

PROCEEDINGS  
OF  
THE SUB-COMMITTEE,  
PUBLIC SERVICE COMMISSION.  

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PILOT SERVICE.



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**BENGAL :**

- SECTION I.—NOTE BY THE SUB-COMMITTEE.  
" II.—NOTE BY THE DEPARTMENTAL MEMBER.  
" III.—ORAL EVIDENCE.  
" IV.—WRITTEN EVIDENCE.

**BOMBAY :**

- SECTION I.—NOTE BY THE SUB-COMMITTEE.  
" II.—NOTE BY THE DEPARTMENTAL MEMBER.  
" III.—ORAL EVIDENCE.

**MADRAS :**

- SECTION I.—NOTE BY THE SUB-COMMITTEE.  
" II.—NOTE BY THE DEPARTMENTAL MEMBER.  
" III.—ORAL EVIDENCE.

## CONTENTS.

	PAGE.
SECTION I.—NOTE BY THE SUB-COMMITTEE, BENGAL	1
SECTION II.—NOTE BY THE DEPARTMENTAL MEMBER, BENGAL	12
LETTER FROM H. J. REYNOLDS, Esq., OFFICIATING SECRETARY TO THE GOVERNMENT OF BENGAL, GENERAL (MARINE) DEPARTMENT, TO THE SECRETARY TO THE GOVERNMENT OF INDIA, MARINE DEPARTMENT	13
REGULATIONS FOR THE ADMISSION OF LEADSMEN APPRENTICES INTO THE BENGAL PILOT SERVICE, CALCUTTA	14
PAPER OF INFORMATION RELATING TO THE BENGAL PILOT SERVICE	15
LETTER FROM D. M. BARBOUR, Esq., SECRETARY TO THE GOVERNMENT OF INDIA, DEPARTMENT OF FINANCE AND COMMERCE, TO THE SECRETARY TO THE GOVERNMENT OF BENGAL, GENERAL (MARINE) DEPARTMENT	17
GOVERNMENT NOTIFICATION OF 13TH JUNE 1885 CONTAINING REGULATIONS FOR THE ADMISSION OF LOCALLY SELECTED CANDIDATES INTO THE BENGAL PILOT SERVICE AT CALCUTTA	18
TABULAR STATEMENT OF THE EXISTING ORGANIZATION AND CONSTITUTION OF THE CALCUTTA PORT OFFICER'S DEPARTMENT	19
RETURN SHOWING THE NUMBER OF VESSELS PILOTED UP AND DOWN THE HUGLI AND THE NUMBER OF CASUALTIES FROM 1857-58 TO 1876-77 INCLUSIVE, AND FROM 1877-78 TO 1886-87	20
FURTHER NOTE BY DEPARTMENTAL MEMBER, WITH STATEMENT SHOWING EARNINGS OF CHITTAGONG PILOTS	21
STATEMENT SHOWING AVERAGE EARNINGS OF THE BENGAL PILOT SERVICE IN 1886	22
SECTION III.—SITTINGS AT CALCUTTA—	
WITNESS NO. I.—EXAMINATION OF J. L. MACKAY, Esq., MERCHANT, REPRESENTATIVE OF THE BENGAL CHAMBER OF COMMERCE	23
WITNESS NO. II.—EXAMINATION OF JAMES STEVENSON, Esq., MERCHANT, REPRESENTATIVE OF THE BENGAL CHAMBER OF COMMERCE	25
WITNESS NO. III.—EXAMINATION OF E. F. HUDSON, Esq., BENGAL PILOT SERVICE	26
WITNESS NO. IV.—EXAMINATION OF CAPTAIN A. W. MANN, BRITISH INDIA STEAM NAVIGATION COMPANY	27
WITNESS NO. V.—EXAMINATION OF CAPTAIN ATKINSON, BRITISH INDIA STEAM NAVIGATION COMPANY	28
WITNESS NO. VI.—EXAMINATION OF E. GOOD, Esq., PORT OFFICER, CHITTAGONG	29
WITNESS NO. VII.—EXAMINATION OF G. M. ANDERSON, Esq., BENGAL PILOT SERVICE	30
WITNESS NO. VIII.—EXAMINATION OF L. W. D'CRUZ, Esq., REPRESENTATIVE OF THE EURASIAN AND ANGLO-INDIAN ASSOCIATION	31
WITNESS NO. IX.—EXAMINATION OF C. A. TWEEDDALE, Esq., REPRESENTATIVE OF THE EURASIAN AND ANGLO-INDIAN ASSOCIATION	32
WITNESS NO. XI.—EXAMINATION OF CAPTAIN W. ELLERY, SHIP "TALUQ-DAR"	36
WITNESS NO. XII.—EXAMINATION OF CAPTAIN C. G. CROSS, SHIP "MYLOMENE"	<i>ib.</i>
SECTION IV.—NOTE BY A. J. MILNER, Esq., PILOT SERVICE, BENGAL	37
EXTRACT OF A NOTE BY W. C. MADGE, Esq.	<i>ib.</i>
SECTION I.—NOTE BY THE SUB-COMMITTEE, BOMBAY	39
SECTION II.—NOTE BY THE DEPARTMENTAL MEMBER, BOMBAY	42
NOTE BY THE SECRETARY TO THE PORT TRUST, BOMBAY	<i>ib.</i>
TABULAR STATEMENT SHOWING THE EXISTING ORGANIZATION AND CONSTITUTION OF THE PILOT SERVICE DEPARTMENT, BOMBAY	43

	PAGE.
NOTE BY THE ACTING COMMISSIONER IN SIND ... ..	44
TABULAR STATEMENT SHOWING THE EXISTING ORGANIZATION AND CONSTITUTION OF THE PILOT SERVICE DEPARTMENT, SIND ... ..	<i>ib.</i>
SECTION III.—SITTINGS AT BOMBAY—	
WITNESS NO. I.—EXAMINATION OF CAPTAIN POTTIS, BRITISH INDIA STEAM NAVIGATION COMPANY ... ..	45
WITNESS NO. II.—EXAMINATION OF CAPTAIN HEXT, R. N., DIRECTOR OF INDIAN MARINE ... ..	47
SECTION I.—NOTE BY THE SUB-COMMITTEE, MADRAS ... ..	51
SECTION II.—NOTE BY THE DEPARTMENTAL MEMBER, MADRAS ... ..	53
TABULAR STATEMENT SHOWING THE EXISTING ORGANIZATION AND CONSTITUTION OF THE PILOT SERVICE DEPARTMENT, MADRAS ... ..	54
SECTION III.—SITTINGS AT MADRAS—	
WITNESS NO. I.—EXAMINATION OF LIEUTENANT J. H. TAYLOR, R. N. R., PORT OFFICER, MADRAS ... ..	55

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PROCEEDINGS  
OF  
THE SUB-COMMITTEE,  
PUBLIC SERVICE COMMISSION.

BENGAL.  
Pilot Service.

Section I.—Note by the Sub-Committee.

The superintendence of the staff of Pilots on the Hughli is committed to the Port Officer at Calcutta, who, in addition to the duties entailed on him by this charge, is the head of the Marine Department of the Government of Bengal and *ex-officio* Shipping Master. The office is at present held by a European, an officer in the Indian Marine, from which service vacancies in the appointment will be supplied. He receives a salary of R1,400. As Shipping Master, he is assisted by two gazetted officers—the Deputy Shipping Master on a salary of R500 to 600, and an Assistant Shipping Master on a salary of R350 to 400. The duties of Shipping Masters bring them into constant contact with officers and crews of all nationalities. They have to enforce the provisions of the Imperial and Local laws relating to the Mercantile Marine, and to see that the regulations of the port are observed, to decide disputes between Commanders of ships and their crews, and to discharge other functions which require experience gained in a seafaring life. The office of Deputy Shipping Master is now held by a non-domiciled European; the office of Assistant Shipping Master by a domiciled European. The Deputy and Assistant Shipping Masters have no direct duties in connection with the Pilot Service. With the exception of the Port Officer, the only gazetted officers who are connected with that service are the Medical Officer at the Sandheads on a salary of R360, a domiciled European, and the Commander of the *Undaunted* on a salary of R400, a European officer of the local Marine, whose ship is chiefly employed as a supply vessel to the pilot brigs.

Bengal.  
—  
Pilot Service.  
—  
Section I.

The extreme length of the pilotage water on which the Bengal Pilot Service is employed is in the south-west monsoon 159, and in the north-east monsoon 127 miles.\* The navigation presents peculiar difficulties owing to the strength of the currents, the number and shifting character of the shoals, and the extreme narrowness, at certain points, of the channels available for the passage of ships of any considerable draught. The dangers to which ships are exposed have hardly been materially reduced since the partial supersession of sailing-vessels by steamships and the employment by sailing-vessels of steam-tugs; for, while the assistance of steam-power enables ships to manœuvre with greater precision and rapidity, the increased length of modern ships renders them more difficult to handle in narrow waters and tortuous channels, and the expense incurred by delay is so greatly enhanced that it is an object to accomplish the passage up or down the Hughli with as much speed as is consistent with safety. On an average this is now effected in one-third of the time it formerly occupied. The acceleration of the passage and the alteration in the construction of the larger ships which frequent the port have added to the danger of navigation in a degree scarcely less than it has been reduced by the employment of steam power.

To secure a staff of efficient Pilots, the Court of Directors created a close service recruited in England. Youths were nominated and sent out with letters of appointment to "Volunteer-ships" in the Bengal Pilot Service in the same manner as cadets were sent to the armies, and midshipmen to the navy of the Company. The officers so recruited were remunerated by fixed salaries, were entitled to leave and pension under special rules, and were required to subscribe to a pension fund for their widows and orphans. The acceptance of gratuities by members of the service was strictly prohibited, and salaries were increased to compensate for the loss resulting from this prohibition; but the orders issued in this behalf were disregarded, and the practice of receiving gratuities continued, even subsequently to important changes in the system, to be presently noticed.

The duties of the service, as originally constituted, were not confined to the piloting of vessels to and from the port of Calcutta and the officering of the pilot brigs which served as depôts for Pilots awaiting the arrival of inward-bound vessels. The service furnished a River Surveyor and officers for the river survey and buoy-vessels. Appointments continued to be made by the Court of Directors and the Secretary of State up to 1861, when they were discon-

\* Pilot Committee's Report, 27th August 1872.

Bengal. continued, inasmuch as it had been resolved in 1856 to abolish the service and introduce a different system.\*

Pilot Service.

Section I.

In order to relieve the State of the expense of a salaried and pension-earning staff, it was determined to recruit locally men who, having already acquired nautical experience, should qualify themselves at the expense of the Government to be Pilots, and should receive a license to pilot vessels. These men were to have no claim to leave or pay of any kind, but were to look for their remuneration to a percentage of their earnings—that is to say, of the fees paid for pilotage.† They were termed ‘Licensed Pilots.’ The Pilots appointed to the service were invited to forego their salaries when on service, and to accept in lieu of them a similar percentage on their earnings; but they were allowed when on sick or other leave to retain the advantages in respect of pay and allowances which they enjoyed under the rules of the service as well as their right to pensions. Those who accepted these conditions were termed ‘Free-list Pilots.’

The remuneration allowed originally to Free-list and Licensed Pilots was fixed at 60 per cent. of the pilotage fees, but was soon afterwards reduced to 50 per cent. The balance of the fees was regarded as the Pilot’s contribution to the cost of the pilot brigs and management. It was contemplated that in time the Pilots would provide their own vessels; and that Government would be relieved of the cost of the maintenance of the brigs and of the salaries of the Commanders and crews.

The staff of Pilots, in consequence of the changes introduced in 1856, comprised three classes, *viz.*, the Salaried, the Free-list, and the Licensed Pilots.

Although the substitution for salaries of a remuneration contingent on earnings stimulated industry, the other changes introduced in 1856 secured neither economy nor efficiency.

The senior Pilots on the Free List, deriving from the percentage of pilotage fees larger incomes than were paid to the Commanders of the pilot brigs, refused to take such commands when their turn came, and the Government of Bengal ruled that they could not be compelled to do so.‡

Difficulty was experienced in obtaining officers of the service to accept or retain the post of River Surveyor or the command of the survey and buoy vessels, as the remuneration of those appointments was small and the duties arduous; and eventually it became necessary to confer them on persons who were not members of the service. In 1871 the Master Attendant pointed out to the Government that whereas in 1856 the Pilot Service, which then consisted of 107 Pilots and 38 Volunteers or Leadsman, had piloted 2,106 ships and done duty on board the several pilot, survey, and buoy vessels at a cost of Rs3,48,000, in 1870 there were paid to 118 Pilots, 10 Leadsman, and 18 officers not in the Pilot Service, but filling appointments formerly filled by Pilots, for the same services Rs5,70,020, although the number of ships piloted had fallen to 1,883. It was also mentioned that a comparison of the years intervening between the years 1856 and 1870 would show a similar loss throughout.§

Under the orders originally framed, a condition was imposed on candidates for licenses that they should have completed three years’ service at sea, but this condition was relaxed in favor of lads from the Martinière and other schools, who, at the intercession of friends and relations, were allowed to go on the river as supernumerary Leadsman, receiving no pay, but qualifying for the appointment of Licensed Leadsman.||

It does not appear that any restriction was placed on candidates for licenses in respect of race or nationality, and consequently two or three foreigners obtained admission to the service; ¶ nor was any restriction placed on the number of persons who might be admitted to the grade of Licensed Leadsman, whence in due course they were promoted to the Pilot grades after passing the prescribed examinations. The result of the absence of such restrictions, of the greater speed with which the navigation was accomplished, and of certain privileges enjoyed by the highest grade, the Branch Pilots, was that the service became too numerous, and, while the senior members earned large incomes, the junior were unable to obtain sufficient incomes or to keep up their knowledge of the river.\*\*

That the system of Licensed Pilots failed to a great extent to secure an efficient staff appears from the following table. From 1856 to 1868, when the system was suspended, 114 were appointed:—

Still in service . . . . .	15
Died . . . . .	21
Dismissed . . . . .	33
Resigned . . . . .	38
Retired with bonuses . . . . .	7
	<hr/>
	114
	<hr/>

\* Papers on the reduction of the Pilot Service, 1874, pages 86-96.

† *Ibid.*, page 82.

‡ *Ibid.*, page 42.

§ *Ibid.*, pages 30 and 89.

|| *Ibid.*, pages 10 and 30.

¶ *Ibid.*, pages 10 and 27.

\*\* *Ibid.*, page 95.

It will be observed that no less than 33 were dismissed and 38 resigned the service. Of 18,930 vessels piloted in the ten years 1857-58—1866-67 inclusive, 811, or 4·28 per cent., grounded or were in collision, and 33 were in consequence totally lost. Nevertheless, in 1867 a Committee appointed to consider the position and prospects of the Pilot Service and to inquire into certain alleged grievances suggested that the members of the old service should be pensioned off, and the staff\* constituted solely of Licensed Pilots. It is fair to observe that the suggestion was made with a view to put an end to the complaints into which the Committee had been instructed to inquire.

Bengal.  
Pilot Service.  
Section I.

The Committee, while they recommended that the appointment of Leadsman should be suspended until the service was reduced to a certain limited number, and found that the excess in its strength was due to the omission to enforce the regulation respecting a three-years' preliminary service at sea, were, nevertheless, of opinion that there should be no bar to the admission of lads from the Martinière and other schools, if special care were taken to ascertain that they were of sound constitution and sufficient physical strength. They recommended that foreigners should be prohibited from entering the service.†

In forwarding the report of the Committee, the Master Attendant observed that under orders of Government, the admission of foreigners had been discontinued;‡ and that the qualification of preliminary service at sea had been dispensed with in certain cases at the request of Pilots who had introduced the sons or relations of deceased or other Pilots, but that the infraction of the rule had ceased; and he presumed that after the experience acquired, no similar request would be attended to: from which it may be inferred that, in his opinion, experience had shown the necessity for insisting on the condition.

As to the physical qualifications of the local candidates, the Master Attendant stated that he was not aware whether any of the young men had turned out weakly and sickly, whereas he had known many instances in which recruits from England had been of unsound constitution.§

The Government of Bengal directed the Master Attendant to make a further report on the radical changes proposed by the Committee after consulting members of the service. Mr. J. P. Baugh Le Patourel, Acting Branch Pilot, was the only member of the service who in his reply dealt with the question of admission to the service. He proposed that candidates should enter it at an age of not less than 14 nor more than 16; that they should be natives of Great Britain, selected from the different training schools in Great Britain (by training schools he appears to have meant training ships), and should produce certificates from a recognized Government Medical officer of soundness of body, and from "the Commanders of the vessels they were taught in" of good character, sobriety, and proved ability.||

The Master Attendant, in furnishing the report called for, proposed that the candidates for the post of Licensed Leadsman should be required to have served four years at sea, and to produce a certificate of competency as 2nd Mate, or any higher grade, granted either by the Board of Trade or by some properly constituted authority in British possessions, and should also be required to produce testimonials of good character and physical fitness.¶

By G. O. No. 3105, dated 6th September 1869, the admission of Leadsman was suspended till the number of the Pilot staff had been reduced to 100.

In a Resolution dated 10th July 1872, the Government of Bengal pronounced its opinion upon the proposal of the Committee of 1867 for the abolition of what was termed "the Covenanted Service." The Lieutenant-Governor not only considered that the action proposed would perpetuate the evil it was designed to counteract, *viz.*, the excessive numerical strength of the Pilot staff, but he regarded it to be in the interests of the port that some at least of the Pilots should belong to a Covenanted Service, on which Government had a strong hold in the shape of the absentee allowances, pensions, and other privileges it bestowed. He observed (probably in reference to the complaint as to the admission of foreigners, and not with the intention of countenancing any race distinction between Her Majesty's subjects) that all the Pilots must be Europeans or East Indians, and must all have served a long apprenticeship to the river; and that if the whole body of Pilots were merely Licensed Pilots, quite free to come and go, they might at any time strike for higher wages, or bargain for gratuities, or in many ways very seriously hamper the trade of the port.\*\* He therefore resolved to refer to another Committee the question as to the number of Pilots required for all services in which Pilots might be employed, and the number of running Pilots required—that is to say, of Pilots employed in piloting vessels to and from the port. He deferred passing orders as to the proportion in which these numbers should be distributed among the several classes of Government servants and Licensed Pilots, or what amount, if any, Government should offer as fair pensions to buy out the supernumeraries of each grade until the Committee had reported. He continued the order prohibiting the enlistment of new recruits until the number of Pilots was reduced to the required strength, and he directed that, in future, no Pilot going on the Free List or licensed should receive more than 50 per cent. of his pilotage earnings.††

\* Papers on the reduction of the Pilot Service, page 17.

† *Ibid.*, pages 9-10.

‡ *Ibid.*, page 27.

§ *Ibid.*, page 28.

|| *Ibid.*, page 64.

¶ *Ibid.*, pages 49-50.

\*\* *Ibid.*, page 96.

†† *Ibid.*, pages 95-97.



Bengal.  
Pilot Service. In pursuance of the report of the Committee, the number of the service was reduced to 70 Pilots and 20 Leadsman by the grant of special pensions and bonuses to supernumeraries, and by refraining from filling up vacancies as they occurred.

