

HB 1944

HOUSE COMMITTEE REPORT

(11)

Date Referred: May 14, 1991

FURTHER REFERRALS:

Date of Committee Action: 5/14/91

The FINANCE Committee considered:

HB 194

HOUSE BILL NO. 194

REGULATION OF MARINE PILOTS

"An Act relating to the Board of Marine Pilots, marine pilots, and marine pilot organizations; and providing for an effective date."

RECOMMENDATIONS: the same title
 be replaced with CS HB 194 (FIN) a new title

have attached amendments(s)

do pass

do not pass

no recommendations

individual recommendations

additional referral to the _____ Committee

ADOPTS: _____ letter of Intent

ATTACHES NEW FISCAL NOTE(S): (Dept)

APPROVES PREVIOUS: (Dept/Date)

fiscal impact CED

fiscal note(s) _____

zero fiscal note _____

zero fiscal note(s) _____

SIGNING DO PASS	DP	OTHER RECOMMENDATIONS	DNP	NR	AM
<i>Mike Navarre</i> NAVARRE	✓	<i>George Jacko</i> JACKO			
<i>Mark Boyer</i> Boyer	X				
<i>Paul Brown</i> Brown	✓				
<i>John Koponen</i> KOPONEN	✓				
<i>James Buines</i> Buines	X				
<i>Ross Phillips</i> Phillips	✓				
<i>John Ulmer</i> Ulmer	X				
<i>Robert Laisola</i> LAISOLA	X				

Mike Navarre NAVARRE
 CO-CHAIRMAN'S SIGNATURE

FISCAL NOTE

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NO. CSHB 194 (FIN)

Revision Date: _____ Department Affected: Commerce & Economic Dev.
 Title: Relating to the Board of Marine Pilots, marine pilots, BRU: Occupational Licensing
 Component: Administration
 Sponsor: Rep. C. Davis, et al
 Requestor: House Judiciary COMPONENT SERIAL NO.

0	3	5	6
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Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
PERSONAL SERVICES	72.3	72.3	72.3	72.3	72.3	72.3
TRAVEL	10.0	10.0	10.0	10.0	10.0	10.0
CONTRACTUAL	10.0	10.0	10.0	10.0	10.0	10.0
SUPPLIES	1.0	1.0	1.0	1.0	1.0	1.0
EQUIPMENT	10.0					
LAND & STRUCTURES						
GRANTS. CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	103.3	93.3	93.3	93.3	93.3	93.3

CAPITAL						
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REVENUE	0	131.6	0	131.6	0	131.6
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FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER GF/PR	103.3	93.3	93.3	93.3	93.3	93.3
TOTAL	103.3	93.3	93.3	93.3	93.3	93.3

POSITIONS:

FULL-TIME	1	1	1	1	1	1
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

Estimate of current year impact: None

ANALYSIS: (Attach a separate page if necessary.)

(SEE ATTACHED)

Prepared By: Jennifer Strickler, Admin. Officer Phone: 465-2144
 Division: Occupational Licensing Date: May 14, 1991
 Approved by Commissioner: Glenn A. Olds
 Agency: Commerce and Economic Development Date: 5-14-91

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

FISCAL NOTE ANALYSIS

CSHB 194 (JUD)

The bill makes a number of amendments to the Marine Pilotage Act. The expenses identified in this fiscal note result from paying for audits to collect information needed to apply standards as mentioned in Section 2, and the employment of a Marine Pilot Coordinator established by Section 4.

The bill places the Marine Pilot Coordinator in the partially exempt service of State government and is charged with the responsibility to administer and enforce the chapter. The costs identified are based on a similar Executive Director position, Range 22.

Personal Services:

Marine Pilot Coordinator, XE, 12 months, \$72.3
Range 22A

Travel: 10.0

Funding of \$10.0 will cover travel and per diem expenses for the marine pilot coordinator to conduct audits, review training programs, and to enforce compliance with the marine pilotage act.

Contractual Services: 10.0

This funding will provide for communications, postage, printing, advertising, and auditing costs.

Supplies: 1.0

Funding will provide for daily operating supplies for the Marine Pilot Coordinator position.

