong Kong are almost 400m in length. Thus, more experienced Class I pilots would be needed to fill the gap in providing pilotage service to these ULCS that are much larger and more demanding in respect of ship handling skills.

Training and Assessment

6. At present, simulation training and practical assessment are not required for all classes of pilots except Class IIA pilots which required three practical assessments before proceeding for examination for Class I licence. For advancement to the next higher class of pilotage, they are trained and assessed by HKPA under the current training and assessment arrangements. Such arrangement is considered insufficient to ensure the pilotage proficiency of the pilots at a higher class. It is also inconsistent with the training and assessment requirements for apprentice pilots and the Continued Proficiency Development Programme (CPDP) of the Class I pilots.

Uneven Distribution of Maximum Vessel Length

7. It is also noted that the existing distribution of maximum vessel lengths for different classes of Class II pilots was non-linear and uneven.

The difference between Class IIC & IIB is 55m while it is 15m and 40m between IID & IIC and IIB & IIA respectively. The uneven distribution does not tally with the linear experience requirement for upgrading to the next class of pilotage.

Proposal

8. Based on the problems that identified above, it is proposed to add two new classes of pilotage, namely IIE and IIF to extend the serviceable vessel lengths of Class II pilots. In effect, the pilotage service that provided by existing Class IIA pilots will be taken up by the proposed Class IIC pilots. It is also proposed that the length of vessel for each class from IIF to IIA should be revised and distributed more evenly from 160m to 350m. Such introduction will ensure a Class II pilot has acquired the experience in handling larger vessels before being upgraded to Class I.

9. For the proposed new entry level Class IIF pilotage, the maximum ship's length to be handled will be increased from 150 metres to 160 metres. To ensure their competency, it is suggested that MD, apart from simulation trainings, to jointly conduct one of the four practical assessments for the apprentice pilots with HKPA before they proceed for the oral and written examination of Class IIF licence. The same arrangement on joint practical assessment is also suggested for Class IID pilotage.

10. At present, all Class I pilots are required to attend a simulation training on ship handling and crises management for different scenarios at the Marine Department Training Centre under the CPDP. The simulation scenarios are tailor-made to improve Class I pilots' ability in handling difficult situation such as engine or steering gear failure and adverse weather conditions including poor visibility, strong current and wind etc. To enhance the competence of Class II pilots in handling difficult situations and to

improve navigation safety, it is proposed that similar tailor-made simulation training commensurate with the next higher class should also be required for the licence amendment of all Class II pilots. The simulation training will be conducted by HKPA and Marine Department while PAC member will be invited to attend as observers.

11. The proposed experience, training and assessment requirements as well as examination arrangement for each class of pilot are listed in Annex IV.

Recommendation

12. The above proposed revisions had been discussed and agreed by members of the PACWG meeting held on 26 June 2012. Members are recommended to endorse the proposal.

Vessel Traffic Services Branch
Marine Department
January 2013

Current Training and Examination Arrangement with Pilotage Authority

Pilot Class	Maximum Length	Assessment for Upgrading to next higher class
I	Any Length	
II A	260m	Oral Examination (by PAC members) 3 practical assessments
II B	220m	
II C	165m	
II D	150m	
Apprentice		Oral & Written Examinations (by PAC members)

Cap 84C Schedule 1

1. The applicant must have accompanied a licensed pilot-

- (a) during the pilotage of a ship to or from an anchorage on at least 20 occasions, of which at least 10 must have commenced during the hours between sunset and sunrise;
- (b) during the pilotage of ship to a mooring on at least 40 occasions, of which at least 20 must have commenced during the hours between sunset and sunrise;
- (c) during the pilotage of a ship from a mooring on at least 25 occasions, of which at least 12 must have commenced during the hours between sunset and sunrise;
- (d) on at least 2 occasions when a ship was rounding Hong Kong Island;
- (e) during the pilotage of a container ship exceeding 250 metres in length through Ma Wan channel on at least 5 occasions, of which at least 2 must have commenced during the hours between sunset and sunrise;
- (f) on at least 2 occasions when a ship was being piloted outside Victoria Harbour for the purposes of-
 - (i) compass adjustment;
 - (ii) direction finder calibration; and
 - (iii) speed trials or engine trials;
- (g) on at least the number of occasions specified in the third column of the following Table 1 when a ship was being berthed, unberthed, docked or undocked at or from the wharves, berths or docks specified in the second column of that Table; and
- (h) during the pilotage of a naval ship to or from an anchorage or a mooring on at least 4 occasions.