Section I. In 1876 the Pilot Service had been reduced to 70 members, and there remained only a body of five Licensed Leadsman from which to fill up any vacancies that might occur in the grades of the service. As a temporary arrangement, pending the consideration of a new scheme of organization, sanction was given to the appointment of nine Licensed Leadsman, of whom six are still serving as Licensed Master Pilots.

In a letter No. 161, dated 19th January 1876, addressed by the Government of Bengal to the Government of India, Marine Department, Sir Richard Temple expressed his concurrence in the reasons which influenced Sir George Campbell, in 1872, to retain a Covenanted Service; but while Sir George Campbell contemplated that the Pilot staff would be partly composed of Covenanted officers and partly of Licensed Pilots, Sir Richard Temple advocated the reconstitution of the service as a Covenanted Service. He observed:—

“By maintaining a service of Government Pilots, the Government would make sure of a regular succession of properly qualified Pilots, who would be amenable to its authority; and though the system would involve more expense than a Licensed Pilot Service, the cost would not be disproportionate to the importance of the object which it would secure.” He expressed himself “convinced that the best possible service should be secured for the navigation of the long river approach to so great a port as Calcutta—an approach reputed to be among the most difficult of its kind in the world, perhaps the most difficult; and that an organized Government service is better than any other can be.” As to the question whether the recruits should be obtained in Calcutta or from England, while he believed that recruits could be obtained in Calcutta from young men of the Merchant Marine who had been three or four years at sea, and who would gladly enter as Licensed Leadsman with the prospects of becoming Pilots thereafter, he thought that by recruiting in England and getting out lads from the training ships there, a better class of young men would be secured. He stated that, in that case, it would be necessary to make them members of a Government Pilot Service, and give them leave allowances and pensions. He therefore requested the Government of India to move the Secretary of State to send out a certain number of youths as Leadsman Apprentices. He at the same time forwarded draft regulations prescribing conditions for the admission of apprentices to the Bengal Pilot Service, and proposed rules with respect to the leave and pensions to be enjoyed by members of the Pilot Service; the regulations being based on the rules of the old service. The proposals of Sir Richard Temple were accepted: the first recruits for the reconstituted service arrived from England in 1877. On an average three appointments in each year are now made by the Secretary of State of lads recommended by the Committees of the training ships, *Conway* and *Worcester*.

In May 1879, the Eurasian and Anglo-Indian Association presented a memorial to the Government of India complaining that the recruitment of the service in England practically debarred Eurasian and Anglo-Indian youths from admission to it. The Governor General in Council, while admitting that it was difficult for the youths to qualify themselves by undergoing a course of professional training in England, yet, believing that no sufficient training could be obtained in India, reluctantly came to the conclusion that the service should continue to be recruited from England only.

In 1883 the Association submitted to the Secretary of State an appeal against this decision. It was urged that even youths sent out from the training ships must learn the duties of a Pilot on the Hughli as Leadsman; that men who had been born and educated in India had rendered efficient service as Pilots, of whom some had risen to the highest grades; and that the dangers of the river had been diminished by more careful survey and accurate charts as well as by the introduction of steamships. For these reasons, the Association asked that the training as Leadsman should be accepted as sufficient, and that if this training was deemed insufficient to secure adequate skill in seamanship, suitable training ships might be provided in India.

Before this appeal was transmitted to England, the Government of India considered it desirable to forward it for consideration to the Lieutenant-Governor of Bengal and to the Bengal Chamber of Commerce; and the Bengal Government also took the opinion of the Port Officer and the Port Commissioners upon it.

The Port Officer (the present Departmental member) considered that for a service so well paid and with such responsible duties, the shipping interest was entitled to expect that the Government would recruit the best class of men that were available. He contended that Eurasian and Anglo-Indian youths, if they desired to enter the service, ought to undergo instruction in the training ships in England, and prove their superiority in competition with the other candidates under training in the same manner as lads of the same class had to obtain admission to the Covenanted Civil and Medical Services. He gave it as the result of his experience that boys trained in India were wanting in energy and ability.

The Port Commissioners suggested, as a means of mitigating the hardships of which the memorialists complained, the creation of scholarships to be competed for by Eurasian and Anglo-Indian boys, and of such an amount as to enable a successful candidate to proceed to England and obtain instruction for three years in a training ship, from which, having passed the necessary examination, he might be drafted into the Bengal Pilot Service as Leadsman.

The Committee of the Chamber of Commerce were of opinion that the necessary professional training could be obtained on the existing pilot brigs. At the same time they intimated their approval of the maintenance of a training ship in Indian waters, if the Government could see its way to do so; and if the training in England were deemed indispensable, they suggested the creation of scholarships tenable by Eurasian and Anglo-Indian youths in training ships in England.

Bengal.  
Pilot Service.  
Section I.

The Lieutenant-Governor of Bengal expressed himself opposed to any rule disqualifying Anglo-Indians and Eurasians from employment, provided that the best men at the least cost could be secured for the service; and he admitted that there were probably many lads in both these classes fitted by position and character as well as by stamina and physique, to do good work as Pilots on the Hughli; but he observed that the one thing wanting to fit them for such duties was a place where they could gain nautical experience and training in seamanship. He pointed out that the preliminary education for the Marine Service was obtained in England on board the training ship *Worcester*, which was open to all, and accommodated some 200 cadets; that the cost of the professional education there given was not less than £55 a year; and that two years at least were necessary to qualify for any branch of Marine Service. He considered it out of the question to think of establishing such an institution as a training ship in India, seeing that the required strength of the Pilot Service was so small, and that outside of the service there were no inducements to young men in India to adopt a seafaring profession. His Honor also pronounced himself opposed to the establishment of scholarships for the nautical education of Eurasian and Anglo-Indian youths at the public expense. Whilst it was possible to get excellent recruits for the service without cost to the State, he thought that it would be unjustifiable to incur avoidable expenditure. His Honor considered that the only way open to the Government to assist the memorialists would be to offer a certain proportion of the vacancies in the Leadsman grade for competition in India to youths who had received a sound elementary education and could produce certificates of good character and respectability, of strong physical health, and of nautical knowledge obtained during an apprenticeship for at least two years under a competent master of a sailing ship of the British Mercantile Marine. At the same time he expressed his preference for a scheme whereby some nominations to a training ship in England might be placed at the disposal of the Association, so that the Association might select promising youths who should take their chance of appointments in the Bengal Pilot Service; and he suggested that perhaps a preference might be given to the nominees of the Association if they were declared to be in all respects fit and competent.

In forwarding the memorial of the Association with these opinions to the Secretary of State, the Government of India called attention to the proposals of the Lieutenant-Governor, and observed :—

“Neither of these plans, however, seems to us to be very practical. The objection to the first, which is perhaps the preferable proposal, is that it is very doubtful whether any considerable number of Anglo-Indian or Eurasian youths would go through an apprenticeship at sea on the chance of being appointed to the Pilot Service.” (The evidence of the representatives of the Association taken by the Sub-Committee justifies this view.) “The second suggestion would not help them much, unless Government were prepared to bear some part of the charges for their training in England; and this we are not disposed to do. \* \* \* In regard to the Pilot Service, however, we are bound to bear in mind that the duties which devolve on a Pilot in the river Hughli are of an exceptionally important character; for human life and the safety of very valuable property may at any time be dependent on the skill, coolness, and nerve of a Pilot brought in presence of sudden and unforeseen difficulty and danger. Unless a young man has received a really good and sufficient training, he cannot be expected to possess that complete self-confidence which is essential to the safe and efficient performance of the responsible duty which must fall to him in a river so dangerous as the Hughli is well known to be. We have no means of training lads for this service in India, and the expense of establishing and maintaining a training vessel for the supply of not more than four candidates for the service annually would be out of all proportion to the results. There is no other course open but to continue the present system, which has been entirely satisfactory, of training in England. We do not consider that the Government can bear any portion of the cost of such training in favor of any particular class or section of the community.”\*

The views expressed by the Government of India were approved by the Secretary of State, who directed that his decision should be communicated to the memorialists. Inasmuch, however, as the recruitment of the Pilot Service through the training ships was not the result of any formal rule, the Secretary of State expressed himself as favourable to the occasional appointment in India of persons who had qualified by apprenticeship at sea, if their qualifications were tested by suitable regulations. At the same time he considered it undesirable that any proportion of annual vacancies should be set aside for competition in India, but deemed it better that if in any year thoroughly qualified candidates were appointed locally, a corresponding reduction should be made in that year in the number of appointments offered to the training ships.†

In consequence of the suggestion made by the Secretary of State in the Despatch last mentioned, the Government of Bengal proceeded to frame regulations for the admission to the

\* The Government of India to the Secretary of State, No. 23, dated 7th April 1884.

† The Secretary of State to the Government of India, No. 85, dated 12th June 1884.

Bengal. service of locally selected candidates. These draft regulations provided for the holding of an examination for admission to the Leadsman grade at a time and place to be fixed by the Local Government. They reserved to the Local Government the power to declare the number of vacancies available for local candidates, and they suggested, in somewhat vague terms, that at least a qualifying standard must be attained. The qualifications imposed on candidates were that they should be not less than 15 nor more than 18 years of age, and descended from European or Eurasian parents domiciled in India; that they should produce medical certificates of good health and physical fitness to work as Pilots in a tropical climate, with satisfactory evidence of moral character; that they should have served at sea for a period of two years as seamen or apprentices in a merchant sailing vessel of not less than 300 tons register employed in the foreign trade, and should produce satisfactory certificates from the Masters they may have served under; that they should have passed the examinations prescribed for the sixth standard of the Code of Regulations for European Schools in Bengal; and, in addition, that they should submit to an examination in seamanship and in navigation up to the standard of 2nd Mate.

Pilot Service.  
Section I.

The Government of Bengal communicated the regulations so drafted to the Eurasian and Anglo-Indian Association at Calcutta. The Board of that body, while expressing their hearty satisfaction at the concessions made to the classes they represented and their real thankfulness to the Government for them, suggested (1) that a fixed proportion of not less than one-third of the future vacancies in the Pilot Service should be filled by appointment in India under the proposed regulations; (2) that subject to any condition for the selection of individuals on which the Government might determine, on proof that a lad had passed the necessary educational test and possessed the necessary moral and physical qualifications, a nomination on which he might count with certainty should be given to him before he proceeded to sea to acquire the necessary professional training; and (3) that the maximum limit of age should be raised to 20 years.

The Bengal Government, adopting the views of the Port Officer that the assignment of a fixed proportion of vacancies might lead to the admission of unfit candidates, and that it was inexpedient to give a candidate a nomination without any guarantee that he had an aptitude for a marine profession, felt itself compelled to disallow the first and second suggestions of the Association, but it agreed to the suggestion about the maximum limit of age, and with this amendment the proposed regulations were approved by the Governor General in Council,\* and on the 13th of June 1885 were adopted and issued.

In 1886 an appointment was offered for competition in India, but no candidate with the requisite qualifications presented himself. In April of the present year an examination was held at Calcutta under the regulations of 1885, and a Eurasian obtained the appointment. Applications were received from four candidates for admission to the examination, but only two appeared. The subjects of the examination are stated in the Notification of September 22nd, 1886, appended to the note of the Departmental member.

The Bengal Pilot Service, as at present constituted, comprises three grades of Pilots and one of Leadsman.

In July 1887, there were 85 officers graded as shown below :—

Branch Pilots	. . . . .	13
Master Pilots, Senior, 30 }	. . . . .	38
Master Pilots, Junior, 8 }	. . . . .	
Mate Pilots	. . . . .	15
Leadsman	. . . . .	20

— 86

Of the 86 officers now serving, 20 are Licensed Pilots. It appears from the return furnished by the Port Officer that with the exception of one Master Pilot who is a Eurasian and one Leadsman who is a domiciled European, the other officers of the Pilot Service are non-domiciled Europeans, but Mr. Hudson, a Master Pilot, stated that six of the Leadsman had been born in India and that five of these six had been educated in England.

Under G. O. No. 1329, dated 19th September 1881, the number of Pilots in the service is to be reduced to 60, and the number of Apprentice Leadsman has been fixed at 25. The Port Officer considers these numbers sufficient for the service of the port.

A Leadsman Apprentice, whether appointed in England or in India, is required to serve for two years as a Leadsman, and receives a salary of R100 to enable him to support himself in Calcutta and to pay his mess-money when on board the pilot brig. At the end of two years he is required to pass an examination as 2nd Mate, and, if successful, is appointed as 2nd Mate to a pilot brig on a salary of R125. Having served for a year on a pilot brig, he is required to serve for another year as Leadsman, receiving a salary of R100 and 50 per cent. of the lead-money paid by the ships on which he does duty. He is next required to pass an examination as 1st Mate, and, if successful, is appointed for a year to a pilot brig, receiving a salary of R150 and his messing expenses. He is next allowed to present himself for examination as Mate Pilot, and, having qualified, is appointed to the grade of Mate Pilot, on the occurrence of a vacancy. After four years' service as Mate Pilot, he is allowed to present himself for examination as Master Pilot, and, on passing it, is promoted to that grade when a vacancy

\* Letter from Government of Bengal to Government of India, No. 194T.G., dated 25th April 1885.  
Letter from Government of India to Government of Bengal, No. 929, dated 21st May 1885.

occurs. Promotion to all grades is made by seniority. A Master Pilot passes an examination after 20 years' service to qualify as Branch Pilot.

Bengal.  
Pilot Service.  
Section I.

The grade regulates the privilege of the Pilot as to the size of ships he is permitted to take charge of.

The following tonnage at present is assigned to the several grades :—

	Tons.
Branch Pilot . . . . .	over 2,000
Senior Master Pilot . . . . .	900 to 2,000
Junior Master Pilot . . . . .	900 to 1,460
Mate Pilot . . . . .	up to 900

Members of the Pilot Service, appointed under the present rules, are not entitled to any salary when on pilotage duty, but receive as their remuneration 50 per cent. of the pilotage dues paid by the ships piloted by them. They receive salaries when employed on other duties. Three of the Branch Pilots are employed as Commanders of the pilot brigs on salaries of R1,000. Five senior Masters and two mates, termed Special Pilots, receive fixed salaries from certain Mail lines, which have been permitted to engage their services. The average monthly earnings of the several grades engaged in pilotage work under the 50 per cent. rule in the year 1886 are shown in the following table :—

	R a. p.
Branch Pilots . . . . .	1,386 2 1
Master Pilots, Senior . . . . .	868 5 1
Master Pilots, Junior . . . . .	502 14 10
Mate Pilots . . . . .	295 6 0

The furlough and leave rules, which are not illiberal, are appended to the note of the Departmental member. The average pay calculated for furlough allowances is for—

	R
Branch Pilots . . . . .	1,000
Master Pilots . . . . .	700
Mate Pilots . . . . .	450

After an actual service of 30 years in India, a member of the service is entitled to a retiring pension according to his rank. A Branch Pilot receives R200 a month; a Pilot of any other rank R100 a month; but not more than four retiring pensions are granted in three consecutive years.

To members of the service who obtain from a prescribed Medical Board certificates of incapacity for further service, invalid pensions are paid at the following rates :—

	R
Branch Pilots . . . . .	200 a month.
Master Pilots . . . . .	100 "
Mate Pilots . . . . .	60 "
Leadsman Apprentices . . . . .	30 "

Members of the service are required to subscribe for pensions to their widows and children, the amounts of the pensions and subscription being determined by the rank of the subscriber, thus :—

	Monthly contribution.	Monthly pension to widow.		Monthly pensions to children.
	R	R		R
Branch Pilot . . . . .	40	100	} To each son till age of 15 years . . . 12 To each daughter till age of 10 years . . 14 and thereafter till marriage . . . 20	12
Master Pilot . . . . .	20	50		14
Mate Pilot . . . . .	10	30		20
Leadsman Apprentice . . . . .	4	15		

Since the service was reconstituted in 1877, 45 appointments have been made under the existing regulations. Of the officers so appointed, 38 are still serving, three have died, one has resigned, two have been invalided, and one has been transferred to the Indian Marine Service. It will be observed that not a single officer so appointed has been dismissed the service. The appointments have been made principally by the Secretary of State, but in some instances the Government of Bengal has exercised its power of nomination; two of the nominees were youths who had served as supernumerary Leadsman before the reconstitution of the service, and a third had gone through a course of instruction on a training ship in England. The average number of appointments has been seven in two years, but during the last six years the average has been three in a year.

The reduction of the number of Pilots and the reconstitution of the Service have apparently greatly increased its efficiency.

In the ten years, 1877-78 to 1886-87 inclusive, out of 20,941 vessels piloted, only 572, or 2.73 per cent., grounded or were in collision, and only six were totally lost.

The Port Officer considers that the lads who have come out from England are of a superior class, and that it would not be desirable to introduce a lower class as their comrades. The introduction of either the Hindu or the Mahomedan element is, he thinks, out of the question. He doubts whether the better class of educated Hindus or Mahomedans would accept employment at sea. He states that there is no room in the pilot brigs for separate messes, nor for separate accommodation for Asiatic officers; and he concurs in the opinion, expressed by some

Bengal.  
Pilot Service.  
Section I.

of the witnesses who were examined by the Sub-Committee, that Asiatics would not be able to exercise the needful, almost despotic, authority of a Pilot over European officers and crews, nor would they inspire the necessary confidence. He maintains that the admission of Asiatics to the service would lead to disastrous results and increase the present rates of insurance. As to the complaint that it is difficult for Europeans born in India to obtain admission to merchant ships, and that they would undergo hardships during their two years' apprenticeship at sea, he observes that the Government in England does not bear the expense of training ships, nor provide facilities for youths to obtain employment afloat; and that every lad who goes to sea has to put up with some hardships. He is of opinion that Eurasians, as a class, do not take to the sea as a profession, and until a large number do so, so that some selection could be exercised, he would view with distrust the introduction of that class into the service. He expresses his conviction that to nominate boys born in the country directly they have left school, and without any test of their fitness for a sea life, would be most unwise.

Licenses are issued to Natives authorizing them to pilot Native coasters and dhonies not exceeding 500 tons between Calcutta and Kedgerree, and to charge pilotage fees at the following rates:—

Draught.	Pilotage payable to Pilots.
	<i>R</i>
Under 8 feet . . . . .	16
" 9 " . . . . .	18
" 10 " . . . . .	20
" 11 " . . . . .	22
" 12 " . . . . .	24
" 13 " . . . . .	27
" 14 " . . . . .	30
" 15 " . . . . .	35
" 15 and over . . . . .	40

In the present year only three Native Pilots have taken out or renewed their licenses.

There is a Port Officer at Chittagong on a salary of R250 rising to R400. This office is held by Mr. Good, a member of the Indian Marine and a European.

There is also a Pilot Service paid partly by fees, and partly by a percentage on earnings.

The service consists of five Pilots and two Apprentices. Of the five Pilots, one is a Eurasian and four are Mahomedans, as are also the two Apprentices. The Eurasian and the Senior Mahomedan Pilot alone receive more than R100 a month.

At the Orissa ports there are two Port Officers. The Port Officer of False Point and Pooree, who is also Customs Collector, receives a salary of R400. The Port Officer of Chandbally and Balasore receives a salary of R300. These officers are Europeans.