Equipment: 10.0

Funding will provide one-time equipment costs for the Marine Pilot Coordinator position. This funding will also provide for on-going office space costs.

TOTAL COSTS: \$103.3

Revenues:

There are approximately 123 licensed marine pilots whose licensing fees must be increased to cover the new costs provided in the bill. In addition, current expenses of the Board of Marine Pilots exceed revenues generated from licensing fees to support its licensing program.

Licensing fees must be raised to cover an additional \$131.7 (an average of the new costs identified in this fiscal note for the first two years, \$98.3, and the current deficit of \$33.4), totalling \$131.7. Therefore, a biennial licensing fee of \$1,070 (\$535 per year) will be necessary to cover the additional program costs ($\$1,070 \times 123 = \131.6). Marine Pilot licensees currently pay a biennial fee of \$180 (\$90 per year). If licensing fees are not increased to cover program costs, the program must then be supported by the general fund.

Since marine pilot licenses are due for renewal on December 31, 1992 (FY 93), revenues will not be collected in the first year of operation under provisions of CSHB 194(JUD). Funding in the first year must therefore be covered by general funds, unless a special one time assessment fee is made to licensees in FY 92.

The revenues identified in this fiscal note are based on the assumption that licensees will be willing to increase their fees to fully cover the costs of its licensing program beginning in FY 93 during the license renewal period.

CS FOR HOUSE BILL NO. 194 (FINANCE)
 IN THE LEGISLATURE OF THE STATE OF ALASKA
 SEVENTEENTH LEGISLATURE - FIRST SESSION

BY THE HOUSE FINANCE COMMITTEE

Offered:
 Referred:

Sponsor(s): REPRESENTATIVES C.DAVIS, G.Phillips, Hudson, Koponen, B.Davis, Taylor, Choquette, Baker, Sharp

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to the Board of Marine Pilots, marine pilots, investigations of marine
 2 accidents, and training fees; and extending the termination date of the Board of Marine
 3 Pilots."

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

5 * Section 1. AS 08.03.010(c)(12) is amended to read:

6 (12) Board of Marine Pilots (AS 08.62.010) -- June 30, 1995 [1991];

7 * Sec. 2. AS 08.62.040 is amended to read:

8 Sec. 08.62.040. POWERS AND DUTIES. (a) The board shall

9 (1) provide for the maintenance of efficient and competent pilotage [PILOT]
 10 service on all inland and coastal water of the state [WATERS COVERED BY THIS
 11 CHAPTER] to assure the protection of shipping, [AND] the safety of human life and property,
 12 and the protection of the marine environment;

13 (2) consistent with the law, adopt regulations, subject to the Administrative
 14 Procedure Act (AS 44.62), establishing the qualifications of and required training for pilots and

1 providing for the examination of pilots and the issuance of original or renewal pilot licenses to
2 qualified persons;

3 (3) keep a register of licensed pilots [,] and agents;

4 (4) adopt regulations under the Administrative Procedure Act (AS 44.62)
5 establishing standards by which pilotage fees may be established, and pay for audits whenever
6 an audit is necessary to collect information needed to apply the standards in the regulations;

7 (5) make available, upon request, copies of this chapter and the regulations
8 adopted under this chapter; and

9 (6) impose civil fines under AS 08.62.190 for violations of this chapter or
10 regulations adopted under this chapter [IT].

11 (b) The board may, by regulation, make any other provision for proper and safe pilotage
12 upon the inland and coastal water of the state [WATERS COVERED BY THIS CHAPTER]
13 and for the efficient administration of this chapter, including establishing a mandatory random
14 drug and alcohol testing program for pilots licensed under this chapter.

15 * Sec. 3. AS 08.62.040 is amended by adding a new subsection to read:

16 (c) The board may require a pilot licensed under this chapter to submit to a physical or
17 mental examination to determine the pilot's fitness to perform the duties of a pilot.

18 * Sec. 4. AS 08.62 is amended by adding new sections to article 1 to read:

19 Sec. 08.62.050. MARINE PILOT COORDINATOR. The department may, after
20 consultation with the board, employ a marine pilot coordinator approved by the board to
21 administer and enforce this chapter. The coordinator may not be a member of a regional marine
22 pilot organization in the state and may not serve as a pilot except as necessary to perform the
23 duties of marine pilot coordinator.