TABLE 1

Item	Wharf/Berth/Dock	Number of Occasions
1.	Tsim Sha Tsui, Kowloon-	} 4 berthings and 4 unberthings (of which 1 berthing and 1 unberthing must have commenced during the hours between sunset and sunrise) of a ship of any length at either or both of these berths, and 1 berthing and 1 unberthing of a ship of any length at South (Inner) or North (Inner) when another ship of any length was occupying South (Outer) or North (Outer).
	Ocean Terminal Wharf-	
	South Berth-	
	(Inner)	
	(Outer)	
	North Berth-	
	(Inner)	
	(Outer)	
2.	Kwai Chung-	} 3 berthings and 3 unberthings (of which 1 berthing and 1 unberthing must have commenced during the hours between sunset and sunrise) of a ship of any length at each berth, and 1 berthing and 1 unberthing of a ship
	Container Terminal Wharf-	
	Berth No. 1	
	Berth No. 2	
	Berth No. 3	

Berth No. 4	}	exceeding 275 metres in length at each berth.
Berth No. 5		
Berth No. 8		
Berth No. 9		
Berth No. 6	}	3 berthings and 3 unberthings (of which 1 berthing and 1 unberthing must have commenced during the hours between sunset and sunrise) of a ship exceeding 168 metres in length at each berth when another ship of the same length or longer was occupying part of the berth.
Berth No. 7		
Berth No. 10		
Berth No. 11		
Berth No. 12		
Berth No. 13		
Berth No. 14		
3. (Repealed L.N. 283 of 1998)		
4. Tsing Yi Island- Petroleum Wharves- (Mobil) (Esso) (Caltex)	}	4 berthings and 3 unberthings of a ship of any length at each wharf.
(China Resources Company main berth)		
(Shell main berth)	}	2 berthings and 2 unberthings of a ship of any length at each berth.
(China Resources Company, east inner berth and west inner berth)	}	1 berthing and 1 unberthing of a ship of any length.
(Shell inner LPG berth)	}	1 berthing and 1 unberthing of a ship of any length at each berth.
H.K. United Dockyards Seawalls Wharf		2 dockings and 2 undockings of a ship of any length at one or more of these docks.
Euro-Asia Seawall Yiu Lian Seawall		
Floating Docks- (Whampao) (Yiu Lian No. 1)	}	2 dockings and 2 undockings of a ship of any length at one or more of these docks.
5. Yam O		
Floating Docks- (United) (Yiu Lian No. 3)		
(Yiu Lian No. 5)		
6. Lok On Pai		1 berthing and 1 unberthing of a ship of any

7. Tap Shek Kok-
Power Station Terminal Wharf
length.
5 berthings and 5 unberthings of a ship exceeding 168 metres in length, with at least 2 of such berthings being starboard side alongside when direct inbound from Green Island.
3 berthings and 3 unberthings of a ship exceeding 168 metres in length.
China Cement Company Wharf
8. Lamma Island-
Po Lo Tsui-
3 berthings and 3 unberthings of a ship exceeding 168 metres in length.
Power Station Terminal Wharf
1 berthing and 1 unberthing of a ship of any length.
9. Sok Kwu Wan-
Cement Wharf
Hong Kong Island-
Kennedy Town-
1 berthing and 1 unberthing of a ship of any length.
China Merchant Wharf
10. Tai Po-
Town Gas Wharf
1 berthing and 1 unberthing of a ship of any length.

2. The applicant must have been an observer on a tug specified in the second column of the following Table 2 on at least the number of occasions specified in the third column of that Table when the tug was attending a ship and performing a towage berthing, unberthing, docking or undocking service.

TABLE 2

Item	Type of Tug	Number of Occasions
1.	Duck-peller/Z-peller type with engine power of 4000 hp or above.	5
2.	Duck-peller/Z-peller type with engine power of 2000 hp or above.	20
3.	Single screw conventional type with engine power less than 1000 hp.	5

3. The applicant must have been an observer on the wharves or berths specified in the second column of the following Table 3 on at least the number of occasions specified in the third column of that Table.

TABLE 3

Item	Wharf/Berth	Number of Occasions
1.	Tsim Sha Tsui, Kowloon- Ocean Terminal Wharf- South Berth- (Inner) (Outer) North Berth- (Inner) (Outer)	} 1 berthing at flood tide and 1 berthing at ebb tide of a ship of any length at both of these berths.
2.	Kwai Chung- Container Terminal Wharf- Berth No. 1 Berth No. 2 Berth No. 3 Berth No. 4 Berth No. 8 Berth No. 9	} 1 berthing of a ship of any length at each berth.
	Berth No. 5 Berth No. 6 Berth No. 7 Berth No. 10 Berth No. 11 Berth No. 12 Berth No. 13 Berth No. 14	} 1 berthing at flood tide and 1 berthing at ebb tide of a ship of any length at each berth.
3.	Tsing Yi Island- H.K. United Dockyards Seawalls Wharf	2 berthings and 2 unberthings of a ship of any length.
4.	The applicant must have been an observer on a mooring boat on at least 5 occasions when the boat was attending a ship being secured to a mooring.	
5.	The applicant must have been attached to the Marine Department for at least 2 weeks.	