There are two Native Pilots at Chandbally who receive fixed salaries of R40 each.

The Sub-Committee examined eleven witnesses and received one opinion in writing. The substance of the evidence is as follows:—

Mr. J. L. Mackay, a partner in the firm of Messrs. Mackinnon, Mackenzie & Co., and Mr. James Stevenson, a partner in the firm of Messrs. Graham & Co., were deputed by the Bengal Chamber of Commerce to give evidence before the Sub-Committee.

The firm of Messrs. Mackinnon, Mackenzie & Co. represents the British India Steam Navigation Company. The Company owns eighty steamers with a tonnage of over 176,000 tons. On about 250 occasions in each year steamers of the Company enter and leave the port of Calcutta. The Company's vessels are manned by Natives of India, and commanded, officered, and engineered by Europeans. It employs 800 European Commanders, Officers, and Engineers and 6,000 Native seamen, firemen, and saloon servants. As a rule the Quartermasters are Natives, but a few European Quartermasters are entertained in steamers trading to England. Mr. Mackay informed the Committee that the Company has no Native Commanders, Officers, or Engineers, and that he had never received an application for employment from Natives qualified to discharge the duties of such officers. Personally, Mr. Mackay saw no reason to debar Natives of India from entering the Bengal Pilot Service, though, if the Service became a mixed service, some alteration might be required to meet the objections of Asiatics to messing and sleeping in the same quarters as Europeans; but he regarded that as a mere matter of detail, which could be easily arranged. Mr. Mackay considered that if a young Native gentleman of sufficient education obtains the necessary knowledge of seamanship either in a seagoing vessel or training ship, and acquires experience of the river and undergoes the manual labour entailed on Leadsman, it is yet to be proved that he would not be an equally efficient Pilot as an Englishman. At the same time Mr. Mackay stated that no educated Natives are now taking to the sea as a profession, and that the Natives employed by the Company as sailors are recruited chiefly from the agricultural and seafaring classes at Chittagong and Surat; and that although they write and read their own languages, they are ignorant of English and without education. He mentioned that even Native owners prefer European Commanders, and that although Arab ships are generally commanded by Natives, they keep at sea only in fine weather, and frequent the port at a season when they have a fair wind both for

coming and returning. Inasmuch as 95 per cent. of the vessels trading to Calcutta are owned, commanded, and officered by Europeans, and insured in European companies, Mr. Mackay considered that, if the Service became a mixed service, it would be right to give Commanders of vessels visiting the port the privilege of choosing either a Native or a European Pilot. He expressed his belief that the Commander would prefer a European Pilot, and stated that this is also the opinion of the Chamber of Commerce. If Natives were admitted as Pilots, it was his opinion that they would have very little to do, unless the Government forced them on ships, which he thought would be unfair. He considered that if Natives were employed as Pilots, the pilot fees paid to them might be reduced, as they would be serving in their own country; but his impression was that the circumstance that the services of Native Pilots could be obtained at a lower rate would not diminish the preference of Commanders for Europeans, and that an objection to the employment of Native Pilots would be entertained by Insurance Companies. If the Government forced Native Pilots on ships, he thought that the rates of insurance would very probably be enhanced, and that the danger of the navigation of the river would be increased.

Bengal.  
Pilot Service.  
Section I.

As to Eurasians and Europeans born in the country, he stated that it is not the practice of the Company to accept European Apprentices to learn seamanship. No youths are taken into the service of the Company who have not undergone a training in a sailing ship. In an experience of 13 years, he had not received five applications for employment from country-born youths who had served their time and obtained a 2nd Mate's certificate. His experience was that very few of such youths cared to go to sea. As to the employment of Eurasians as Engineers, Mr. Mackay stated that the Company had employed a considerable number of them at sea and had found them unreliable, because, when anything went wrong, or there was a press of work, they fell sick. The Company had consequently been obliged to dismiss them and to engage young men in Great Britain, of whom the greater number had been trained in engineering shops at Glasgow. He added that the Company employs a great many Eurasian and country-born lads in their dockyards and workshops in Calcutta and Bombay, and that ashore those youths give satisfaction.

The firm of Messrs. Graham & Co., of which Mr. James Stevenson is a member, are Agents of the International Marine Assurance Company and the Anchor Line of steamers, and the representatives of the largest number of outside ships, both sailing vessels and steamers, that trade to the port of Calcutta. Mr. Stevenson, speaking from a personal experience of 16 years, and from opinions expressed to him by shipmasters, characterized the officers of the Bengal Pilot Service as a very high class of men, unsurpassed by the members of any Pilot Service, either in private character or professional attainments. Mr. Stevenson, who is thoroughly acquainted with the river, detailed to the Committee the difficulties in navigation experienced in his presence, and stated that the Hughli was generally regarded by shipmasters and owners as one of the most difficult and dangerous rivers in the world, if not the most difficult and dangerous. He added that the insurance risk is very great, and that the introduction into the service of men who are inferior either in experience or otherwise would be certain to increase the risk. The introduction of Natives into the Pilot Service would, he considered, compel many owners of vessels to insure them who now avoided that expense.

Mr. Stevenson was of opinion that, while a high degree of education of a literary character is not necessary for a Pilot, a thorough training as a seaman and experience in handling ships are most essential; and that a vigorous and robust constitution, energy, nerve, judgment, resource in sudden emergencies and a high sense of duty and responsibility are qualities required in a Hughli Pilot; and these qualities, according to his experience, are most wanting in the Natives of Bengal. He described Native seamen as obedient and good men in ordinary weather, and giving less trouble than the same class of Europeans, but easily prostrated in rough weather, and in fact of the least use when most required. He had had no experience of Native officers, and knew of no vessels of any size commanded by Natives; but he had been frequently asked by Native owners to recommend European captains. He knew of no Native who, he considered, would make a reliable Pilot; nor had he ever known one express a wish to join the service. With regard to Eurasians and country-born Europeans, he stated that he had not received any application from these classes for employment on board a steamer, except as stewards, nor for apprenticeships as seamen; but he admitted that it is not the practice to take apprentices in Calcutta on the ships with which he is connected. He stated that his firm employed Eurasians as tallymen and in similar occupations in connection with shipping for reasons of economy, and he also stated that if there were training ships in India, he thought that there were lads in the country who could be sufficiently trained to take appointments in the Pilot Service.

Mr. E. F. Hudson, a Master Pilot in the Bengal Pilot Service of 28 years' standing, considered it inexpedient to recruit Natives of India for the Pilot Service, because the nature of the work required promptitude and highly skilled action to meet emergencies which might arise at any time. He regarded the rules framed for the admission of local candidates as not excessive in their requirements, so far as general education was concerned; but he thought that a sufficient knowledge of seamanship might be acquired in the service under the tuition of the senior members of the pilot brigs. He considered that, in the absence of training on a training ship, a condition that the candidate should have served two years in a merchant sailing vessel is not altogether indispensable; but that it is more necessary at the present time than it was formerly, because, owing to the substitution of steam for sails, it is not now so easy to acquire experience

Bengal.  
Pilot Service.  
Section 1.

of sailing ships. Among the Branch and Master Pilots, he is acquainted with men who were born and educated in this country, he also knew that there are six Leadsman Apprentices who had been born in this country, but five of these had received an education in England either on a training ship or elsewhere.

Captain A. W. Mann, commanding a steamer of the British India Steam Navigation Company, stated that he had frequented the port of Calcutta since 1868, both as an officer and as commanding a steamship; that he considered the Bengal Pilot Service as now constituted the most perfect Pilot Service in the world; and that, taking the officers as a class, there are no Pilots who do their work as efficiently as the members of the Bengal Pilot Service. He considered that it would not be at all advisable to employ Natives as Pilots; he stated that he had had considerable experience of Native Pilots in the Moulmein, Rangoon, and Chittagong rivers, and that he had never found one of them in a case of emergency who was equal to the occasion; that, being compelled to employ Pilots, he had been obliged to take a Native Pilot when there was no other available; but that, knowing the river as well as the Native Pilot did, he on such occasions simply took charge of his ship himself. He also stated that if he had a choice of employing a European or a Native to pilot his vessel up or down the Hughli, and could obtain the services of the Native at a lower rate of pay, he would certainly choose the European.

Captain Atkinson, also a Commander in the service of the British India Steam Navigation Company, expressed similar views.

Mr. G. M. Anderson, a Master Pilot in the Bengal Pilot Service of 29 years' standing, stated that he had been appointed by the Court of Directors after he had attended the Royal Naval School at Dulwich for three years, and had spent two years at sea. He considered that some men born in the country of European, or partly of European, parentage had proved themselves very good Pilots. He knew no instance in which a pure Asiatic had entered the Pilot Service. He had served with Native crews, and was of opinion that the better class of Native mariners would not be likely to provide good material for the Pilot Service; that they were physically unfit for the duty and wanting in nerve and promptitude in cases of emergency. He stated that since the reconstitution of the Bengal Pilot Service accidents on the river were considerably less frequent than they had been formerly, although the time occupied in performing the voyage is much less. He considered that the education received in the training ships is a proper one for men appointed in England; and that the requirement in the case of men recruited in India, that, in lieu of that training, candidates should have served for two years in a sea-going ship, is reasonable.

Mr. L. W. D'Cruz, who appeared as a representative of the European and Anglo-Indian Association, took exception to the condition imposed on the local candidates for appointment, that they should have served at sea for two years in a merchant-sailing vessel employed in the foreign trade. He asserted that parents could only with difficulty, if at all, induce shipowners or captains to accept apprentices in Calcutta, and that they are unwilling to send their sons to sea for a period of two years when it is uncertain whether on their return they would find a vacancy in the Pilot Service, because the opportunities for obtaining employment on board-ship were unfrequent in Calcutta, and because if a youth did not succeed in obtaining an appointment in the Pilot Service or on boardship, he would have lost two years during which he might have fitted himself for another career and might have obtained some other employment. He added that parents of youths born in this country are generally too poor to afford the risk of sending their sons to be educated on training ships, unless there is a certainty that their sons would secure appointments. Having adverted to the circumstance that country-born lads are sent to England to be educated to compete for the Medical Service as a proof that parents would not be unwilling to incur the expense entailed, he was compelled to admit that in such cases the parents have no security that their sons will succeed in obtaining appointments.

Mr. C. A. Tweeddale, another representative of the Eurasian and Anglo-Indian Association, read a statement embodying the views of the Association. In this paper objection was taken to the rule limiting the age for entering the service to 18 years, and it was proposed that the limit should be raised to 20. [It appeared that the witness was not aware that the rule had been altered and that the maximum age had been raised to 20.] Objection was also taken to the condition requiring a two years' service at sea in lieu of the period passed by the English candidates on a training ship, for reasons which have been already noticed in the evidence of Mr. D'Cruz, with an additional reason that apprentices on board merchant vessels would be required to do menial work and associate with the lowest classes of seamen. It was suggested that all the nominations to the service should be thrown open to competition, and that no portion of the appointments should be restricted to a particular class or to youths in the training ships on the Mersey. It was argued that the education received on the training ships is theoretical and superficial, and that a knowledge of navigation is altogether unnecessary for a Pilot on the Hughli. It was added that lads trained on the training ships had practically to be trained afresh on the pilot brigs in India. It was suggested that lads of European and Anglo-Indian parentage should be trained on board the same pilot brigs in which the lads from the training ships are made efficient and practical Pilots—a training which, it was urged, had been proved sufficient by the efficiency of Pilots locally recruited already in the service. Mr. Tweeddale advocated the following scheme, *viz.*, that after a youth has passed the educational test required by Government, he should be appointed as an Apprentice Leadsman, without pay, to take his turn in heaving the lead up and down the river; that when on board the pilot brigs, he should be required to take his regular turn of duty in keeping watch and manœuvring the vessels, by such training acquiring a practical knowledge of the river and of seamanship; that after an

apprenticeship of two years, he should be required to pass an examination and produce certificates of his ability from the Pilots with whom he has served as Leadsman and from the Commanders of the pilot brigs; that if he fails to pass his examination after two years, he should be permitted an extension of another year to enable him to qualify; that if he then fails, his services should be dispensed with; and that during the period of apprenticeship his parents or guardians should be required to defray his expenses for subsistence on the pilot brigs at the same rate as is charged for the lads from the training ships. Mr. Tweeddale stated that the parents of local candidates for employment in the service are not, in some instances, in a position to pay the cost of sending their sons to England to be trained on board a training ship.

Bengal.  
Pilot Service.  
Section I.

Captain William Ellery, of the ship *Talagdar*, who had traded to the port since 1870 as Master of several ships owned by Messrs. T. & J. Brocklebank, of Liverpool, expressed a very high opinion of the efficiency of the Bengal Pilot Service. Judging from the behaviour of Native boatmen and others employed on the river, he did not think that any of them could qualify for the duties of a Pilot, or that it would be possible to train them to exercise the cool judgment and readiness of resource in emergency which were necessary for the protection of property on such a dangerous river as the Hughli. As regards East Indian youths, he considered that a certain number of them could be found who would readily undergo the necessary course of training at sea, and that a healthy, intelligent East Indian, who had faithfully served two years in a sailing vessel and passed a competitive examination, would be well qualified to enter the junior grade of the Pilot Service. He was of opinion that residence in a pilot brig would not be a sufficient training. He asserted that respectable boys could without difficulty be apprenticed in good ships plying to and from the port, and expressed his readiness to take apprentices for a term of three or four years. He mentioned that he had received a Eurasian apprentice at the port of Calcutta who promised to make a good sailor, and who proposed to offer himself as a candidate for the Pilot Service at the ensuing examination. He also mentioned that the *Khyber* and another ship, both owned by his employers, had each a Eurasian apprentice from the port of Calcutta. He stated that there were from five to eight apprentices on each ship, and that the apprentices messed together and not with the men.

Captain C. G. Cross, of the *Mytomene*, who had navigated the Hughli from time to time for 16 years, was of opinion that the Pilot Service, as it now exists, is thoroughly efficient. He considered that Natives of Asiatic birth would not be fit men for the service; that a Pilot must not only know the river, but the handling of a ship, both how to conduct the ship and how to avoid collisions; that he must have courage and promptitude of judgment; and that he ought to have some training afloat for not less than two years. He was of opinion that the necessary knowledge for working a ship at the Sandheads could be procured in the pilot brigs. He did not think that the boys trained in the *Conway* and *Worcester*, of whom many had served under him, received a sufficient training in practical seamanship for a Pilot. He stated that he received apprentices on his ship, and that if a boy was robust, strong, and respectable, he would take him as an apprentice from the port of Calcutta, whether his parents were European or Eurasian; but that he would prefer a boy of European parentage, because a European would stand changes of climate better. He stated that he had tried Mahomedan sailors and had found them efficient in fair weather, and that he believed that the Arab Commanders were fairly good sailors in their own waters. He mentioned that on one occasion he had boarded a ship with an Arab Commander in the Bay of Bengal to compare chronometers; that he found the Commander had three, and had worked out three sets of sights in English figures; and that he ascertained from him that he had been taught navigation in Calcutta.

Mr. E. Good, of the Indian Marine, Port Officer at Chittagong, stated that he had under his charge the Native Pilot Service at that port; that the best man in the service was a Mahomedan, a native of Chittagong, who had been a *sekuni* in the service of the British India Steam Navigation Company, and before that in Government service; and that he had also one Eurasian Pilot who was an exceptionally good man, and who had been educated at the Doveton College, and had subsequently obtained a certificate authorizing him to act as Master of country ships; that he desired to enlist good Mahomedans and Eurasians, but found a difficulty in obtaining them; that Natives were inferior in promptitude, nerve, and readiness to the class of Europeans who could alone be obtained for the remuneration offered, but compared favorably with them in steadiness and sobriety. He admitted that Commanders of vessels are apt to disregard the orders of Native Pilots. He also stated that although he had offered Eurasians in Chittagong a chance of employment on ships with a view to obtain appointments as Pilots or Leadsman, they had not availed themselves of his offer; and that they are unwilling to put up with the hardships of a seaman's life, and consider the work degrading and derogatory.

In advertence to this witness's evidence, Mr. D'Cruz suggested that the Eurasians referred to were probably by birth pure Asiatics, who on their conversion to Christianity had assumed Eurasian names and customs.

Mr. A. J. Milner, Branch Pilot, forwarded to the Sub-Committee his opinion as to the qualifications of Natives of India for the Pilot Service of the River Hughli. He considered them as a class unable to discharge the duties of Pilots, because they are deficient in nerve, judgment, and decision of character; and, considering the risk to life and the value of property entrusted to the charge of Pilots, and the large amounts paid by the mercantile community for pilotage, he thought that merchants were entitled to the best talent procurable.

Mr. W. C. Madge, an influential member of the Eurasian and Anglo-Indian Association, also addressed a note to the Sub-Committee complaining of the condition requiring a two years' training at sea in lieu of a training for two years on a training ship as a qualification for the admission of local candidates.



## Section II.—Note by the Departmental Member.

Bengal. The Port Officer of Calcutta is the administrative head of the Bengal Pilot Service, and also *ex-officio* Shipping Master. He discharges also various other duties in connection with marine questions, and is the head of the Bengal Government, Marine Department.

Pilot Service.  
Section II.

2. The number of gazetted officers is five, as follows :—

	R
(1) Port Officer, European . . . . .	1,400
(2) Deputy Shipping Master, European . . . . .	500—600
(3) Assistant Shipping Master, European . . . . .	350—400
(4) Surgeon at the Sandheads, European . . . . .	360
(5) Commander, supply steamer, European . . . . .	400

3. Of the above, all are domiciled in England, except the Assistant Shipping Master and the Surgeon at the Sandheads.

4. The Pilot Service, as at present established, consists of sixty Pilots and twenty-five Leadsman of various grades. The numbers of the Service have varied very much at different times.

5. Up to 1856 the Pilot Service was a close service. Direct appointments to it were made by the Court of Directors in exactly the same manner as to the Indian Army or Navy. The Service was paid by salaries, and had its own leave and pension rules. Such appointments in decreasing number continued to be made up to 1861, when they were discontinued. A change in the rules of this Covenanted branch was made during these years, *viz.*, in the method of paying. Instead of being paid by salaries, they all, with one or two exceptions, gradually accepted payments based on their actual earnings.

6. From 1856 a new system of recruiting the Service was commenced by the introduction of locally-selected candidates, known as the "Licensed Service." From that date until 1868, when further appointments were suspended, a total number of 114 men were appointed, of whom only 15 now remain in the Service.

The disposition of the men is shown in the following table :—

Total number appointed . . . . .		114
Still in service . . . . .	15	
Died . . . . .	21	
Dismissed . . . . .	33	
Resigned . . . . .	38	
Retired with bonus . . . . .	7	
	114	

7. These Licensed Pilots have been throughout paid also by earnings, *i.e.*, for actual work done by them ; but they have no leave or pension allowances whatever.