24 Sec. 08.62.055. TRAINING PROGRAMS FOR PILOT LICENSE. (a) The board shall
25 establish standards for training programs for a pilot license. The standards may include
26 requirements for

27 (1) familiarization and training trips on vessels subject to this chapter;

28 (2) dockings, undockings, and tug assisted maneuvers;

29 (3) completion of the training program within a specified period;

30 (4) other training or experience that the board considers appropriate.

31 (b) The board may not establish standards under this section that have the effect of

1 unreasonably restricting entry into the profession by any person.

2 * Sec. 5. AS 08.62.080 is amended by adding a new subsection to read:

3 (b) The board shall establish dates for license examinations and shall provide public
4 notice of the dates for license examinations.

5 * Sec. 6. AS 08.62.090 is amended by adding a new subsection to read:

6 (c) In order to be eligible to take the next scheduled examination, a person shall file the
7 application with the board at least 30 days before the date of the examination.

8 * Sec. 7. AS 08.62.100 is repealed and reenacted to read:

9 Sec. 08.62.100. QUALIFICATIONS FOR LICENSE. (a) The board shall issue a pilot
10 license to a person if the person is a citizen of the United States, passes the written examinations
11 given by the board, qualifies under regulations adopted by the board, and meets the qualifications
12 in (b) - (c) of this section.

13 (b) In addition to the qualifications in (a) of this section, an applicant may not receive
14 a license under this section unless the applicant provides documentation to the board of the
15 following service:

16 (1) one year of service as a master of ocean or coastwise vessels while holding
17 a license as the master of ocean steam or motor vessels of any gross tons;

18 (2) two years of service as a master of freight on a towing vessel while holding
19 a license as the master of freight and towing vessels of not less than 1,600 gross tons;

20 (3) two years of service as a chief officer on ocean or coastwise vessels of not
21 less than 1,600 gross tons while holding a license as the master of ocean steam or motor vessels
22 of any gross tons;

23 (4) two years of service as commanding officer of United States government
24 vessels of not less than 1,600 gross tons while holding a license as the master of ocean steam
25 or motor vessels of any gross tons; or

26 (5) three years of experience as a professional pilot during which the candidate
27 was actively engaged in piloting.

28 (c) An applicant for a license under this section shall possess an endorsement of first
29 class pilotage on the applicant's United States Coast Guard license with no tonnage restrictions.

30 * Sec. 8. AS 08.62.120 is repealed and reenacted to read:

31 Sec. 08.62.120. RENEWAL. Licenses issued under this chapter expire on December 31

1 of each even-numbered year. In addition to complying with the requirements of AS 08.01.100,
2 in order to renew a license a pilot shall

3 (1) submit a renewal application on a form provided by the board;

4 (2) meet the minimum qualifications set out in AS 08.62.100 and the regulations
5 adopted by the board under AS 08.62.100; and

6 (3) on a form approved by the board, provide evidence of a satisfactory physical
7 examination by a licensed physician within 60 days before the date of renewal.

8 * Sec. 9. AS 08.62.130 is repealed and reenacted to read:

9 Sec. 08.62.130. LAPSED LICENSE. The board shall reinstate a lapsed license if, in
10 addition to complying with the requirements of AS 08.01.100(a) - (c) and AS 08.62.120, the pilot
11 takes and passes a written examination if the license has been lapsed one year or more.

12 * Sec. 10. AS 08.62.150(a) is amended to read:

13 (a) The board may impose a disciplinary sanction on a person licensed under this chapter
14 when the board finds that the person

15 (1) is incompetent in the performance of pilotage duties;

16 (2) is [HABITUALLY] intoxicated during the performance of pilotage duties
17 due to alcohol, a controlled substance, or other drug;

18 (3) illegally possesses, uses, or sells controlled substances [NARCOTIC OR
19 HALLUCINOGENIC DRUGS];

20 (4) makes a false statement to obtain a license;

21 (5) violates a provision of this chapter or a regulation adopted under this chapter
22 [IT];

23 (6) is guilty of misconduct during the course of employment; or

24 (7) has had the person's United States Coast Guard pilot license conditioned,
25 suspended, or revoked [SUFFERED REVOCATION OF FEDERAL LICENSURE AS A
26 PILOT].