Cap 84C Schedule 3

Class of Pilotage	Experience required
IID	<p>(a) Pilotage of ships of not less than 107 metres and not more than 150 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(b) Berthing and unberthing of ships of not less than 107 metres and not more than 150 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
IIC	<p>(a) A minimum of 12 months continuous experience in Class IID.</p> <p>(b) Pilotage of ships of not less than 150 metres and not more than 165 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(c) Berthing and unberthing of ships of not less than 150 metres and not more than 165 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
IIB	<p>(a) A minimum of 12 months continuous experience in Class IIC.</p> <p>(b) Pilotage of ships of not less than 165 metres and not more than 220 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(c) Berthing and unberthing of ships of not less than 165 metres and not more than 220 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
IIA	<p>(a) A minimum of 12 months continuous experience in Class IIB.</p> <p>(b) Pilotage of ships of not less than 220 metres and not more than 260 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(c) Berthing and unberthing of ships of not less than 220 metres and not more than 260 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
I	A minimum of 12 months continuous experience in Class IIA.

Current Training and Assessment Arrangement by HKPA

Pilot Class	Maximum Length	Training & Assessment for upgrading to next higher class
I	Any Length	Continued Proficiency Development Programme (including simulation practice in a 5-year cycle since 2007)
II A	260m	
II B	220m	2 practical vessel-training 1 practical assessment
II C	165m	2 practical vessel-training 1 practical assessment
II D	150m	2 practical vessel-training 1 practical assessment
Apprentice	Training as per Cap. 84C Schedule 1	4 practical assessments Simulation practice (since 2004)

Proposed Training, Assessment and Examination Arrangement

Pilot Class	Maximum Length (Proposed)	Training & Assessment for Upgrading to next higher class
I	Any length	Continued Proficiency Development Programme (including simulation practice in a 5-year cycle since 2007)
II A	350m	Oral Examination (by PAC members) 3 joint practical assessments by HKPA and MD Simulation training conducted by HKPA and MD
II B	300m	2 practical vessel-training 1 practical assessment by HKPA Simulation training conducted by HKPA and MD
II C	250m	2 practical vessel-training 1 practical assessment by HKPA Simulation training conducted by HKPA and MD
II D	210m	2 practical vessel-training 1 joint practical assessment by HKPA and MD Simulation training conducted by HKPA and MD
II E (new)	180m	2 practical vessel-training 1 practical assessment by HKPA Simulation training conducted by HKPA and MD
II F (new)	160m	2 practical vessel-training 1 practical assessment by HKPA Simulation training conducted by HKPA and MD
Apprentice	Training as per Cap. 84C Schedule 1	4 practical assessments, of which, 1 shall be jointly assessed by HKPA and MD Simulation training conducted by HKPA and MD Oral & Written Examinations (by PAC members)

Remarks: All practical vessel training and assessments are set for vessel of next higher class.

For both the simulation training and practical assessment, PAC members would be invited to attend as observers.

PROPOSED REQUIREMENT

Class of Pilotage	Experience required
IIF	<p>(a) Pilotage of ships of not less than 107 metres and not more than 160 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(b) Berthing and unberthing of ships of not less than 107 metres and not more than 160 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
IIE	<p>(a) A minimum of 12 months continuous experience in Class IIF.</p> <p>(b) Pilotage of ships of not less than 160 metres and not more than 180 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(c) Berthing and unberthing of ships of not less than 160 metres and not more than 180 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
IID	<p>(a) A minimum of 12 months continuous experience in Class IIE.</p> <p>(b) Pilotage of ships of not less than 180 metres and not more than 210 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(c) Berthing and unberthing of ships of not less than 180 metres and not more than 210 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
IIC	<p>(a) A minimum of 12 months continuous experience in Class IID.</p> <p>(b) Pilotage of ships of not less than 210 metres and not more than 250 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(c) Berthing and unberthing of ships of not less than 210 metres and not more than 250 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
IIB	<p>(a) A minimum of 12 months continuous experience in Class IIC.</p> <p>(b) Pilotage of ships of not less than 250 metres and not more than 300 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(c) Berthing and unberthing of ships of not less than 250 metres and not more than 300 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
IIA	<p>(a) A minimum of 12 months continuous experience in Class IIB.</p> <p>(b) Pilotage of ships of not less than 300 metres and not more than 350 metres in length to or from buoys or anchorages on at least 10 occasions, of which at least 5 must commence during the hours between sunset and sunrise.</p> <p>(c) Berthing and unberthing of ships of not less than 300 metres and not more than 350 metres in length from wharves, berths, docks or piers on at least 20 occasions, of which at least 10 must commence during the hours between sunset and sunrise.</p>
I	A minimum of 12 months continuous experience in Class IIA.