<i>Covenanted Pilots.</i>	
Branch Pilots . . . . .	12
Master Pilots . . . . .	30
Mate Pilots . . . . .	30
Senior 2nd Mates . . . . .	12
Junior Mates . . . . .	11
Volunteers . . . . .	2
	97
Licensed Pilots . . . . .	88
Licensed Leadsman . . . . .	16
Supernumerary Leadsman . . . . .	11
	65
	162

8. In 1867 a Committee recommended the stoppage of further entries. The total number of Pilots of both classes and of Leadsman was at that time 162, as shown in the margin.

9. Owing to the salaries having been stopped, and the direct inducements to work held out by the new system of payment, it was found that the work could be done with a very much smaller number of men ; and this has led to the reduction of the service, first to 70 Pilots and 2 Leadsman, and then to 60 Pilots and 25 Leadsman.

10. No further appointments to the Licensed Service were made until 1876, when, under orders of Government, nine Licensed Leadsman were appointed, of whom six are still serving as Licensed Master Pilots. This was a temporary arrangement, pending the consideration of a new scheme of organization.

11. In 1877 it was decided by Government, for reasons set forth in letter No. 161, dated 19th January 1876, from the Government of Bengal, General Department, Marine, to the Secretary to the Government of India, Marine Department, that it was desirable to re-establish a Covenanted Service recruited from England, whose regulations were based on those of the old Service. The first contingent of the new recruits arrived in 1877; and since that date 45 men have been appointed, of whom 37 are now serving in various grades, from Master Pilots downwards. The average rate of appointments has been seven in two years, but during the last six years it has been only three in each year. These men have been generally appointed by the Secretary of State for India on the recommendation of the Committee of the training ships *Worcester* and *Conway*. A few appointments, however, have been made on nomination by the Government of Bengal on various grounds. The regulations under which these are made are attached.

12. In 1885, owing to representations made by the Eurasian community, a system of local candidature for the Service was ordered by the Government of India in the Department of Finance and Commerce, No. 929, dated 21st May 1885, to Government of Bengal under certain regulations, a copy of which is also attached, and one appointment offered for competition last year; but no candidates having the requisite qualifications came forward. Another appointment is about to be competed for on the 1st of April of this year. The other two appointments will still be nominated from England. The lads who have thus come out are of a superior class, and I think it would not be desirable to introduce a lower class as their comrades.

13. The introduction of either the Hindu or Mahomedan element is, I think, out of the question. I do not think Hindus would go to sea, nor the better class of educated Mahomedans. We have no room in the pilot brigs for separate messes or separate accommodation; and, as stated by many witnesses who were examined by the Public Service Commission, such men would not be able to exercise the needful, almost despotic, authority of a Pilot over European officers or crews, nor would they inspire the necessary confidence; and I feel sure that such admissions would lead to disastrous results, and increase the present high rates of insurance.

14. As regards the complaints as to difficulty of getting shipped, and the hardships the lads in this country would undergo in order to serve two years at sea, there is this to be said, that it is what every boy who goes to sea has to put up with, and that Government does not provide the expenses of training ships in England, or provide facilities for youths getting afloat. It does not appear that the Eurasian takes to the sea as a profession; and until a large number do so (so that some selection can be exercised among those who do), I should view with distrust the introduction of any such men. To nominate such boys from any of the schools direct, without any test of their fitness for a sea life, would, in my opinion, be a great error.

No. 161, dated Calcutta, 19th January 1876.

From—H. J. REYNOLDS, Esq., Officiating Secretary to the Government of Bengal, General (Marine) Department,  
To—The Secretary to the Government of India, Marine Department.

With reference to the correspondence noted in the margin, I am directed by the Lieutenant-Governor to submit, for the consideration of the Government of India, his proposals regarding the recruitment of the Hughli Pilot Service.

Letter to the Government of India, Marine Department, No. 671, dated 5th February 1873, and enclosures.

Reply of the Government of India, No. 36, dated 24th September 1873.

2. The Pilot Service has now been reduced to 70 members, the number recommended in the Government Resolution of the 5th February 1873; and there remains only a body of five Licensed Leadsman from which to fill up any vacancies which may occur in the grades of the Service. As the number of Pilots is only just sufficient for the work of the port, it becomes a matter of importance to provide and train up recruits, who shall be ready to take their places in the Pilot list as vacancies occur.

3. Sir Richard Temple has fully considered the conditions under which the Pilot Service should henceforth be recruited. Sir George Campbell, in his resolution of the 10th July 1872, paragraph 5, recorded his opinion "that it is in the interests of the port that some at least of the Pilots should belong to a Covenanted Service, on which Government has a strong hold in the shape of the absentee allowances, pensions, and other privileges it bestows. All Pilots must be Europeans or East Indians; the Pilots must all have served a long apprenticeship to the river; and if the whole body of Pilots were merely Licensed Pilots, quite free to come and go, they might at any time strike for higher wages, or bargain for gratuities, or in many ways they might very seriously hamper the trade of the port. The profession must always be a close profession; it would take years to breed up another race of Pilots; and it may, after all, be the best policy for Government to continue the Covenanted Service for a part at least of the trade of the port."

4. Sir Richard Temple concurs generally in these views. He is strongly impressed with the importance of maintaining a Government Pilot Service on account of the hold which Government

Bengal  
Pilot Service.  
Section II.

Bengal.  
 Pilot Service.  
 Section II.

is thus enabled to retain on the Pilots. He thinks that it might possibly be dangerous to trust entirely to a Licensed Service, the members of which might combine to strike, and thus cause the greatest inconvenience and danger to the interests of the port. By maintaining a service of Government Pilots, the Government would make sure of a regular succession of properly qualified Pilots who would be amenable to its authority; and though the system would involve more expense than a Licensed Pilot Service, the cost would not be disproportionate to the importance of the object which it would secure. He is convinced that the best possible service should be secured for the navigation of the long river approach to so great a port as Calcutta—an approach reputed to be among the most difficult of its kind in the world, perhaps the most difficult; and that an organized Government service is better than any other can be.

5. The Lieutenant-Governor has consulted the Master Attendant and other experienced officers regarding the number of apprentices who ought to be kept in training to qualify as Pilots; and he finds it generally agreed that there ought to be at least 20 (or perhaps 24) Leadsman Apprentices in training for the Pilot Service; and the question arises whether the recruits shall be obtained in Calcutta or from England. The Lieutenant-Governor believes that recruits could be obtained in Calcutta from young men of the Merchant Marine, who have been three or four years at sea, and who would gladly enter as Licensed Leadsman, with the prospect of becoming Pilots hereafter. But the Lieutenant-Governor thinks that by recruiting in England, and getting out lads from the training ships there, a better class of young men can be secured. In this case it will be necessary to make them members of a Government Pilot Service, and give them leave, allowances, and pensions. Youths would not come out from England merely on the prospect of getting employment as Licensed Pilots.

6. I am therefore to request that the Government of India will move the Right Honourable the Secretary of State for India to send out ten youths this year, and five in each of the two following years, as Leadsman Apprentices. It appears probable that youths in Her Majesty's training vessels will readily embrace the career which an entrance into the Bengal Pilot Service holds out to them; and that such youths would be likely to supply the Pilot Service with efficient and well-conducted members. I am to annex a paper of the Regulations under which these apprentices will eventually be admitted to the Pilot Service; and as it is desirable that the advantages of the Service should be fully known to those who may desire to become candidates for it, I am also to append a paper of information upon certain points connected with the Service. But it must be clearly understood that the Government reserves to itself a full discretion to pass such orders as it may think fit for the regulation of the Service, and that the particulars contained both in the rules and in this paper of information are at any time liable to be modified.

7. In conclusion, I am to express the Lieutenant-Governor's hope that early orders may be passed upon this reference, as it is important that the members of the Pilot Service should not be further diminished. The Lieutenant-Governor has now under consideration a variety of questions affecting the constitution of the existing Pilot Service; and detailed proposals upon these points will shortly be laid before the Government of India.

*Regulations for the admission of Leadsman Apprentices into the Bengal Pilot Service at Calcutta.*

The following conditions are prescribed for the admission of Leadsman Apprentices into the Bengal Pilot Service:—

1. Candidates must be not less than 15, and not more than 18 years of age.
2. Every candidate must produce a medical certificate of good health and physical fitness to work as a Pilot in a tropical climate, and also a certificate of good character.
3. Each selected candidate will receive a 2nd class passage to Calcutta, and an allowance of £20 for outfit.
4. Each Leadsman Apprentice, on arriving in Calcutta, will report himself to the Port Officer, and will receive Rs. 100 per mensem from the date of his arrival to enable him to support himself in Calcutta, and to pay his mess-money when on board the Pilot brigs.
5. He will have to serve for two years as a Leadsman, and then to pass an examination as 2nd Mate. Then he will be required to serve as 2nd Mate of a Pilot brig for one year, during which time he will receive Rs. 125 per mensem; and then for another year as a Leadsman, during which time he will receive Rs. 100 per month and 50 per cent. of the lead money paid by the ships in which he does duty.
6. He will then be required to pass an examination as 1st Mate, after which he will have to serve another year as 1st Mate of a brig, during which time he will receive Rs. 150 a month and mess. He will then be allowed to go up for examination as a Mate Pilot.
7. After passing this examination, a Leadsman Apprentice will be promoted to the grade of Mate Pilot as vacancies occur.
8. After four years' service as Mate Pilot, he will be permitted to go up for examination for Master Pilot; and on passing that examination, he will be promoted to be Master Pilot as vacancies occur in that grade.

9. Vacancies which occur in the grade of Branch Pilot will be filled up by promotion from the Master Pilot's grade.

10. Members of the Pilot Service, who enter the Service under these rules, are not entitled to any salary while on pilotage duty. They receive as their remuneration 50 per cent. of the pilotage dues paid by ships piloted by them. They are entitled to allowances while on leave or special duty, and to pensions on retirement from the Service.

11. Every member of the Pilot Service is subject to the rules made from time to time by the Government in regard to discipline, leave, leave allowances, number of officers in the Service, distribution into grades, tonnage of ships to be allotted to the several grades, &c.; and in all respects he is amenable to such orders as may be passed by Government for the regulation of the Service.

Bengal.  
Pilot Service.  
Section II.

*Paper of information relating to the Bengal Pilot Service.*

The following particulars are given for the information of young men who may desire to enter the Bengal Pilot Service; but it must be distinctly understood that it is entirely in the discretion of the Government to modify the rules of the Service in any way that it may think fit:—

I.—The present strength of the Bengal Pilot Service is 61, composed as follows:—13 Branch Pilots, 39 Master Pilots, and 9 Mate Pilots. It is intended that eventually there shall be 12 Branch Pilots, 36 Master Pilots, and 12 Mate Pilots; but this number is liable to alteration at the pleasure of Government. At present a Mate Pilot generally becomes a Master Pilot in about five years, and a Branch Pilot in about 18 years from the date of his qualifying as a Mate Pilot.

II.—Pilots who enter the Service in future will receive no salary while on active pilotage duty, but will be remunerated by receiving 50 per cent. of the pilotage dues paid by the vessels which they pilot. At present the average earnings of each grade, calculated upon this principle, are as follows:—

Mate Pilot, about	... Rs.	350 per month.
Master Pilot, about	... "	700 "
Branch Pilot, about	... "	1,000 "

But the Government does not in any way guarantee that any Pilot shall earn these sums.

III.—Three of the Branch Pilots are in command of pilot brigs, and receive fixed salaries of Rs. 1,000 per month.

IV.—Pilots receive pensions from Government, and no subscriptions towards their own pensions are required from them. They are required to subscribe on liberal terms towards pensions for their widows and families.

V.—Pilots who are guilty of misconduct are liable to suspension, or to be placed on reduced earnings, to loss of steps, to degradation of rank, and, in aggravated cases, to dismissal. These punishments may be inflicted either in accordance with the verdict of a Court of Inquiry, or under the direct order of Government.

*Leave.*

Section 1.—For the purposes of these rules, the pay of the several grades of the Service shall be taken to be as follows:—

	Rs.
Branch Pilot	1,000 a month.
Master Pilot	700 "
Mate Pilot	450 "

Section 2.—Furlough may be taken to the extent of four years during the entire period of service, in the following instalments, *viz.*:—After ten years' service, two years; and after every subsequent eight years, one year, on an allowance of half the average pay for the last three years; provided that no furlough can be granted to an officer who has taken leave on medical certificate until three years after his return from leave on medical certificate. If a portion of an instalment is taken, the remainder may be added to any later instalment, provided that not more than two years' furlough may be taken at one time.

Section 3.—Leave on medical certificate may be taken to the extent of three years during the whole period of service, but not for more than two years at a time, and not more than twice out of India. Such leave cannot be taken for more than one year, except after three years' continuous service immediately preceding. Leave on medical certificate cannot be counted as service for furlough, and no leave on medical certificate can be taken while any furlough is due. An officer on leave under this section is entitled to half his average pay for the first fifteen months of each period of absence, but not for more than thirty months in all. For the rest of his leave under this section, he is entitled to a quarter of his average pay. The minimum allowance during leave on medical certificate to the officer to whom any allowance is due shall be Rs. 100 a month.

Bengal.  
Pilot Service.  
Section II.

*Section 4.*—(a) Special leave on urgent private affairs may be granted at any time for not more than six months, provided that an officer who has had special leave must render six years' active service before he can again have such leave.

(b) For the first six months for which an officer is on special leave, whether the six months be included in the same leave or not, he is entitled to leave allowance of half his average pay for the last three years.

(c) Thereafter he is entitled to no leave allowance.

*Section 5.*—Subsidiary leave on half average pay, on the terms and conditions prescribed in sections 63 and 64 of the Civil Leave Code, may be prefixed and affixed to furlough, leave on medical certificate, and special leave on urgent private affairs taken out of India.

*Section 6.*—Privilege leave may be taken either—

(a) As provided for officers in sections 70 to 75 of the Civil Leave Code\*; or

(b) For a period of two months in every twelve on half pay (which cannot be accumulated) on a medical certificate showing that the applicant requires, through sickness, more leave than he could take under the ordinary privilege leave rules in sections 70 to 75. When such leave is taken in extension of ordinary privilege leave, the period of ordinary privilege leave first taken under clause (a) must be commuted to double the period on half pay under this clause. Leave taken under this clause shall be reckoned as active service; provided that if leave taken under this clause be extended under medical certificate, the whole of the leave shall be treated as leave on medical certificate under section 3.

(c) The leave authorized in clause (b) may be taken in instalments; but a Pilot may not take leave under clause (a) for eleven months after his return to duty from his last leave taken under clause (b).

*Section 7.*—A Pilot is eligible, after he attains the age of 55 years, for privilege leave, and for any special leave on urgent private affairs to which he may be otherwise entitled. No leave other than privilege leave, or special leave on urgent private affairs granted to a Pilot before his 55th birthday, has effect after that date.

#### Pension.

*Section 1.*—(a) After an actual service of 30 years in India, a member of the Bengal Pilot Service is entitled to a retiring pension according to his rank as follows:—

	Monthly pension.
	Rs.
Branch Pilot ... ..	200
Any lower rank ... ..	100

*Proviso.*—Not more than four retiring pensions may be granted in three consecutive years.

(b) Upon a certificate of incapacity for further service from the Medical Board of the India Office, or from the Surgeon-General or Deputy Surgeon-General in Calcutta, or from a Medical Committee over which the Surgeon-General or Deputy Surgeon-General should, when practicable, preside, such a Pilot is entitled to an invalid pension, varying according to his rank, as follows:—

	Monthly pension.
	Rs.
Branch Pilot ... ..	200
Master Pilot ... ..	100
Mate Pilot ... ..	60
Leadsman Apprentice ... ..	30

*Section 2.*—A Pilot retiring on an invalid pension, while absent on leave in England, will receive the pension of the rank which he held when his leave began, unless he have been promoted within twelve months from that date, in which case he will receive the pension of the rank to which he has been thus promoted.

\* *Viz.*—

70. The amount of privilege leave admissible at one time is limited to three calendar months.

71. The amount of privilege leave earned by an officer is one-eleventh part of the time during which he has been on duty without interruption; provided that no privilege leave can be earned by an officer by duty done while three months' such leave is due to him, and that whenever duty is interrupted, all claim to privilege leave earned theretofore is forfeited. Absence on privilege leave, though not counting as duty, is not an interruption of duty within the meaning of this section.

72. The privilege leave due to an officer is the privilege leave which he has earned less the period during which he has been absent on privilege leave.

73. To an officer who has been on duty without interruption for eleven calendar months, and who has not for six calendar months been absent on privilege leave, the whole or any part of the privilege leave due to him may be granted.

74. An officer on privilege leave has a lien on his substantive appointment; he has also a lien on his officiating appointment so long as it is not resumed by an officer having a superior lien on it.

75. An officer on privilege leave is entitled to a leave allowance equal to the salary which he would receive if he were on duty in the appointment on which he has a lien.

*Section 3.*—Except with the special sanction of the Secretary of State, no Pilot who has reached the age of 55 years shall be appointed to a new office, or shall be permitted to retain any office which he has held for five years and upwards. The word "office" for the purposes of this section includes "grade."

Bengal.  
Pilot Service.  
Section II.

*Section 4.*—Members of the Bengal Pilot Service must make the following contributions towards the cost of pensions for their widows and orphans:—

	Monthly contribution.
	Rs.
Branch Pilot ... ..	40
Master Pilot ... ..	20
Mate Pilot ... ..	10
Leadsman Apprentice ... ..	4

*Section 5.*—The following pensions are granted to the widows and orphans of Pilots:—

(1) To the widows of Pilots married before their husbands retired from the service—

	Monthly pension.
	Rs.
(a) To the widow of a Branch Pilot ... ..	100
(b) To the widow of any other Pilot, according to the rank of her husband at the time of his death or retirement, as follows—	
Widow of a Master Pilot ... ..	50
"    "    Mate Pilot ... ..	30
"    "    Leadsman Apprentice ... ..	15

(2) To the children of Pilots of all ranks by wives married before their husbands retired from the service—

	Rs.
Son, till age of 15 years ... ..	12
Daughter, till age of 10 years ... ..	14
and thereafter till marriage ... ..	20

*Note.*—A wife married to a Pilot after his retirement from active service and her children are entitled to no pension.

*Note.*—"Retired" and "retirement" in this section mean "retired or retirement on pension."

*Section 6.*—To entitle widows and orphans to pensions under these rules, Pilots are to forward to the Port Officer certificates of their marriage, and of the births of their children, and their baptisms, within one month after the occurrence thereof. Notices of death are in like manner to be forwarded to the Port Officer.

*Section 7.*—No widow who may have been legally divorced or separated from her husband for adultery, or who, at the period of her husband's demise, may have quitted his protection and be living in a state of notorious adultery, though not divorced or separated from him by law, or who, after her husband's decease, may be living in a notorious state of incontinence, and no female orphan living in such state shall be entitled to receive, or continue to receive, any pension under these rules.

*Section 8.*—If a widow pensioner marries, her pension ceases during her coverture; but in the event of her again becoming a widow, she is re-admitted to the pension to which she was entitled during her first widowhood, unless her second husband was a member of the Pilot Service, and at his death of a higher grade than her first husband, in which case she is entitled to the pension of the higher rank.