27 * Sec. 11. AS 08.62.155 is repealed and reenacted to read:

28 Sec. 08.62.155. DISCIPLINARY SANCTIONS. The board may take disciplinary action
29 under AS 08.01.075.

30 * Sec. 12. AS 08.62.160 is amended to read:

31 Sec. 08.62.160. MANDATORY EMPLOYMENT OF LICENSED PILOTS. A vessel

1 subject to this chapter navigating inland and coastal water of the state [THE INSIDE
2 COASTAL WATERS OF ALASKA] as determined by the board in regulation shall employ a
3 pilot holding a valid license under this chapter. A vessel in the mandatory pilotage water of
4 the state shall be under the conduct of a pilot licensed under this chapter during movement
5 of the vessel, unless the pilot is removed by the master for cause.

6 * Sec. 13. AS 08.62.185 is repealed and reenacted to read:

7 Sec. 08.62.185. PILOTS REQUIRED FOR OIL TANKERS. (a) An oil tanker of 50,000
8 dead weight tons or greater that is not required by federal law to be under the direction and
9 control of a federally licensed pilot shall employ a pilot licensed by the state under this chapter
10 when navigating in state inland or coastal water beyond Alaska pilot stations.

11 (b) The pilot required in (a) of this section shall control the vessel during all docking
12 operations.

13 * Sec. 14. AS 08.64.190 is repealed and reenacted to read:

14 Sec. 08.62.190. CIVIL FINE. (a) A master or owner of a vessel required by this chapter
15 to employ a licensed pilot who fails to do so when a licensed pilot is available, unless the perils
16 or hazards of the sea prevent the employment of a pilot, is subject to a civil fine imposed by the
17 board of not less than \$5,000 nor more than \$15,000 for the first violation and not less than
18 \$10,000 nor more than \$30,000 for each subsequent violation.

19 (b) Except as provided in (a) of this section, a person who violates a provision of this
20 chapter or a regulation adopted under this chapter is subject to a civil fine imposed by the board
21 of not less than \$1,000 nor more than \$5,000.

22 (c) Each day on which a violation described in this section occurs is a separate violation.

23 * Sec. 15. AS 39.25.120(c) is amended by adding a new paragraph to read:

24 (22) marine pilot coordinator of the Board of Marine Pilots.

25 * Sec. 16. TRANSITION; PILOT LICENSE. (a) A pilot license issued under AS 08.62.100 before
26 the effective date of this Act shall be valid for the period for which the license was issued and may be
27 renewed until December 31, 1994, without examination upon payment of the pilot license fee.

28 (b) A person may not hold a pilot license after December 31, 1994, without satisfying the
29 requirements of AS 08.62.100, as amended by sec. 7 of this Act.

30 (c) Notwithstanding (a) - (b) of this section, a person licensed under AS 08.62 who applies for
31 a change, amendment, or an endorsement for the person's pilot license must qualify for the change,

1 amendment, or endorsement under AS 08.62, as amended by this Act and implementing regulations
2 adopted by the Board of Marine Pilots.

3 * **Sec. 17. INVESTIGATION OF MARINE ACCIDENTS.** The marine pilot coordinator of the Board
4 of Marine Pilots shall cooperate with federal and state agencies responsible for regulation of marine
5 pilots and the investigation of marine accidents to develop guidelines for, and a system of timely,
6 thorough, and fair investigations of, marine accidents involving death or injury to a person or damage
7 to property. The marine pilot coordinator shall submit a report on the guidelines and system developed
8 to investigate marine accidents and on recommendations for legislation necessary to provide for the
9 investigation of marine accidents to the legislature on the first legislative day of the Second Regular
10 Session of the Seventeenth Alaska State legislature.

11 * **Sec. 18.** The Department of Commerce and Economic Development, notwithstanding AS 08.01.065,
12 may establish a one-time assessment on persons licensed under AS 08.62 and applicants for licenses
13 under AS 08.62 to pay for additional training required under this Act before the next period for renewal
14 of marine pilot licenses.

MAY-11-91 SAT 11:22 SEA PILOTS

P. 01

MARINE PILOTING

Southeastern Alaska Pilots' Association

Telephone: (907) 225-8884
(907) 225-8893

CABLE ADDRESS: SEAPILOTS

P. O. BOX 6100
KETCHIKAN, ALASKA 99901

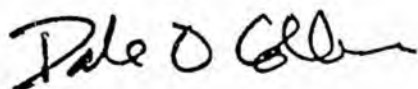
May 11, 1991

Representative Cheri Davis
Senator Drue Pearce
Alaska State Legislature
Juneau, AK 99811

Dear Senator Pearce and Representative Davis,

This is to advise you that the Southeastern Alaska Pilots' Association fully supports a one time assesment of every Alaska Pilot, to fund costs associated with Senate Bill 218 and House Bill 194.

Sincerely,



Dale O. Collins
President

SOUTHWEST ALASKA PILOTS ASSOCIATION

P.O. Box 977
Homer, Alaska 99603

Tel: (907) 235-8783
Fax: (907) 235-8119

Senator Drue Pearce,
Representative Cheri Davis,
Alaska State Legislature
Juneau, Alaska 99811

Dear Senator Pierce and Representative Davis,

This is to advise you that the South West Alaska Pilots Association supports a one time assesment of every Alaska state pilot, to fund costs associated with House Bill 194 and Senate Bill 218.

Sincerely yours
R.L. Hendricks
R.L. Hendricks Pres.

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPARTMENT OF COMMERCE & ECONOMIC DEVELOPMENT

P.O. BOX D
JUNEAU, ALASKA 99811-0800
PHONE: (907) 465-2534

DIVISION OF OCCUPATIONAL LICENSING

April 8, 1991

The Honorable Cheri Davis
Alaska House of Representatives
P.O. Box V
Juneau, AK 99811

Dear Representative Davis:

The Board of Marine Pilots is pleased to support House Bill 194. The board appreciates your efforts and shares your concerns about the seriousness of enacting a modern pilotage law for the State of Alaska.

If there is any way that the Board of Marine Pilots can be of any assistance to you in this fight, please call upon me.

Very truly yours,



M. Paul Taylor, P.E., Chairman
BOARD OF MARINE PILOTS

MPT/1vs5199t
4891a

WALTER J. HICKEL, GOVERNOR

**DEPARTMENT OF COMMERCE &
ECONOMIC DEVELOPMENT**

DIVISION OF OCCUPATIONAL LICENSING

P.O. BOX D
JUNEAU, ALASKA 99811-0800
PHONE: (907) 465-2534

May 10, 1991

Senator Drue Pearce

Dear Senator Pearce:

If the Board of Marine Pilots would advocate an assessment on Marine Pilot licensees sufficient to implement SB218 for FY '92, then the Department of Commerce and Economic Development would have no objection to such an assessment. I understand that this type of assessment has occurred twice within recent years for other boards with sweeping changes. Both times this assessment was done through Statutes and I understand that would be the proper procedure in the case of Marine Pilots.

Sincerely,

Ann Boudreaux

Ann Boudreaux
Director

PILOTAGE ORGANISATION FOR PORT EMPLOYED PILOTS

Captain Jim Varney, FNI, FIMH, MCIT

Immediate Past-President, International Maritime Pilots' Association

Lately Marine Services Manager/Harbour Master, Ports of Auckland Ltd

This chapter is taken from the new major book The Nautical Institute on Pilotage and Shiphandling, published this month, and serves well to introduce the book.

THE PUBLICATION of this book on Pilotage is timely, given the changes that are taking place in various parts of the world with regard to the employment of pilots.

As president of IMPA, and a member of the maritime safety committee of the International Association of Ports and Harbours (IAPH) I was recently given the task of reviewing and updating the chapter dealing with 'Pilots and Pilotage' in the IAPH publication *Guidelines on Port Safety and Environmental Protection*.

I am pleased to record that all recommendations were accepted in full, and the revised chapter was re-printed and published in June 1989. At the time I recommended to all IMPA members that *regardless of how they were employed*; private, State, or port, every pilot station should obtain a copy. While they are not mandatory, but simply 'Guidelines' for IAPH members, the observance and fair implementation of them should ensure better working relationships with all those concerned in the efficient operation of any port regardless of its size or complexity. The unknown (to me) authors of the original chapter are to be congratulated on the manner in which they addressed this topic.