*Section 9.*—Widows and female orphans above the age of fifteen years are required to forward to the Accountant General's Office declarations half-yearly, in May and November, that they are not married, and that they have not been married at any intervening period. The declarations are to be countersigned by the executor to the estate of the deceased member of the Pilot Service, or pensioner, or by the guardian of an orphan, and by a member of the Pilot Service, certifying to the truth of the declaration to the best of their knowledge and belief. Forms of the declaration will be furnished on application to the Accountant General, Bengal.

*Section 9a.*—The pension of the family of a Pilot, if drawn in England, will be paid at the rate of exchange fixed yearly for the adjustment of financial transactions between the Imperial and Indian Governments.

*Section 10.*—Subscriptions by a Pilot for the purpose of securing pensions for his wife and children are refunded in the event of his resignation or dismissal.

No. 929, dated Simla, 21st May 1885.

From—D. M. BARBOUR, Esq., Secretary to the Government of India, Department of FINANCE AND COMMERCE,  
To—The Secretary to the Government of Bengal, General (Marine) Department.

I am directed to acknowledge the receipt of your letter No. 194T.G., dated the 25th April 1885, forwarding a draft of the rules which His Honor the Lieutenant-Governor wishes to introduce experimentally for the admission into the Bengal Pilot Service of youths locally selected as Leadsman Apprentices.

Bengal.  
Pilot Service.  
Section II.

2. I am to say that the Governor General in Council approves of the rules proposed. It is understood that no definite proportion of vacancies will be reserved for Anglo-Indians and Eurasians, and that no nominations are to be made before the conditions laid down in the rules are fulfilled.

#### NOTIFICATION.

*The 13th June 1885.*—The Lieutenant-Governor is pleased, with the previous sanction of the Governor General in Council, to publish the following regulations for the admission of locally-selected candidates into the Bengal Pilot Service at Calcutta :—

#### Regulations.

1. An examination for admission to the Leadsman's grade of the Bengal Pilot Service may be held in Calcutta at a time and place to be fixed by the Local Government. The number of vacancies available for local candidates shall also be declared; but no local candidate shall be appointed who does not satisfy the Examiners, or who, in other respects, does not come up to the requirements of the following rules.
2. Candidates must be not less than 15 or more than 20 years of age, and descended from European or Eurasian parents domiciled in India.
3. Every candidate must produce a medical certificate of good health and physical fitness to work as a Pilot in a tropical climate, and also satisfactory evidence as to his moral character.
4. He must also have served at sea for two years in a merchant sailing vessel of not less than 300 tons register, employed in the foreign trade as a Seaman or Apprentice, and must produce satisfactory certificates from the Masters he has sailed under.
5. He will be required to have passed the examination laid down for the sixth standard (middle) of the Code of Regulations for European schools in Bengal, and in addition will be examined in seamanship and in navigation up to the standard of a 2nd Mate.
6. He will, on being appointed to the service, receive Rs. 100 per mensem.
7. He will have to serve for two years as a Leadsman, and then to pass an examination as 2nd Mate. Then he will be required to serve as 2nd Mate of a pilot brig for one year, during which time he will receive Rs. 125 per mensem; and then for another year as a Leadsman, during which time he will receive Rs. 100 per mensem and 50 per cent. of the lead-money paid by the ships in which he does duty.
8. He will then be required to pass an examination as 1st Mate, after which he will have to serve another year as 1st Mate of a brig, during which time he will receive Rs. 150 a month and mess. He will then be allowed to go up for examination as a Mate Pilot.
9. After passing this examination, he will be promoted to the grade of Mate Pilot as vacancies occur.
10. After four years' service as Mate Pilot, he will be permitted to go up for examination for Master Pilot, and on passing that examination he will be promoted to be Master Pilot as vacancies occur in that grade.
11. Vacancies which occur in the grade of Branch Pilot will be filled up by promotion from the Master Pilot's grade.
12. Members of the Pilot Service, who enter the service under these rules, are not entitled to any salary while on pilotage duty. They receive as their remuneration 50 per cent. of the pilotage dues paid by ships piloted by them. They are entitled to allowances while on leave or special duty, and to pensions on retirement from the service.
13. Every member of the Pilot Service is subject to the rules made from time to time by the Government in regard to discipline, leave allowances, number of officers in the service, distribution into grades, tonnage of ships to be allotted to the several grades, &c., and in all respects he is amenable to such orders as may be passed by Government for the regulation of the service.

#### NOTIFICATION.

*The 22nd September 1886.*—Competitive examination for admission of one locally-selected candidate into the Bengal Pilot Service will be held at the Port Office on 1st April 1887, in accordance with the regulations published in the *Calcutta Gazette* of the 21st June 1885, Part I, page 610.

2. The following will be the subjects of examination :—

- (1) Reading.
- (2) Writing—to write a short narrative or letter.
- (3) Arithmetic—up to vulgar and decimal fractions, proportion, and interest.
- (4) English—recital of 80 lines of poetry or 40 lines of prose from a standard writer and explanation of the allusions.  
Parsing and analysing a short complex sentence, and the knowledge of the method of forming English nouns, adjectives, and verbs from each other.
- (5) Geography—including physical geography, special knowledge of the British Isles and of India.
- (6) History—outlines of History of India from Akbar, and History of England from Elizabeth to Victoria.
- (7) Mathematics—*Geometry*, Euclid, to the end of first book.

*Algebra*—addition, subtraction, and multiplication.

- (8) Elementary Science—the common pump, barometer, thermometer, pulleys, and levers.
- (9) Seamanship—up to the standard of a 2nd Mate.
- (10) Navigation—up to the standard of a 2nd Mate.

Existing Organization and Constitution of the Port Officer's Department.

1 Department.	2 Total number of gazetted appointments, not being purely clerical, of salaries of Rs. 100 and upwards.	3 Distribution of gazetted appointments and other appointments amongst classes or grades, with rate of pay attached to each.	4 NUMBER OF APPOINTMENTS IN EACH CLASS OR GRADE NOW HELD BY						
			Europeans not domiciled in India.	Europeans domiciled in India.	Eurasians.	NATIVES OF INDIA.			Total.
						Hindus.	Mahomedans.	Others.	
Port Office ... ..	3	Port Officer ... .. 1,400 Commander, S. S. <i>Undaunted</i> ... .. 400  Medical Officer, Sandheads ... .. 300  <i>Covenanted Pilot Service.</i> 3 Branch Pilots in command of Pilot brigs, at Rs. 1,000 each 9 Branch Pilots } 60 per cent. pilotage ... .. 18 Master Pilots } 15 Mate Pilots, 50 per cent. pilotage ... .. 4 Leadsman, at Rs. 150 each ... .. 3 Leadsman, at Rs. 125 each ... .. * 13 Leadsman, at Rs. 100 each ... ..	1	...	...				
		1 Branch Pilot, 60 per cent. pilotage ... .. 20 Master Pilots— 5 at 60 per cent. pilotage ... .. 15 at 50 per cent. do. ... ..	1	...	1				
		<i>S. S. "Undaunted."</i> 1 Chief Engineer, Rs. 250 ... .. 1 2nd ditto " 170 ... .. 1 3rd ditto " 120 ... .. 1 Chief Officer " 150 ... ..	...	...	1				
Shipping Office ... ..	2	Deputy Shipping Master, Rs. 500 to 600 ... .. Assistant Shipping Master, Rs. 350 to 400 ... ..	1	1	...				

Note.—All Pilots on the running list receive no fixed salaries from Government, but draw pilotage fees, which average more than Rs. 100 per month.  
 \* Of the 13, six are on receipt of 50 per cent. of lead-money in addition to their pay.  
 N.B.—Particulars of these can be seen in the half-yearly list already forwarded.

CALCUTTA PORT OFFICE;

The 19th July 1887.

A. W. STIFFE, Captain, I. M.,

Port Officer of Calcutta and ex-officio Shipping Master.

Bengal.  
 Pilot Service.  
 Section II.

PUBLIC SERVICE COMMISSION.



Bengal.  
Pilot Service.  
Section II.

*Return showing number of Vessels piloted up and down the Hughli and the number of casualties from 1857-58 to 1876-77 inclusive, and 1877-78 to 1886-87.*

Years.	NUMBER OF VESSELS PILOTED.		TOTAL.		CASUALTIES.		TOTAL.		VESSELS LOST BY		TOTAL VESSELS LOST BY	
	Inward.	Outward.	Inward.	Outward.	Grounding.	Collisions.	Grounding.	Collisions.	Grounding.	Collisions.	Grounding.	Collisions.
1857-58 ...	1,000	960			128	23			5	...		
1858-59 ...	970	978			46	13			3	1		
1859-60 ...	832	880			15	2			4	...		
1860-61 ...	849	804			12	1			4	...		
1861-62 ...	892	901			92	14			3	...		
1862-63 ...	934	937			89	13			6	...		
1863-64 ...	1,140	1,112			69	15			4	...		
1864-65 ...	1,208	1,097			96	12			4	...		
1865-66 ...	909	981			80	12			2	...		
1866-67 ...	774	774			75	4			2	...		
			9,506	9,424			702	109			37	1
1867-68 ...	884	909			90	10			...	...		
1868-69 ...	887	878			79	9			4	...		
1869-70 ...	806	805			58	6			2	...		
1870-71 ...	931	938			64	13			...	...		
1871-72 ...	957	907			77	6			1	1		
1872-73 ...	948	954			62	7			1	1		
1873-74 ...	981	946			68	10			...	...		
1874-75 ...	927	901			49	6			2	...		
1875-76 ...	914	906			45	7			...	...		
1876-77 ...	1,161	1,121			32	7			2	...		
			9,396	9,266			624	81			12	2
1877-78 ...	1,372	1,321			50	11			2	...		
1878-79 ...	967	1,000			37	16			1	...		
1879-80 ...	896	895			34	10			...	...		
1880-81 ...	984	1,015			46	7			...	...		
1881-82 ...	1,074	1,058			33	12			...	...		
1882-83 ...	1,151	1,141			51	25			1	...		
1883-84 ...	1,085	1,073			42	14			...	1		
1884-85 ...	903	923			51	17			...	...		
1885-86 ...	1,031	969			37	16			...	...		
1886-87 ...	1,021	1,062			52	11			1	...		
			10,484	10,457			433	139			5	1
Total ...	...	...	29,386	29,146			1,759	329	...	...	54	4

ARTHUR W. STIFFE, *Captain,*

*Port Officer of Calcutta.*

*Further Note by the Departmental Member.*

- (1) Native Pilots on the river Hughli are allowed to handle only dhonies or country craft not exceeding 500 tons. Copies of their license and scale of pilotage are attached.
- (2) There is *one* Port Officer at Chittagong, salary Rs. 250 rising to Rs. 400 per month.
- (3) The Chittagong Pilot Service is a salaried service.
- (4) It consists of one Eurasian, four Natives (Musalmans of the Serang class), and two apprentices (Natives) of the same class.
- (5) At the Orissa ports there are two Port Officers : one is styled the Port Officer of Chandbally and Balasore, and the other the Port Officer\* of False Point and Pooree. Their salaries are Rs. 300 and Rs. 400 respectively. They are both Europeans. Nautical men are essential for these appointments.
- \* Who is also Customs Collector.
- (6) There are two Native Pilots for Chandbally and Dhamra on a fixed salary of Rs. 40 each. There are no Government Pilots at False Point, none being required.

Bengal.  
Pilot Service.  
Section II.

*Statement showing earnings of Chittagong Pilots.*

Names.	Office.	Nationality.	Present monthly pay.	Eight per cent. allowed on annual earnings of 1886-87.	Amount of pilotage earned in 1886-87.	Remarks.	
			Rs.	Rs. A. P.	Rs. A. P.	Rs.	Rs.
Mr. B. R. Texeira ... ..	Pilot ... ..	Eurasian ... ..	200	220 0 10	2,757 12 0	150	rising to 200
Mubarak Ali ... ..	Do. ... ..	Mahomedan	90	226 13 8	2,835 12 0	75	„ to 100
Mansoor Ali ... ..	Do. ... ..	Ditto ... ..	65	161 3 2	2,015 4 0	50	„ to 75
Washil ... ..	Do. ... ..	Ditto ... ..	65	203 8 3	2,544 0 0	50	„ to 75
Yakoob Ali ... ..	Do. ... ..	Ditto ... ..	65	201 8 7	2,519 4 0	50	„ to 75
Mirza Ali ... ..	Apprentice	Ditto ... ..	20	...	86 0 0	.....	
Ebrahim ... ..	Ditto ... ..	Ditto ... ..	20	25 2 10	314 12 3	.....	



## Section III.—Sittings at Calcutta.

WITNESS No. I—23rd March 1857.

Examination of J. L. MACKAY, Esq., Member of the firm of Messrs. Mackinnon, Mackenzie & Co., Calcutta, and Representative of the Bengal Chamber of Commerce.

Bengal  
Pilot Service.  
Section III.

The President.

You are a partner in the firm of Messrs. Mackinnon, Mackenzie & Co., and a member of the Bengal Chamber of Commerce?—Yes. I have been deputed by the Chamber of Commerce, as one of their representatives, to give evidence before this Commission.

I believe your firm are agents for the British India Steam Navigation Company?—Yes.

One portion of my firm's business is the managing agency of the British India Steam Navigation Company. The Company owns eighty steamers with a tonnage of over 1,76,000 tons.

All its steamers are manned by Natives of India, and commanded, officered, and engineered by Europeans.

The Company's standing afloat establishment is—

800 European Commanders, Officers, and Engineers.

6,000 Native seamen, firemen, and saloon servants.

We have no Native Commanders, Officers, or Engineers, and never have any application for employment from Natives qualified to take up such duties.

We find our Native crews excellent men—sober, hard-working, reliable, civil, and obedient.

A very large number of our steamers trade with Calcutta; the Company's steamers enter and leave the port of Calcutta about 250 times in every year.

I see no reason why Natives of India should be debarred from entering the Bengal Pilot Service. If the Service was to become a mixed one, probably some altered arrangements would have to be made on board the brigs at the Sandheads, as the Natives would probably object to eating and sleeping in the same quarters as the Europeans. But that would be a matter of detail which could probably easily be arranged.

If a young Native gentleman elects to enter the Bengal Pilot Service, and chooses to go through the course of training, either in a seagoing vessel or in a training ship in India or in England, and has the education necessary to qualify him to pass the preliminary examination for admission to the Service, I see no reason why he should not be admitted; and if he undergoes the years of training and manual labour in the brigs and as Leadsman on the river, which he must go through to qualify him

The President—contd.

to take pilotage charge of vessels, then I should say it has yet to be proved that he will not be equal to an Englishman in doing the work.

But as 95 per cent. at any rate of the vessels visiting Calcutta belong to Europeans, and are commanded and officered by Europeans, and are insured as well as their cargoes in European Insurance Societies, and as, with the exception of a few Arab dhonies, even the Native-owned vessels are commanded by European shipmasters, I think it would be right to give vessels visiting this port the privilege of choosing either a Native or a European Pilot.

My impression is that you will find few, if any, young educated Native gentlemen disposed to undergo the manual labour and hardships attendant on the first eight or ten years of a Pilot's life; but I do think it has yet to be proved that they would not be equal to the duties.

You say all your Commanding Officers are Europeans?—Yes.

And your Quartermasters?—They are Natives as a rule, but we have a few European Quartermasters in the home-going steamers.

Captain Stiffe.

I understand that you would keep two classes of Pilots at the Sandheads?—My idea is that, if Natives entered the Pilot Service, they would probably object to eating and sleeping in the same quarters with Europeans, even if the Europeans did not object.

Would Natives be able to eat on boardship at all?—Mahomedans would, but then they would probably object to sit down at the same table where there was forbidden food, or to live in the ship if there were pigs on board.

And you would have to send two Pilots to every ship to ask whether a Native or European Pilot was wanted?—That would be a detail which you would have to arrange. You would certainly have to signal to the ship to let you know whether a Native or a European was wanted.

Would you pay Native and European Pilots at the same rate?—No; I do not think they ought to get the same rate of pay. Natives are in their own country.

J. L. Mackay, Esq.

Bengal.

Pilot Service.

Section III.

J. L. Mackay, Esq.

*The President.*

You think it would be more economical to employ Native Pilots?—Yes, if they were equally qualified and could be got for less money; but my impression is that no vessels would employ Native Pilots.

Not if the fees demanded for their services were less than those charged for the services of Europeans?—No; I do not think that would make any difference.

*Captain Stiffe.*

How would Insurance Companies view the employment of Native Pilots?—I think there would be an objection on their part also. I think if the Captain of a vessel had the choice between a European and a Native Pilot, he would prefer the European. Even a Native owner of a ship prefers a European Commander.

Are not Arab ships largely manned by Nukaldars?—Yes; but they only sail in fine weather. They come here in the last of the south-west monsoon, and go away about the middle of the north-west monsoon. They have a fair wind both ways.

*The Hon'ble Mr. Quinton.*

Is it the opinion of the Chamber of Commerce that a European Master coming to this port would prefer a European to a Native Pilot?—Certainly. In fact, if Natives are admitted as Pilots, they would have very little work to do, unless the Government forced them on ships, which I think would be unfair. At the present moment we have no educated Natives going to sea.

If Government were to force Native Pilots on ships, do you think it would have any effect indirectly on the trade of the port?—I think it would very probably enhance the rates of insurance and increase the danger of the navigation of the river.

*Captain Stiffe.*

Would the Master and Officers obey a Native Pilot as they would a European?—They would certainly not have the same confidence in the judgment of the Native in a difficulty.

*The President.*

Do any Eurasians or European boys born in the country apply for employment in your ships?—No; we only take Europeans when they have a 2nd Mate's certificate.

Then you do not accept European Apprentices?—No; we insist on their having undergone a training in a sailing ship. I think in my experience of the last thirteen years we have not had five applications from country-born boys who have served their time and got a 2nd Mate's certificate. We find that very few of them indeed care to go to sea.

*Captain Stiffe.*

Have you any Eurasian Engineers serving in your ships?—We have had, but we found them

*Captain Stiffe—contd.*

unreliable. They used to get sick as soon as there was any extra work to be done.

*Mr. Ryland.*

Were these country-born lads brought up at the Sibpur College or in any way technically trained, or were they simply picked up as waifs and strays?—They had served an apprenticeship in one of the factories or engineering shops here.

One of the Government Factories?—Either Government or private factories.

Do you know whether any of them had been trained in the Sibpur College?—That I do not know. We employ a good many Eurasian and country-born lads in our workshops ashore, and there they do very well. They work from eight in the morning till four in the afternoon, but at sea if anything goes wrong or there is a press of work, they immediately fall sick. We have had a good many of them in our service, and have been obliged to clear them out and get out young fellows from home, who have been mostly brought up in work shops in Glasgow. We bring them out on a three years' agreement, and find them thoroughly reliable and steady and honest.

*The President.*

I suppose you have to pay them higher wages?—No; we treat them on just the same basis. We give a Eurasian just the same pay, and we make no distinction between good men of either class.

*The President.*

Have you a dockyard here?—Yes, and also in Bombay.

And do you still employ a large number of Eurasians in Bombay?—No; only a few. We enter the men as apprentices; bring them up; and let them find employment when they have served their time.

Do the country-born lads and Europeans in Bombay go to sea more freely than they do on this side?—I do not know.

*The Hon'ble Mr. Quinton.*

Do you know whether among Native seamen there are any men who might be called educated?—They are quite illiterate, so far as English is concerned. Of course they can read and write their own language. Those from Surat can read and write Guzerati for instance. On this side of India we recruit our Native crews principally from Chittagong in Eastern Bengal. They are men who spend the greater part of the year at sea.

*The President.*

They belong to the agricultural class—do they not?—Yes.

Your crews on the Bombay side are principally Natives of Surat—are they not?—Yes, and they also belong to the agricultural class, and are not educated.

WITNESS No. II—23rd March 1887.

Examination of JAMES STEVENSON, Esq., Member of the firm of Messrs. Graham & Co., Calcutta; Member of the Bengal Chamber of Commerce; Representative of the Bengal Chamber of Commerce.

The President.

I believe you are deputed to appear on behalf of the Committee of the Bengal Chamber of Commerce to give evidence before this Commission?—I am.

You are a member of the firm of Graham & Co. of this city?—Yes.

For what lines of shipping are your firm agents?—For the Anchor Line and for private ships also. We are one of the largest representatives of outside ships, both sailing and steam vessels, at the port.

Will you give us your opinion as to the possibility of employing Natives of India, including Eurasians and locally-born Europeans, in the Pilot Service?—Besides representing large shipping interests, we are agents for the International Marine Assurance Company. My personal experience of the shipping business of the port has extended over a period of sixteen years, and I am well acquainted with the duties which have to be performed by members of the Pilot Service. I spent about ten days on board one of the pilot brigs at the Sandheads during the month of October, about fourteen years ago, and more recently I spent two or three days in the same manner. I have been up and down the river repeatedly, and have had special facilities for appreciating the character of the navigation. I have gone down the river to see the dangers of the bars safely passed, and for the purpose of reporting the result of my observations. On one occasion I was for whole days on the river between Garden Reach and the Sandheads in a steamer drawing something less than 25 feet. On one occasion, when we had to pass over a bar of the river which could only be passed at high water, I made it my business to ascertain what the danger was. The ship was lying at anchor, and I was very much struck by the way she dragged her anchors. In fact, there was no rest for anyone on board for two nights, and in the morning, when the anchors were drawn up, we found that one of the flukes of one anchor had gone, and the second was as burnished steel from having been dragged through the sand. On another occasion, in going down with a steamer drawing rather more water, a difficulty occurred at the bar off Atcheepore. All on board were conscious that the vessel was passing through the mud by the peculiar way in which she moved. I know most of the Senior Pilots personally, and have almost daily opportunities of making their acquaintance and of judging their characters. I have besides had frequent opportunities of hearing from the Masters of the vessels consigned to my firm regarding the private and business character of the Pilots, the exceptional nature of the duties which they have to perform, and the dangers of the Hughli. I consider that they are, as a rule, a very high class of men; unsurpassed by any Pilot Service in the world, according to the opinions repeatedly expressed to me by Shipmasters who have had experience of other ports. The Hughli is gen-

The President—contd.

erally regarded both by Shipowners and Masters as one of, if not the most difficult and dangerous rivers in the world. The insurance risk is very great, and any trifling with the Service, either by introducing inferior men—inferior by reason of inexperience or otherwise—would be certain to increase the insurance rates. I know from experience that very many of the vessels which frequent this port do not insure. If Natives were introduced into the Service, I believe that it would become universal to insure. I do not consider a high degree of education necessary for a Pilot—I mean in the shape of literary culture, but a thorough training as a seaman and experience in handling vessels are most essential. After that, a vigorous and robust constitution; then energy, coolness, promptitude, nerve, judgment, resource in sudden emergencies, a high sense of duty and responsibility and moral courage are some of the qualities most required in the Hughli Pilot, and are, according to my experience, the very qualities most wanting in the Native of Bengal. Some of our vessels are manned by Native crews, chiefly for economy's sake. They are obedient and good men in ordinary weather, and give less trouble than the same class of Europeans; but they are easily prostrated in rough weather—in fact, of the least use when the most required. I know of no Native Officers. I know of vessels owned by Natives, and have been frequently asked to recommend European Captains for them. I know of no vessels of any size commanded by Natives, and I have not in all my experience met a Native seaman that I consider would make a reliable Pilot. I have never known one express a wish to join the Service.

Have you had applications for employment from Eurasians or Europeans born in the country?—Not for any employment on board a steamer, except as Stewards.

Not for apprenticeships as seamen?—No.

I believe the risk of collision in this river is very great by reason of the narrowness of some of the channels, and also by reason of the great rapidity of the current and the difficulty of steering?—Yes.

Captain Stiffe.

Have you had any experience of Eurasians in actual employment?—Yes. We employ them as tally men and in similar occupations in connection with shipping.

Is that because you prefer Eurasians, or because they are cheaper than Europeans?—Because they are cheaper.

Are those positions of responsibility?—Not apart from honesty.

Have you seen the regulations propounded by Government for the admission of a limited number of Eurasians to the Bengal Pilot Service

Bengal.

Pilot Service.

Section III.

J. Stevenson, Esq.

Bengal.

Captain *Stiffe*—contd.Mr. *Ryland*—contd.

Pilot Service.

Section III.

*J. Stevenson, Esq.*

(hands witness copy of the regulations). That standard is about the same as is required from the young officers who pass out of the training ships to come to us. In your opinion is the qualification required an excessive one?—Eurasians differ so much in stamina and character according to my experience, that I would hesitate to lay down any hard and fast rules as to what would be a reasonable qualification in their case.

Mr. *Ryland*.

Do you receive apprentices on board your ships as they do in the English vessels at home?—Not here in Calcutta.

All your apprentices are shipped in England?—Yes; under articles.

Would you receive any if they offered themselves in this country?—I think not. We have not done so hitherto.

There are no training ships or anything of the kind in this country that would enable lads to acquire the knowledge requisite to fit

them for the Pilot Service?—I do not know at the present moment that there are. I know it has been proposed to have such vessels.

Do you believe there are lads in this country who could be sufficiently trained to take up appointments in the Pilot Service, if there were such vessels?—Yes.

There are such ships at home, and I believe they turn out the great majority of the men who are employed in mercantile ships?—Yes.

Captain *Stiffe*.

Are you aware that the young men who go to these training vessels pay just the same for their training as they would at a boarding school?—I do not know, nor do I think it makes any difference.

I mean that these training ships are not charitable institutions?—Quite so.

And are in fact maintained by the contributions of the boys?—Yes.

*E. F. Hudson, Esq.*

WITNESS No. III—23rd March 1887.

Examination of E. F. HUDSON, Esq., Covenanted Master Pilot, Bengal Pilot Service.

Captain *Stiffe*.The *President*—contd.

You are a Master Pilot in the Bengal Pilot Service. For how many years have you been in that Service?—Twenty-eight.

Do you think it is advisable to recruit Natives of India, including Europeans born and bred in the country, and Eurasians, as well as pure Natives, as Pilots on the river Hughli?—If I do not hold a too exalted opinion of my own Service, I should say not.

The Hon'ble Mr. *Quinton*.

What are your reasons for saying so?—The nature of the work; I think it requires promptitude and highly skilled action to meet emergencies which may arise at any time.

The *President*.

Is a knowledge of seamanship necessary?—You must have a knowledge of seamanship to be a Pilot, but that knowledge is perfectly well taught by the senior members of our Service in the pilot brigs. There is no other seamanship required than what can be taught in the Service.

To be efficient, a Pilot should be able to form an accurate judgment of the speed of ships in motion?—That is also learned when they first join the Service as Leadsman and go up and down the river with the Pilots.

You are acquainted with the rules which regulate the recruitment of Europeans and Eurasians in this country as Pilots. Do you consider that they are sufficient to secure efficiently trained men, or do you think them excessive in their requirements?—They are not excessive in their requirements, considering the standard of education given at the present day. But if one is to devote one's time to learning the river, one has not much time for literary culture. If a boy is to join the Service, as I did, between the ages of fifteen and seventeen, you cannot expect him to be very far advanced in literary culture, but it is quite necessary that he should have a certain amount of it.

Then you consider that these rules do not require a higher standard of literary culture than was possessed by you, and boys like you, who came out to India to join the Service many years ago?—Yes; what I do say is that my literary culture was quite equal to what is required by those rules.

Captain *Stiffe*.

Is it not the case that the boys in the training ships at home are now taught navigation up to the standard of 2nd Mate?—They are, but, inasmuch as I myself did not learn navigation up to the standard of 2nd Mate, I cannot say whether it is necessary or not.

As an educational test designed to prevent the entrance of illiterate persons into the Service, do you think the educational qualification prescribed by the rules is too high?—I do not.

The President.

What is the salary of a Leadsman?—His pay is Rs. 100 per mensem when he first joins. From this Rs. 20 is deducted for messing on board the brig, and about Rs. 30 for messing on shore; Rs. 10 is deducted for his pension fund and Rs. 4 for income-tax; he has also to pay the cost of landing and embarking on coming away from or joining a ship. After two years as a Leadsman, his pay is raised to Rs. 125, and after that he gets Rs. 100 more, plus an indefinite share of what is called lead-money. But he will not receive more than Rs. 200 a month for five or six months; probably not much more than Rs. 150.

Are there any men in your Service who were born in this country?—Yes; among the Branch and Master Pilots there are men who were born and educated in this country. Of the Leadsman Apprentices, there are to my knowledge six who were born in this country, but five of these received an education in England either on a training ship or elsewhere.

What is the largest income that a Pilot can make?—It is unlimited.

What is the average then?—I might put it down at about Rs. 1,400 or 1,500 a month, but it would depend on whether the man was working; he might be sick. When a man gets old, he cannot attempt to work the whole year round.

I believe a certain number of boys are recommended by the committees of the training ships in England to the Secretary of State every year for appointments to the Bengal Pilot Service?—Yes.

Can you tell me whether the boys nominated in England have been obliged to serve at sea for two years in a merchant sailing vessel?—They have not; but in lieu of that they have had to serve for two years in the *Worcester* training ship.

The Hon'ble Mr. Quinton.

Do you know on what principle boys are selected by the committees of the training ships. Do they undergo an examination before they are nominated by the Secretary of State?—They must certainly be among the best boys on the ship who have elected to take the appointments.

The President.

You mean they are the best boys among those who will take foreign service?—Yes, and who are physically fit for it. Some parents do not like their boys to go to India.

Do you consider that, in the absence of training on a training ship, a condition that a boy should have served two years in a merchant sailing vessel is essential in the case of candidates for the Bengal Pilot Service?—I cannot say that it is altogether indispensable, but it is more necessary than it used to be, because, owing to the substitution of steam for sails, it is not so easy now-a-days to acquire experience of sailing ships.

Is it necessary for a Pilot to know something of the way to navigate sailing ships, whether he works in sailing or in steamships?—Most certainly. A Pilot must know how to manœuvre a sailing ship either for the purpose of handling a ship or of avoiding collisions with sailing ships.

Captain Stiffe.

Is it the case that, although most sailing vessels take steam, there are a certain number of smaller ones which still sail up and down, and that, if a Ship Master declines to take steam, the Pilot has to sail the vessel up?—Yes.

Mr. Ryland.

Do the training ships afford the instruction that is necessary for the Pilot Service to the same extent as sailing vessels would?—If you mean instruction in navigation, I say yes.

And in lieu of the rule which requires a two years' training in a merchant sailing ship, which you say is not absolutely indispensable, do you think that all that is necessary to qualify young men for the Bengal Pilot Service is afforded by the training ships at home?—The handling and manœuvring of a ship is learned out here. It cannot be learned in a training ship.

What is it then they learn in training ships that cannot be learned out here?—I do not know. There is nothing that cannot be learned out here, if it is learned.

If there was a training ship out here?—Certainly. But training ships are very expensive schools. They are floating boarding schools, in fact.

WITNESS No. IV—23rd March 1867.

Examination of Captain A. W. MANN, in the service of the British India Steam Navigation Company.

Captain Stiffe.

You have been for some time trading to Calcutta off and on?—Yes, since 1863, both as an officer and as commanding a steamship in the service of the British India Steam Navigation Company.

What are your views with reference to the employment as Pilots of Natives of India, including Europeans born and educated in this country,

Captain Stiffe—contd.

and Eurasians?—I do not think it would be at all advisable.

If you had a choice whether you would employ a European or a Native to pilot your vessel up or down the Hughli, and could obtain the services of the Native at a lower rate of pay, which would you choose?—The European certainly.

Bengal.

Pilot Service.

Section III.

E. H. Hudson, Esq.

Captain A. W.  
Mann.



Bengal.

Pilot Service.

Section III.

Captain A. W.  
Mann.Captain *Stiffe*—concl'd.

In the old times we had Native Pilots in the Moulmein, Rangoon, and Chittagong rivers. They were Natives of Chittagong, and they had been going to sea from boyhood. I have had considerable experience of their work. Sometimes when there was no one else available, we were obliged to employ them, and I never found one of them in a case of emergency that was equal to the occasion. It simply came to this, that we, as Commanders of ships, knew the river equally as well as they did; but as the pilotage was compulsory, and we were obliged to employ these men, we simply took pilotage charge of the ships ourselves. Of course there is no comparison between the difficulty of navigating the Hughli and the Rangoon rivers.

Then it is specially with regard to the Hughli that you would be opposed to the employment of Natives as Pilots?—Quite so. As the Bengal Pilot Service is now constituted, it is certainly the most perfect Pilot Service in the world. I have been in all parts of the world, and there are no Pilots, taking them as a class, that do their work so efficiently and so well as the members of the Bengal Pilot Service.

The Hon'ble Mr. *Quinton*.

In large ports elsewhere are there organized Pilot Services, or have you to depend on licensed Pilots?—We have to depend on licensed Pilots.

Captain *Stiffe*.

But these licensed Pilots, as a rule, form a body under supervision and have their own rules—do they not?—Yes; for instance the Trinity Board in London supervises Pilots on the British coasts; but those Pilots are not taken into the Service as lads as Pilots are here. They go in as men. They may have served as Commanders of small vessels for a number of years before they pass the prescribed examination and are licensed as Pilots.

WITNESS No. V—23rd March 1887.

Captain *Atkinson*.

Examination of CAPTAIN ATKINSON, in the service of the British India Steam Navigation Company.

Captain *Stiffe*.

I believe you have commanded a vessel trading to Calcutta for a great number of years?—Yes, since 1864, in the British India Steam Navigation Company's service.

What are your views as to the employment of Natives as Pilots in the river Hughli?—I do not think they would do. I have had experience of Natives as Pilots in the Rangoon, Moulmein, and Chittagong rivers. As long as they know the river, and everything goes well and smoothly, it is all right, but if any trouble occurs, they lose their heads altogether.

The President.

Do the Pilots on the Moulmein river belong to an organized service?—Oh, yes; it is a licensed service.

Captain *Stiffe*—cont'd.

They are not allowed to run without a license?—No.

The Hon'ble Mr. *Quinton*.

Do the fees paid by the vessels go to the Pilots?—That is a matter of arrangement between the Board and the Pilots. I have had long experience of the working of Native crews, having been working with them since I came into the British India Steam Navigation Company's service in 1868, and my opinion of the Native, as a seaman, is that he must be led. He will not act on his own responsibility in cases of emergency or in times of danger, and in fact you never can make a Native realize danger. He is never aware of it. You have to tell him—to watch him. He does not know how to avoid danger. He cannot see it.

Mr. *Ryland*.

Did not Europeans born and bred in this country at one time form a large proportion of the Pilot Service?—Some of the present Pilots were born and bred in this country, but I do not think they all were.

Here is a long string of names of Pilots up to 1861 (reads names). Are you acquainted with any of them?—I am not. Most of the men I know in the Service are certainly Englishmen, born and educated in England, principally in the Blue-coat schools, I believe; and of late I think some have come out from the *Worcester* training ship.

There is no training ship in this country—is there?—No.

They join the training vessel in the hope of eventually getting appointments in this Service—do they not?—I believe some of the boys commence their early training with that hope.

The President—cont'd.

But is it a trained service like the Bengal Pilot Service?—Well, they are trained, I suppose, because they have to serve a certain period as probationers until they pass the examination before the Port Officer there, who, if he is satisfied with their knowledge of the river, gives them a license to pilot vessels up to certain draught. As they acquire experience, the draughts are increased, and their punishment for errors of judgment and negligence takes the form of a reduction of draught.

Do they undergo any preliminary training in seamanship?—They are men who have been brought up to the sea. I suppose they have traded in the Bay of Bengal in Native crafts.

But they are not men of education?—No.

Suppose you had men of a better class?—It seems to me more a question of physical capacity

The *President*—concl'd.

or of nerve. I doubt whether higher education would improve them. It is purely a question of technical knowledge and nerve and the faculty of dealing with emergencies as they arise.

Would you select a Native Pilot for choice, supposing his pay was fixed at a lower rate, or would you prefer a European and pay a higher charge?—I would take the European. At Rangoon, before the present service was organized, there were two services, the Native and the European, and a Captain who took a Native Pilot did so simply on the understanding that he remained in charge of the vessel. The Rangoon river is an exceptionally simple one, and when a Captain took a Native Pilot, he was perfectly well aware that the Pilot would not interfere with his ideas of navigation.

Mr. *Ryland*.

Have you had any experience of Eurasians as Pilots?—I cannot say that I have. I know almost every man in the Bengal Pilot Service, and I am not aware whether the term would apply to any of them.

You are aware perhaps that in former years a large number of Branch Pilots were Eurasians?—I suppose that must have been so. I am not quite sure what you mean by "Eurasian." I have

Mr. *Ryland*—cont'd.

known members of the old Pilot Service; they piloted my ship up and down the river many a time, and I never had a complaint to make against any of them.

The *President*.

Do you consider that the river Hughli presents exceptional dangers to navigation?—Oh, yes. It is really an exceptional river.

Mr. *Ryland*.

Can you say whether it has improved or not of late years?—I do not think that the river itself has altered much, but the shipping has so enlarged in size, and the speed of vessels has become so much greater, that the danger has increased more or less in that way.

The *President*.

You mean that you have to get longer ships round the bends, and it requires more nerve and judgment to handle a ship?—Yes, and now-a-days time is a very important matter. A really good Pilot will get you down the river on one tide. On the other hand, there were more sailing vessels in former days.

Does not steam very much help the navigation?—In a way it does, but the difficulty of the increased length and draught of the ships remains.

WITNESS No. VI—23rd March 1887.

Examination of E. GOOD, Esq., Port Officer, Chittagong.

E. Good, Esq.

The *President*.

You are an officer of the Indian Marine?—Yes, and I am now Port Officer at Chittagong.

Do you know anything of the Bengal Pilot Service?—No.

Have you a Native Pilot Service under you at Chittagong?—Yes.

From what class of men do you recruit that Service?—I try to get the best Mahomedans I can, but those I get are very poor. In cases of emergency we always find the Natives at fault; in plain sailing they do very well, but in the event of the vessel getting into a predicament, they have not that promptitude, nerve, and readiness which a European has. In other respects they are to be favorably compared with the lower class of Europeans, who alone could be obtained for the remuneration offered, because they are steady and sober men.