To this end I make no apology for including the following extract from the 'Guidelines' with the hope that their wider publication will assist pilots of all persuasions as well as other members of the seagoing profession and those whose job it is to administer pilotage services.

PILOTS AND PILOTAGE

PILOTAGE IS A UNIQUE SERVICE based upon local knowledge and special conditions prevailing in the pilotage area. It may be performed in coastal waters, estuarial waters, rivers, ports, harbours, lakes or enclosed dock systems or any combination of these areas which may come within a port's jurisdiction.

A pilot's function is to combine technical knowledge concerning the operation of a vessel with local knowledge concerning special conditions which exist in the port area and with which the master of the vessel cannot be expected to be conversant. In this respect, pilots must first of all be technically capable of piloting vessels of all types which call at the port. They must be well versed in the latest equipment and navigational aids as well as the regulatory and environmental requirements.

The second and perhaps most important part of the pilot's function, however, is an overall appreciation due to his local knowledge of the special regulations and unique conditions which exist in the port area.

Administration

The rules governing pilotage should be designed to meet the special conditions and needs of each port area. In order to maintain a safe and efficient pilotage service and for this service to meet the special conditions of the port area, an authority must be established which will have the ultimate regulatory control over the pilotage service. Essentially, this system is now in operation throughout many ports in the world. Such a body is ordinarily a group of maritime-oriented people, having interests in the port area, who make regulations to cover the following considerations.

- The eligibility of pilots to perform pilotage services within its jurisdiction;
- The requirements for obtaining a licence or other type of operating authority for pilots;
- The administration of the examination procedures necessary in order to ensure that applicants for pilot licences are properly trained, qualified and have the requisite local knowledge;
- The requirement that pilots keep themselves abreast of the latest technological developments and the latest navigational aids;
- The investigation of casualties, accidents and alleged transgressions by pilots, and the conduct of any necessary disciplinary measures;
- The fixing of the proper number of pilots necessary to ensure a satisfactory traffic flow;
- The fixing of fair and reasonable rates for pilotage services;
- The requirements to ensure that pilots receive proper and fair treatment, timely remuneration, and any other action necessary to ensure that an efficient pilotage service is rendered;
- Determine the necessary equipment (boats, accommodation, etc.) and manning scales for its efficient and safe operation; and
- The requirement that pilots report breaches of ratified international conventions (overloading, faulty pilot boarding/disembarking systems, pollution by oils or other noxious substances, etc.) and breaches of national and port regulations, etc.
- For the bond to limit the liability of a pilot, in those countries where there is no legal protection. (The level of pilotage fee charged must to some extent be reflected in the insurance costs of the service. Therefore, the introduction of 'limited liability' should lower insurance premiums and thus costs);
- Pilots should meet the medical and eye-sight requirements prescribed by their national administration.

... Training

Pilot training covers two major aspects—viz., technical training in vessel operations and in the use of

the latest vessel equipment and navigational aids and the training and acquisition of experience with respect to the special and unique conditions which exist in the port area. These background skills for pilots have been developed in two principal ways.

Pilots with experience as deep-sea mariners possessing a master's or mate's licence or as licensed tugboat officers: these pilots have acquired their technical background skills through actual vessel operations and their training as pilots in a particular port area requires them to become thoroughly familiar with and aware of the conditions which exist in the port area. The amount of training and the length of training period for a prospective pilot whose technical skills have been acquired through actual vessel operations will depend upon a number of factors, such as the complexities of the special conditions in the port area and the amount and type of traffic in the port. The initial training period would probably be from six months to a year.

Pilots train under what was historically known as the guild system and which is now commonly described as the apprenticeship system. This training programme is used by some State pilot associations in the United States and elsewhere in the world and has proved to be successful and effective. The apprenticeship system takes a relatively young person with a good educational background, who is physically qualified to be a pilot and who then undergoes a period of apprenticeship with the licensed pilots in the port area. Such an apprenticeship or learning period usually lasts between five and ten years. The apprentice pilot simultaneously learns technical skills concerning vessel operations and the conditions of the port area during a period of actual on-the-job training. This training also involves a programme of study for the apprentice, who must acquire adequate technical background, skills and knowledge.