Captain *Stiffe*.

Do you think they exercise the same authority on board ships?—No; a Native Pilot gives an order, but if the Commander of the vessel does not think it is exactly what ought to be done, he takes no notice of it. Many cases of that kind have occurred to my knowledge.

Captain *Stiffe*—cont'd.

Do any Europeans or Eurasians apply to you for employment in your Service?—We have not a good class of Eurasians in Chittagong, but I have taken great trouble to get good men and to obtain berths on board ships for them, promising them that, if they go to sea for two or three years and return, I would give them a berth in their own town as Pilots or Leadsman; but they do not seem to care about it. They will not rough it. They consider the work of a seaman degrading and derogatory.

Mr. *Ryland*.

You refer to the very lowest class of Eurasians?—I refer to the ordinary class which seeks employment as Custom House Officers and Preventive Officers. I recollect one instance of a Eurasian lad who was rather a smart boy. I tried to get him to go to sea, but he would not go; he preferred to remain in the Tidal-house.

What pay did he get in the Tidal-house?—Rs. 20 a month.

And he preferred to remain on that pay to roughing it at sea?—Yes.

How do you select your Native Pilots?—The men at present under my charge were already in the Service, with the exception of one who has turned

Bengal.

Pilot Service.

Section III.

Captain *Atkinson*.

Bengal.

Pilot Service.

Section III.

E. Good, Esq.

Mr. Ryland—contd.

out the best man in the Service. He was a Sekuni in the service of the British India Steam Navigation Company, and before that in Government service. It happened that a steamer got ashore, and this man volunteered to go off to her in a boat from Chittagong, for which he received a medal. He is a Mahomedan, and a thoroughly trustworthy man. He is a Native of Chittagong.

Have all the Pilots under you been seamen?—More or less. The man I mentioned is a practical seaman.

Do you make it a necessary condition of appointment to the Service that a man shall have been to sea?—Certainly. He must have served in a ship for a certain number of years. He would be of no use otherwise. He cannot learn the profession on the river. It is absolutely necessary that a man should have gone to sea. He will learn a certain amount on a training ship, but not those things you would learn at sea. He will not have practical experience in dealing with emergencies unless he has been to sea.

Captain Stiffe.

In Chittagong, I believe, you have nothing which corresponds with our Pilot brigs in which a man may learn practical seamanship?—No; we have only cutters.

Captain Stiffe—contd.

Do you know anything about the Pilots in the Rangoon and Moulmein ports?—I know that the Native Pilots have not proved a success there. A Native, who will handle a little ship very cleverly, loses his heart at once and gets frightened if he goes on board a big ship. I should be very glad if I could get Eurasian Pilots. I have one Eurasian Pilot who is a very good man, and steady.

Mr. Ryland.

What class of Eurasian is he?—Of the class I was speaking about. He is not a gentleman. He belongs to the middle class.

Has he been educated at a public school?—I believe he was educated at the Doveton College in Calcutta.

The President.

Has he been to sea?—Oh, yes. He holds a country Master's certificate.

Captain Stiffe.

Were his ancestors seafaring men?—I believe they were Pilots. He is an exceptionally good man.

WITNESS No. VII—23rd March 1867.

G. M. Anderson,  
Esq.

Examination of G. M. ANDERSON, Esq., covenanted Master Pilot, Bengal Pilot Service.

The President.

You are a Master Pilot in the Bengal Pilot Service, I believe?—Yes.

How long have you been in the Service?—Twenty-nine years.

Were you appointed by the Court of Directors?—Yes.

Had you had any training before you came to this country?—Yes; I had attended the Royal Naval School at Dulwich for three years, and I had spent two years at sea.

What is your opinion as to the larger employment of Natives of the country in the Bengal Pilot Service, including in the term "Natives," Eurasians, and all persons born and bred in the country as well as pure Asiatics?—Some men born in the country of European, or partly of European, parentage turned out very good Pilots in the old Service. As to pure Asiatics, I am not aware of any instance of such persons having entered the Pilot Service.

Have you served a great deal with Native crews?—Yes.

Would the better class of Native mariners with whom you have had to deal be likely to provide good material for the Pilot Service?—No.

In what qualities do you think them deficient?—They are physically unfit; but, first of all, they

The President—contd.

have not nerve or promptitude in cases of emergency.

Since the reconstitution of the Bengal Pilot Service are accidents on the river more or less frequent than they were formerly?—They are considerably less frequent.

And is the time occupied in performing the voyage up and down the river from the port to the open sea less than it used to be?—Much less.

Has greater speed and more security been attained since the institution of the present Service?—Yes.

Do you consider that the training undergone by men who now enter the Service is calculated to make good Pilots?—I do.

Are there any conditions for admission to the Service, either in the case of the men appointed in England or of those appointed in India, that you think could be dispensed with?—No; I think the education which is received in the training ships is a proper one.

And is the requirement in the case of men recruited in India that, in lieu of that training, candidates should have served for two years in a seagoing ship reasonable?—Certainly.

Captain *Stiffe*.

Have not young men in training ships to learn the practical handling of the sails; in fact everything that can be taught on a stationary vessel?—Yes.

The *President*.

Are the boys in the training ships instructed in such measures as would be taken in emergencies likely to arise at sea?—No; nothing of that sort. Simply the handling of sails, and how to send masts and yards up and down, manning the boats, heaving the lead, and things which it is necessary for a seaman to know.

Mr. *Ryland*.

Have you any Leadsman under you who have been brought up in this country?—None at present. All have been appointed from home.

What was the system of selecting Leadsman before the present Service was organized?—They received their appointments from the East India Company through interest.

Were many of them the sons of the old Pilots?—A few of them were.

Bengal.  
Pilot Service.  
Section III.

G. M. *Anderson*,  
Esq.

WITNESS No. VIII—23rd March 1857.

Examination of L. W. D'CRUZ, Esq., Representative of the Eurasian and Anglo-Indian Association.

L. W. *DeCruz*, Esq.

The *President*.

Will you kindly state the views of the Association you represent on the subject of the larger employment of Natives of India in the Bengal Pilot Service?—The subject has been before the Association for some years, and we have sent up a memorial to the Secretary of State on the subject in which we stated our case. There has been no definite Government order excluding Eurasians and Anglo-Indians from the Service, but from a speech made by the Lieutenant-Governor of Bengal in 1878, it appeared that young men were to be appointed to the Service exclusively from England. This led us to make enquiries, and a good deal of correspondence took place. In preparing our correspondence, we looked through the list of Pilots in the Service since 1820, and obtained the names of about sixty gentlemen in the Service who were born in the country; it was not possible to show exactly how many of those had been educated here, but a good many of them had been, and had entered the Service and served creditably. Some of those men are still serving, and the fact remains that men of the same class did rise to the position of Senior Pilots as well as Branch Pilots. I may be allowed to mention a slight misapprehension in the use of the term Eurasian. We have heard of a lower class of men at Chittagong. These, as a matter of fact, are not Eurasians, but Natives of pure descent who have become Christians, have adopted European names, wear European clothes, and pass for Eurasians, but are not of European descent. On the other hand, Eurasians who have been brought up under proper conditions in the country are now serving the country in other appointments with credit, and their exclusion from the Pilot Service is due to no fault of their own. We appealed to the Secretary of State, and we are very thankful for the concession that has been made; but in that concession there are certain conditions laid down which we consider to be impracticable, and therefore prohibitory. It is not that those who enter the Service here are required, as a part of their training, to go to sea for two years that we object to, but that they are required to do so before they are nominated to the Service. A lad who wishes to enter the Service here must have passed the sixth standard of the European Education Code. That is not a high standard, and numbers of Eurasian lads pass it at fourteen or

The *President*—contd.

fifteen. The objection is not to that, but that when a lad has passed that standard, if he wishes to enter the Pilot Service, he has to go to sea. And suppose he does so; after two years he returns, and finds there is only one vacancy available. This is not a seaport town where there is any opportunity for a young man to take service as a seaman in any capacity whatsoever. Merchant vessels will not take apprentices here, and the Indian lads have therefore no opening in India for entering the Pilot Service. It is not likely, therefore, that anything like an effort will be made to prepare lads for a service in which the number of appointments is limited, seeing that the chances of their entering it would be so uncertain. A boy risks losing not only the two years he has spent at sea, but also his opportunity of obtaining other employment in case he is unable to enter the Pilot Service. He has lost the time he might have spent at college or in apprenticeship. All we desire is that the rule should be so altered as to allow nominations to be made, say from among lads who have passed the sixth standard and are physically fit to enter the Service, so that they may have a certainty of entering the Service after having served for two years at sea and come back.

Captain *Stiffe*.

Is it not the fact that Eurasians do not like to go to sea, but wish to join the Pilot Service?—Eurasians would go to sea if, by doing so, they could make certain of being appointed to the Service on their return. It is not fair to say that they do not like the sea when they have no opportunity in Calcutta of going to sea. I believe there are many parents who would be willing to pay a premium for their sons if the ship-owners would take them as apprentices. I remember we sent a deputation to Admiral Sir William Hewitt on one occasion when he was in Calcutta, and asked him to take some of our lads on board his ship as apprentices; but he said he could not do so, as all the men under him were enlisted in England, and the same thing has been told us by the merchant firms here. But even if a vacancy occurred on one of the seagoing vessels here, the ship goes back to England, and, I believe, all hands are paid off there; and what

Bengal.

The President—contd.

The Hon'ble Mr. Quinton.

Pilot Service.

Section III.

L. W. De Cruz, Esq.

is the boy to do in England? On the other hand, if the boys are taken on under articles, the vessel is bound to return them to their port of embarkation, or send them back on some other vessel.

Might you not send them to a training ship in England?—We are not rich enough yet to risk money, but we are quite willing to spend money if there is a certainty of appointments for our children.

Mr. Ryland.

If Eurasian and Anglo-Indian parents could secure nominations for their sons, do you think they would send them to the training ships at home?—I think they would. They send their sons to England to be trained for the Medical Service.

Captain Stiffe.

Are they nominated to that Service before they leave India?—I think not. We do not wish the nominations to be given without any preliminary test of the candidate's powers. Let them first of all pass a certain educational standard and a physical test.

The President.

How do you account for the difficulty which is experienced in obtaining Eurasian Pilots for the port of Chittagong?—The better class of Eurasians do not think it worth their while to enter that Service. The last witness mentioned the case of a boy on Rs. 20 a month refusing a berth in the Pilot Service, but I do not think a boy on Rs. 20 could be worth much.

What do you think the object of Government is in keeping up the present class of Pilots?—To have efficient men.

Do you think that, as a rule, they would be likely to get as efficient men from the men of your community in India as they can get from the training ships at home?—I can only refer you to the past, and say that it has been so.

Have we not just heard that there are fewer accidents on the river now than there were in times past, although the dangers of the river have, if anything, increased?—No doubt, but then the training that would fit one class would fit another.

The President.

Have we not secured a more efficient Service by having the men trained as they are?—Yes, and I think also that the changed circumstances of life in India would give us a better class than we used to get under the old system.

The Hon'ble Mr. Quinton.

Are not the chances of getting efficient men in England greater than the chances of getting them out here?—Certainly.

The President.

But still you say that, in former days, the Government succeeded in getting efficient Pilots in the country?—Yes, and efficient men are now found in the country to fill appointments in other branches of the public service.

## WITNESS No. IX—23rd March 1887.

C. A. Tweeddale,  
Esq.

Examination of C. A. TWEEDDALE, Esq., Representative of the Eurasian and Anglo-Indian Association.

The President.

You also represent the Eurasian and Anglo-Indian Association?—Yes.

Will you kindly state the views of your Association on the question now before the Commission?—

*Witness reads.*—In the month of February 1885, the Directors of the Eurasian and Anglo-Indian Association were furnished by the Local Government with the draft rules for the admission into the Bengal Pilot Service of Eurasian and Anglo-Indian youths locally selected, and were invited to offer any suggestions or remarks regarding the proposed rules; according to which each candidate is required—

(1) To be not below 15 nor above 18 years of age, and to be of European or Eurasian parents domiciled in India.

(2) To produce a certificate of health and physical fitness to serve as a Pilot in a tropical climate, and evidence of good moral character.

The President—contd.

(3) To have served two years at sea in a merchant sailing ship of not less than 300 tons burthen, employed in the foreign trade, as a seaman or apprentice, and produce satisfactory certificates from the Masters he has sailed under.

(4) To have passed in the examination up to the sixth standard of the Code of Regulations for European Schools in Bengal, and in addition to be examined in the elements of seamanship and navigation up to the standard of a 2nd Mate.

(5) On appointment to receive Rs. 100 per mensem to enable him to support himself and pay his mess money when on board the pilot brig.

The Association, in reply to the Government on the above subject, recommended—

(a) the fixing of a regular proportion of nominations, not less than one-third, of future

## The President—contd.

vacancies for appointments to be made from the Eurasian and Anglo-Indian community;

- (b) it also recommended that on proof that a lad has passed the necessary educational test and possesses the other necessary moral and physical qualifications, a nomination on which he may reckon with certainty may be given to him *before* he proceeds to sea to acquire the necessary professional training;
- (c) whether, considering the varied circumstances and conditions, personal and social, of Anglo-Indian and Eurasian lads, it would not be advisable to widen the range of the years within which the choice must be made, making it extend from 15 to 20 instead of from 15 to 18 years.\*

To this letter no reply has as yet been received from the Government. I therefore desire with your permission to draw attention to the hardships imposed on Eurasian and Anglo-Indian lads by the proposed rules.

Before doing so, however, I desire to state first, with regard to nominations to the Bengal Pilot Service, that the Directors of the Association in 1885 suggested that only one-third of such nominations should be made from the Anglo-Indian and Eurasian community, which practically amounts to only a single appointment yearly.

The proper course as it appears to them on reconsideration is to throw open all the nominations to public competition, and not to restrict any portion of such appointments to a particular class or to youths from the training ships on the Mersey only, as the restriction would create an ill-feeling among the nominees which would continue throughout their career in the Service, and which is undesirable. But, apart from the sentimental view of this question, I trust to be able to prove to this Commission that the Indian Government will, by throwing open the whole of such nominations to Indian lads, be served, not only more economically, but more speedily with a staff of Pilots fitted in every respect for the profession.

With regard to the limit of age contained in the first of the proposed rules, the Secretary of our Association has already fully expressed the opinion of the Directors, and pointed out the necessity for widening the range of years from 15 to 20;\* and in his remarks on this point I entirely concur, and now desire to draw your attention to it with a view to an amendment, which would secure better educated lads with more matured characters without preventing the admission of younger lads.

As regards Rule 2, there can be no possible objection.

Rule 3 acts as a *bête noire* to the nomination of lads of Eurasian and Anglo-Indian parentage to the Pilot Service, and completely handicaps, if it does not altogether exclude, their chance of

## The President—contd.

such nomination, and the Directors of the Association would be sorry to harbour the idea that this rule was drafted with this special object.

With every respect for any opinion which may be expressed to the contrary, I think it my duty, as delegate of the Eurasian and Anglo-Indian Association community, to state that the framers of this rule could not have regarded the conditions and circumstances of the community in considering the feasibility of these requirements, for it will be clear to any person who has the slightest knowledge of the trade of this port that the largest portion of its commerce is freighted in steam vessels through the Canal, and only such of the staples of trade as will not bear the cost of expensive freight, or regarding which rapidity of despatch is not a *sine qua non*, are shipped on board sailing-vessels at very low rates of freight, and that the number of sailing vessels visiting this port is consequently less than the number of steam vessels. Further, that the crews, including apprentices, on such vessels are, in the generality of instances, shipped under articles in England, and that the Commanders of such vessels are not in a position to take on lads, nor are they permitted to execute indentures for apprentices on account of their owners. The chances, therefore, of European and Anglo-Indian lads being able to qualify for the Pilot Service in the way prescribed by Rule 3 are extremely limited.

But if perchance such an opportunity did offer for apprenticeship, what would be the position of such a lad on board? His first-half year would probably be spent in attending the cuddy table, and he would be a general fag to the Master, the Officers, and particularly the Steward of the vessel, in cleaning the scuppers, holystoning the decks, and attending to the poultry and cattle; his quarters would be in the fore-castle, and his associates would possibly be the worst characters that the four continents could produce; he would be an adept in slang, his morals would be depraved, while no traces of refinement would be left in him after his two years' apprenticeship. Can it be possible, therefore, that the Government would care to recruit its Pilot Service from such an atmosphere, or that any sensible parent would risk the future of any lad after years of careful training, education, and refinement, from infancy to youth, by permitting him to serve as an apprentice under such circumstances, when the only inducement to do so is the bare possibility of a nomination.

Apart from these drawbacks, it is a well-known fact that as soon as a vessel arrives at any port in the United Kingdom, she goes into the docks, where her cargo is unloaded and her crew discharged.

Most of the crew have their homes in the vicinity of the port, and are consequently not inconvenienced; but where would our candidate for the Pilot Service find a home? He has received no wages during his apprenticeship, and cannot therefore find quarters even the poorest that the back slums of London or Liverpool can offer. The adage "nothing for nothing" is very generally enforced,

Bengal.

Pilot Service.

Section III.

O.A. Tweeddale, Esq.

\* The Association apparently was unaware that this had already been done.

Bengal.

Pilot Service.

Section III.

A. Tweeddale, Esq.

The President—contd.

throughout the world, but nowhere more stringently than in Britain, where people cannot afford to be hospitable, however much they may desire to be so; and the result, necessarily, will be that the Indian youth will have to resort to the home for vagrants if he is not arrested for something worse, and, instead of qualifying for a Pilot, he may qualify more advantageously for a felon.

To further prove how very unfair this ruling is with regard to the admission of Indian lads, I desire to mention that the youths sent out to India from the training ships *Conway* and *Worcester* are not required to pass any period at sea. These vessels, something after the fashion of the seamen's *Bethel* in Prinsep's Ghat, are moored in the Mersey, and the boys are taught the names of the different masts, yards, sails, and ropes, and their adjustment and manœuvring, with a theoretical and superficial knowledge of steering and navigation, the latter being altogether unnecessary for a Pilot on the Hughli. After a course of training for two or three years, the lads are required to pass an examination; the lad that passes the best examination is nominated for the Navy, the next three are nominated for the Bengal Pilot Service, and their passages paid out to India. On arrival here they receive a salary of Rs. 100 per month; and as they are unfitted to take up the duties of Pilots, they are appointed as Leadsman Apprentices, going up and down the river according to turn, heaving the lead; and, while on board the brigs, they have to take their turn of watch, and assist generally in manœuvring the brig when it cruises about at the Sandheads. It is here, therefore, that these lads do receive their actual practical training in seamanship and knowledge of the river in which they are required to act as Pilots. This Indian training of the training ship lads extends to between two and three years, when on their passing in a knowledge of the river and a 2nd Mate's examination, they are appointed as Mate Pilots as vacancies occur, and gradually rise to the upper rungs of the service ladder.