There is also a system of training which is a combination of the other two systems. A candidate for a pilot's licence spends alternating periods as an apprentice pilot and at sea, qualifying for his mate's and/or master's certificates or licences.

Pilotage of any type of vessel would be possible only after a pre-determined number of years, during which a pilot would progress to vessels of increasing tonnage and/or draught. In some circumstances it may be required that an upper age limit be imposed on pilots for certain types or classes of ships.

Enrichment of skills

It must be recognised that pilots are learning and reinforcing their skills every day. They are continuously finding different combinations of weather, current, traffic and of course, different standards of vessels and crews. This requires a variation in their approach to the manoeuvres they have to make, which in turn adds to their store of knowledge. Pilots should be encouraged to attend one or more of the many training establishments located throughout the world. These include radar simulators, bridge simulators and model basins for both day and/or night-time scenes and ship-handling.

Some pilot associations promote this improvement of skills by having 'sounding trips'—trips on which a

pilot is observed by a more senior colleague who assesses his ability and performance and his suitability for advancement to piloting ships of a greater size or draught. In other districts, on vessels of unusual size, shape and/or manoeuvring characteristics, a second pilot is put aboard to observe the pilotage and perhaps assist with such tasks as communications.

Prevention of the one-man error

The pilot must take into account not only the safe conduct of the vessel he is piloting, but also the safety, protection and well-being of other vessels and users of the port, the port itself and the environment. The effective utilisation of pilots depends most critically upon the effectiveness of the communications developed between the pilot and the master and upon the mutual respect which each has for the functions and duties of the other, also the effectiveness of communications to the VTS and the masters of attending tugs.

When a pilot boards a vessel, he is given the conduct or the charge of piloting the vessel while the master remains in command. The pilot's function is to manoeuvre the vessel within the port area so that local hazards, special regulations, environmental requirements and any other unique local conditions existing in the port area are brought to the attention of the master for adherence or avoidance, as the case may be. Problems of so-called one-man error may arise in situations due to a lack of communication between the pilot, the master, the harbour information control organisation or the tugs. Communication by the pilot to all involved should be relatively standardised and it should always be complete.

The pilot would usually undertake the following procedure:

- Inform the master of the instructions the pilot had received concerning the vessel with respect to docking, time of arrival, assistance of tugs, whether port or starboard docking is to be effected and any other pertinent information such as manoeuvres to be carried out;
- Inform the master of any special conditions that may be expected during the passage;
- Inform the master of the traffic anticipated (through traffic systems in ports where such systems exist), especially if the traffic is expected to be unusual; and
- Inform the master of the known weather conditions and the weather expected on the intended route.

The master should inform the pilot:

- The characteristics of the vessel: length, beam, height of mast, draught of vessel fore and aft, type of engines, number of propellers and rudders, bow and stern thrusters, whether the propellers are right handed or left handed, whether the pitch is fixed or controllable.
- The manoeuvring characteristics of the vessel: number of revolutions at each speed, maximum number of revolutions astern, time response of the engine and of the rudder, turning ability, minimum speed at which the vessel will steer under normal circumstances, maximum time that the engine can run continuously astern.
- Any unusual characteristics or defects or problems that could affect the safe manoeuvring of the vessel, number of crew available for mooring.

All pilots should be familiar with the IMO vocabulary, especially in countries in which the English language is not the first language.

Control of tugs and other craft

A programme of close co-ordination and communication with operators of tugs and other craft is an integral part of pilotage practice. A uniform practice and procedure is essential to assure absolute compliance with all instructions and orders given from the bridge. Tug and other craft operators assisting the vessel must at all times be under the control of the pilot. Past instances on record, when disaster or damage was caused or nearly caused, could probably have been averted had there been closer co-operation and better communication between the bridge and the assisting craft. This could be effected by ensuring that in the port area certain VHF channels are reserved exclusively for ships, tugs and mooring craft, etc. The master, upon the advice of the pilot, shall determine the number of tugs to be employed but the port authority may stipulate a minimum number. The pilot shall determine the positioning, speeds and how the tugs are to be made fast.

Port practice and policies

The personnel infrastructure of a port area includes many different elements such as tugboat operators, stevedoring companies, waterside labour, local coast guard authorities, customs officials, pilots and others. In a port, pilots may operate in any of the following areas: sea and estuaries, rivers, docks, canals and lakes. Some pilots may only perform berthing/unberthing functions and in addition some of senior status may be required for VLCCs and similar large vessels.

The achievement of safe, efficient and pollution-free operations within a port area obviously depends upon the effective co-ordination of all these elements. A pilot certainly has an essential role in the achievement of this objective but not the only role. Port co-ordination must be achieved through some authoritative form of co-operative effort, between all the groups which operate within the port area.

In some ports where there is not already one co-ordinating body, it may be advisable to have a port/marine liaison committee, made up of representatives of organisations charged with the establishment, maintenance and protection of the port's aids to navigation, vessel traffic services and port facilities. In addition, the committee should also include representatives of other services necessary for the safe movement of vessels within the port area. This committee would advise on matters such as (but not restricted to):

- Draught limitations.
- When and where tugboat escort and/or assistance is needed.
- Suggested time for movements under various tidal conditions.
- Regulations governing movement of marine traffic in the ports.
- A review of all matters affecting the safe and efficient operation of the port and the promulgation of such guidelines as are warranted to achieve these purposes. These should include consideration of the different types of accident that could occur and a review of the means at the disposal of the port in case of an accident, especially one involving a vessel carrying oil, gas, chemicals or other noxious and/or hazardous cargo. This would enable a decision to be made about the most appropriate measures to be taken to safeguard the safety of lives,

vessels, installations and the environment, in turn determining what additional equipment is needed to cope with potential emergencies.

- An advisory role in port development and renovation.
- VTS is a service provided for the purpose of: enhancing the safety of the vessels navigating or moored in the area, of the harbour installations and the protection of the environment; and co-ordinating, expediting and maintaining an orderly flow of traffic. The VTS will provide information, advice and instructions mainly based on the rules and regulations promulgated by the port marine liaison committee.

It is obvious that a VTS can only be properly operated if there is close co-operation between all the parties involved and more particularly between the VTS operators and the pilots who are the direct link between the VTS centre and the vessels and who are fully conversant with the local rules, regulations and procedures.

The presence of a pilot on board a vessel will enable the VTS to simplify its procedures and interventions as far as that vessel is concerned. Pilots may also be called upon by the operators of the VTS to participate in its operation, where their particular knowledge of local conditions and expertise in handling various sizes and types of ships can be invaluable. □

FURTHER TO THIS I would add.

1. The ultimate objective for any pilot service, no matter how the pilots are employed, must be to provide a pilot as and when required for every vessel requesting such a service.
2. The person provided should be properly qualified and experienced in handling the size and type of vessel to which they are allocated.
3. They should be physically fit and mentally alert to enable them to carry out the duties of a pilot throughout the pilotage act.
4. This can vary greatly, and is not only dependent upon distance; harbour, dock work, river, or estuary pilotage or combination of these, but is also subject to the vagaries of weather; tide; traffic patterns, and last but not least, equipment failure, all of which can play havoc with rosters and duty turns in a busy pilotage district.

Basic qualification

This may differ from country to country, but, in the main, the government or State will be responsible for setting the basic qualification that a *candidate* for a pilot's licence must hold. The vast majority today insist on the master foreign-going certificate or its equivalent, with or without command time. In many ways this is an advantage to port authorities who employ pilots, as they can then utilise the skills of these people more fully for a greater range of work. This again is dependent upon the size and nature of the port and its workforce.

To those of you who are intent on joining the profession—I wish you well. After 26 years as a pilot, I still think that one of the most pleasurable moments is to arrive on the bridge of a ship and be greeted by a firm handshake, a friendly and sometimes mightily relieved master, and the magical words 'she's all yours, pilot'. As long as you don't take this too literally you can then settle down to enjoy your work—i.e., the sheer pleasure of controlling, in most cases, the largest objects built by mankind capable of being moved, which will require your undivided attention. Just be sure that they are also capable of being stopped. □