If, therefore, it is found necessary for such lads to be trained practically and afresh on the pilot brigs in India for a period of between two and three years, during which period the Government pays them at the rate of Rs. 100 each per month, before they are competent to take up the duties of a Mate Pilot, notwithstanding their previous training on the *Conway* and *Worcester*, it becomes a pertinent question as to what are the advantages, if any, which the Government derive by restricting the major or any portion of the nominations to the Pilot Service to lads from the training vessels in England?

At this stage I would ask the Committee whether the Government has any, and what, reasonable objection to lads of European and Anglo-Indian parentage being trained in this country on board the very pilot brigs in which the lads from the training vessels are made efficient and practical Pilots, and where it has already been proved by the present men in the Service that there can be no better school.

To my mind no reasonable objection can be shown, and the advantages to be obtained are numerous:—

The President—contd.

- (1) I would therefore suggest, for the consideration of this Committee, that the pilot brigs should be the vessels in which Indian lads should be trained for the Pilot Service.
- (2) That after a youth has passed the educational test required by Government, he should be appointed as an Apprentice Leadsman, without pay, to take his turn in heaving the lead up and down the river. This will give him a practical knowledge of the river, its different soundings, its sands, its shoals, its currents, and its dangers. When on board the pilot brigs, he should be required to take his regular turn of duty in keeping watch and manœuvring the vessel. This will give him a practical knowledge of seamanship. With two years of such apprenticeship, I submit that an Indian lad would be far better fitted to pass an examination than if he were sent out on a foreign voyage or served his apprenticeship in the training ships for double the period, and he would most certainly make a more efficient Pilot, as he will have made himself acquainted with the dangers of the river which he is required to guide a vessel through.

After an apprenticeship of two years, he should be required to pass an examination, and produce certificates of his ability from those Pilots whom he has been with while heaving the lead, and from the Commanders of the pilot brigs.

If he fails in this examination after two years, he may be permitted an extension of another year to enable him to qualify; but if he fails the third year, he may be sent away.

During his period of apprenticeship, his parents or guardians should be required to defray his expenses for subsistence on board the pilot brigs at the same rate as is charged to the lads from the training vessels.

The advantages of such a measure are obvious:—

- 1st.—The Government will be saved the expense of paying the passage out of youths from the training vessels.
- 2nd.—It will be saved the expense of the salaries of such lads at the rate of Rs. 100 each per month during the period of their practical training in India as Leadsman about two or three years.
- 3rd.—The Indian lads would sooner qualify as Pilots than the lads from the training vessels, the latter having to serve for two or three years in England, and a similar period in India before they are qualified.
- 4th.—The Pilot Service would be expeditiously provided with practical recruits.
- 5th.—The Indian lads would not be so subject to climatic influences as fresh arrivals from Europe.
- 6th.—The furlough and leave allowances would be considerably reduced, as Indian lads would not need to go frequently to Europe, their homes being in India.

The President—contd.

7th.—And, lastly, the Government would provide a fresh field for employment without unnecessary drawbacks for the Eurasian and Anglo-Indian youths.

During the earlier stages of the discussion on the question of throwing open this Service to Indian lads, certain uncharitable remarks were passed as to their want of nerve and energy, or, as it was facetiously represented at the time, their "want of backbone." It is unnecessary for me to state anything with regard to such remarks, as I believe the fact of a number of Eurasians being in the Service at present is in itself a sufficient refutation of them, and the occasion of the wreck of the *Mohussir* is a sufficient proof that the Eurasian Pilot who was on board, not only did not lack backbone, but had an enviable superfluity of it.

Mr. Ryland.

Why should not the boys after receiving their nominations go home and be trained on board a training ship?—In some instances parents are not in a position to pay the cost of sending their sons to England to be trained on board a training ship.

The President.

The cost of keeping these boys on board the pilot brigs would be about Rs. 40 a month. Do you know whether their parents could afford Rs. 40 a month?—No doubt a great many, who had the welfare of their children at heart, would be able to afford it.

We are informed that the pilot brigs have not accommodation for these boys on board; what do you say to that?—The lads who are sent out from England every year go up and down the river as Apprentice Leadsman, and are accommodated on the pilot brigs; and if they can be accommodated, why not the lads locally selected?

The answer to that might be that boys locally selected are not yet fit to be Leadsman. You could not replace the boys who are now brought out from England by locally selected boys?—They would soon learn the duties of a Leadsman.

Captain Stiffe.

Do you know that a training ship in England is a full rigged ship, and that the boys have to learn to go aloft and do exactly the same work as they would afloat?—Quite so, but, so far as heaving the lead goes, there is very little to be learned on an English training ship. They have not the variety of depths there. A boy would much sooner qualify to be a Leadsman if he was taught heaving the lead on a moving vessel.

Do you mean that after these two years' probation you speak of they should be appointed as Pilots?—First of all I propose they should pass an educational test; then that they should be appointed Apprentice Leadsman without any pay or allowances for two years; and then they may be examined, and, if found to be qualified, entertained as Mate Pilots.

Our Leadsman now serve for five years before they are entertained as Pilots in addition to their training at home?—I would make no difference between the training ship lads and the local lads.

The President.

You are aware that for five years the boys who are brought out from England receive a very small salary?—They receive an allowance of Rs. 100 a month. The Indian lad would not require to receive a single fraction till he was acquainted with the duties of a Leadsman. All that I ask for the lads locally selected is, that if they can pass the same examination at an earlier period, they should not be rejected.

The Hon'ble Mr. Quinton.

What is your present employment?—I belong to the Calcutta Customs.

Have you ever been to sea?—I have been to China.

As an Apprentice?—No, as a passenger.

You are aware, no doubt, that the position of the Hughli Pilots is one of very great responsibility?—Yes.

That the safety of the ship and cargo and the lives of the passengers and crew depend upon him?—Quite so.

Is it the duty of the Government then to procure the most efficient men for the Service they can?—Yes.

Do you think that, as a layman, you are able to give an opinion as to the qualifications which are required under those circumstances? Do you think we should be justified in adopting your opinion in opposition to that of professional witnesses?—Certainly not; I should not like to press my views in opposition to those of professional witnesses.

The President.

You wish to suggest that, in lieu of two years on board an English training ship, the locally selected candidates might undergo two years' training on a pilot brig?—Two years, or even longer, if necessary.

The Hon'ble Mr. Quinton.

Do you know what education is given on board the training ships in England? Are you acquainted with the rules?—No. I submit that a knowledge of navigation is not necessary for a Pilot.

The President.

Supposing a ship was tacking down a reach and the Pilot of a ship coming up the river did not know how far each tack would carry her, might there not be danger of a collision?—I do not know.

The Hon'ble Mr. Quinton.

Are there any Eurasians, members of the Pilot Service, in your Association?—I do not know.

Are there any seagoing men in your Association?—I believe so.

Mr. Ryland.

Has it occurred to you that a boy who has served for two years as an apprentice in a sailing vessel has acquired a means of obtaining his livelihood even if he fails to enter the Pilot Service?—He might go as an able seaman perhaps.

Do not the sons of gentlemen go as apprentices in trading vessels?—They enter in quite a different position. It is not merely a question of the hardships to which a lad would be exposed, but he would necessarily be required to associate with the lowest class of seamen.

Bengal.

Pilot Service.

Section III.

C.A. Tweeddale, Esq.



WITNESS No. X—25th March 1887.

Bengal.

Pilot Service.

Section III.

Captain W. Ellery.

Examination of CAPTAIN WILLIAM ELLERY, of the Ship *Taluqdar*, 2,500 tons register, B 3,000 gross.

The President.

I have been trading to this port since 1870 as Master of several vessels owned by Messrs. T. & J. Brocklebank, of Liverpool.

I have a very high opinion of the efficiency of the Bengal Pilot Service, and never had an accident on the Hughli during the 17 years I have been in command.

Judging from the behaviour of Native boatmen and others employed on the river in very rough weather, I do not think that any of them could ever qualify for the duties of a Pilot, and I think it would be impossible to train them to exercise that cool judgment and readiness of resource in emergency so necessary for the protection of property on such a dangerous river as the Hughli.

As regards East Indian youths, I have no doubt that a certain number of them could be found who would readily undergo the necessary course of training at sea, and I believe that a healthy, intelligent East Indian, who has faithfully served two years in a sailing vessel and passed a competitive examination, would be well qualified to enter the junior grade of the Pilot Service.

The Hon'ble Mr. Quinton.

I consider that two years' service in a seagoing sailing vessel is essential to the proper training of a Pilot, especially for the Hughli. Since I have commanded a ship of large tonnage, I have never come up the Hughli without steam. In 1873, when I commanded a ship, the *Bowfell*, 1,000 tons register, I came up under sail. The cost of steam is from Rs. 900 to Rs. 1,800, and therefore I should always come up under sail, if I could;

The Hon'ble Mr. Quinton—contd.

but so great are the dangers of the river, arising from strong eddies and numerous bars, that steam is indispensable for large ships; and even with steamers there is constant danger, unless the Pilot is a man of ripe experience and cool judgment. I have been for more than 30 years at sea in Messrs. Brocklebank's employ, and have been on vessels in all parts of the world, and I know no navigation more dangerous.

The President.

I do not think that residence in a pilot brig would be a sufficient training. A Pilot should understand how to manœuvre a ship and how to deal with her canvas in sudden squalls; in other words, he should be experienced in the wearing and tacking of a ship and in the taking in and setting of sail.

Mr. Ryland.

Respectable boys can easily be apprenticed on good ships plying to and from this port. I would take apprentices for a term of three or four years.

The President.

I have a Eurasian apprentice from this port. He promises to make a sailor. I believe he proposes to offer himself as a candidate for the Pilot Service at the examination on April 1st. The *Khyber*, 2,000 tons register, and another vessel, both of which belong to Messrs. Brocklebank, have also each a Eurasian apprentice from this port. We have from five to eight Apprentices on each ship. They mess together and not with the men.

Captain C. G. Cross.

WITNESS No. XI—25th March 1887.

Examination of Captain C. G. Cross, of the ship *Mylomene*, 1,900 tons register, owned by Messrs. Henry Furney & Sons, Liverpool.

The President.

I have navigated the Hughli from time to time for 16 years. The Pilot Service, as it now exists, is thoroughly efficient. The Calcutta river is the most difficult to navigate of any I know. The distance from the lightship to Calcutta is about 110 miles. The eddies are very strong in the river, the bars shift considerably, and at times there is little water for a large ship, and the channel is narrow. I do not think natives of Asiatic birth would be fit men for this Service; and for such a service you are bound to obtain the best men. A Pilot must know not only the river, but the handling of a ship, both to conduct the ship and to avoid collisions, and he must have courage and promptitude of judgment. A Pilot ought to have some training afloat, at least two years. I think that the necessary knowledge for working a ship at the Sandheads would be got in a pilot brig. I have had many boys from the *Conway* and the *Worcester*. I do not think those training ships

The President—concl'd.

afford a sufficient training in practical seamanship for a Pilot. I take apprentices in my ship. If I considered a boy robust, strong, and respectable, I would take him as an apprentice at this port, whether his parents were Europeans or Eurasians. I should prefer a boy of European parentage, because he would stand changes of climate better.

I have had Mahomedan sailors. They make good sailors in fine weather. I have had no experience of Arab sailors, but I believe the Arab Commanders are pretty good sailors in their own waters. When I was in the *Philomene*, I went on board a ship, the Commander of which was an Arab, in the Bay of Bengal to compare chronometers. I found the Commander had three, and had worked out three sets of sights in English figures. I asked him where he had been taught navigation, and he told me he had learnt it in Calcutta.

## SECTION IV.

Note by A. J. MILNER, Esq., Branch Pilot.

I beg to state, with reference to the question as to whether the Natives of India could qualify for the pilotage of the River Hughli, that in my opinion, collectively, they are deficient in nerve, judgment, decision of character, &c., to carry on such duties; and considering the risk to life, the valuable property entrusted to the charge of Pilots, and the large amounts paid by the mercantile community for such service, I think merchants are entitled to the best talent procurable.

Bengal.  
Pilot Service.  
Section IV.  
A. J. Milner, Esq.

Extract of a Note by W. C. MADGE, Esq.

W. C. Madge, Esq.

Anglo-Indians who were excluded from the Bengal Pilot Service by an order of the Secretary of State, confining nominations for that Service to lads chosen from English training ships, though theoretically declared eligible once more, still find admission difficult or impossible because a previous training of two years is declared necessary, and in the existing dearth of demand for Indian lads on seagoing ships, seamanship is not largely followed among them as a profession.

The injustice of the existing arrangement lies in the preference shown to lads trained in English ships, for they are received on those ships without any previous training in seamanship, and it has never been seriously contended that two years passed on an English training ship confers anything like an education in practical seamanship. In fact, a far better training in seamanship can be obtained on board any of the pilot brigs than on the *Gibraltar* or *Conway* or *Worcester* in English waters. Anglo-Indians and Eurasians admitted into the Pilot Service before 1878, and trained entirely on pilot brigs, rendered good service on them, and rose to actual distinction, and all the real practical seamanship of most English lads elected for the Pilot Service from English training ships is acquired after their joining their ships in the Hughli.

It is felt very strongly that, if the Government cannot provide separate training ships for the youths of the country, it may at least allow Anglo-Indian and Eurasian lads of respectable families and good character and decent education to be received on board the pilot brigs as sailor apprentices, and thus trained in seamanship. This would open up a new career for Indian lads; and while from lads so trained occasional selection could be made for the Pilot Service after suitable examination, the residue would have some chance of finding employment in the Mercantile Marine, whose Masters refuse to ship untrained lads.

PROCEEDINGS  
OF  
THE SUB-COMMITTEE,  
PUBLIC SERVICE COMMISSION.

BOMBAY.  
Pilot Service.

Section I.—Note by the Sub-Committee.

The control of the Bombay Pilot Service is, subject to certain restrictions, vested in the Trustees of the Port of Bombay by the Bombay Port Trust Act, 1879, section 72.

Bombay.  
Pilot Service.  
Section I.

The authorised strength of the staff is eighteen, *viz.*, three Harbour Masters, five First-grade Pilots, five Second-grade Pilots, and five Third-grade Pilots.

The Secretary to the Port Trust, in a note addressed to the Government of Bombay in March in the present year, states that with the exception of two appointments vacant in the third grade, all the appointments are held by Europeans domiciled in India; but from the evidence of a witness who is acquainted with some of the officers, it appears that they are not all domiciled by birth.

Under the bye-laws Nos. 19—23 the following qualifications are prescribed for admission to the service:—

The Port Officer is authorised to appoint, subject to the approval of the Trustees, so many probationers, not exceeding four, as may from time to time be considered necessary. Candidates must be British subjects and not under 21 years of age. They must produce certificates of good character and ability and a certificate from a Medical officer appointed by the Trustees of physical fitness and ability to distinguish primary colours.

A probationer may, with the sanction of the Port Officer, present himself for examination as to his ability to perform the duties of a pilot by a Board composed of the Port Officer or his Assistant or a Dock Master, the Harbour Master, one first or second-grade Pilot and Lloyd's Marine Surveyor. A probationer who fails to pass the required examination within six months after the date of his appointment, is liable to have his name removed from the list. After passing the examination a probationer is eligible for appointment as a third-grade Pilot when a vacancy occurs.

Promotions to the several superior grades are, as a rule, regulated by seniority. One moiety of the receipts for pilotage is received by the Trustees for their expenses in connection with the Pilot Service, such as the provision of schooners, the entertainment of a Medical officer to render medical aid to the officers free of charge, and the fixed salaries and furlough allowances of such of the officers as are entitled to receive them. Of the other moiety of pilotage receipts a percentage is divided among the Harbour Masters, who also receive fixed salaries. From this moiety there are also paid allowances to Harbour Masters for piloting vessels into Dock and on changing berths, and provision is also made for allowances due to Pilots on leave. The residue is divided among the Pilots according to the amount earned by the officers of each grade.

The average monthly earnings of the officers in each grade for the past five years have been—

	<i>₹</i>	<i>a.</i>	<i>p.</i>
Harbour Masters (including salaries) . . . . .	767	0	0
First-grade Pilots . . . . .	547	8	0
Second " " . . . . .	467	5	4
Third " " . . . . .	353	2	8

By an order of 10th August 1887, the percentage of gross pilotage receipts to be received by the Trustees is from the 10th September 1887 to be reduced to 43½, and the percentage to be applied to the other purposes mentioned is to be increased to 54½.

When the exigencies of the service permit, Pilots are entitled to leave and furlough under bye-laws 68 and 85. Leave may be granted on medical certificate for two years in all, but not for more than one year at a time, and on such leave the officer is entitled to half the pay of his substantive grade.



As at present constituted, the staff consists of four officers, one in each grade, all of whom are Europeans. No rules have been framed to regulate admission to the service, but in practice the following have been adopted :—

Bombay.  
Pilot Service.  
Section L

A candidate must have obtained a first or second Mate's certificate from the Board of Trade, and must produce certificates of good conduct and sobriety from Masters of vessels in which he has served.

He is appointed on probation for three months, during which period he receives a salary of ₹100. At the end of three months he is required to pass an examination as to his qualifications to perform the duties of a Pilot, and on passing it his appointment is confirmed and he is graded in the third class and is allowed to pilot vessels of light draught. After five years of approved and efficient service in the third class he is promoted to the second class, and, after a similar period of like service in that class, to the first class. The Senior Pilot is selected for the appointment from men graded in the first class who hold a Board of Trade certificate as Master.

Pilots who entered the service prior to the 1st April 1875 enjoy the benefit of the Leave and Pension Rules applicable to the Uncovenanted Service. Pilots appointed since that date may claim furlough to the same extent as is allowed to members of the Uncovenanted Service, but they have no claim to pension. In lieu of this provision they are permitted to contribute 5 per cent. of their earnings to a Provident Fund, to which the Port Trustees make a contribution from their funds of a minimum sum equal to 50 per cent. of the amount subscribed by each Pilot. If at the end of the year there is a sufficient surplus of revenue at the disposal of the Trustees, an additional 50 per cent. is contributed to the amount subscribed by each Pilot during the year.

If after fifteen years of approved service a Pilot desires to retire or is invalided, he is refunded the amount of his subscriptions and the contributions of the Port Trustees with interest, and in the event of the death of a Pilot when he is in the service, those sums are paid to his nominee.

Pilots are permitted to continue in the service so long as they are capable or until they attain the age of 55 years, and on retirement receive the amount of their subscriptions and the contributions of the Port Trustees.

The qualifications required are similar to those which are necessary for efficient service at other harbours and ports frequented by steamers and sailing vessels of considerable tonnage and include a thorough acquaintance with local circumstances, such as the channels, depths of water, tides, currents and prevailing winds.

At present only European Masters and Mates of vessels apply for employment in the service. The Commissioner in Sind is of opinion that so long as they can be induced to join the service, qualified English seamen should be appointed Pilots in preference to any other class.

BOMBAY.  
Pilot Service.

Section II.—Note by the Departmental Member.

Bombay.  
Pilot Service.  
Sec. II.

From Brigadier-General M. W. WILLOUGHBY, Secretary to Government, Marine Department, to the President, Sub-Committee, Public Service Commission, dated Bombay Castle, 16th May 1887, No. 169 :—

I have the honour to acknowledge the receipt of the Public Service Commission's Secretary's letter, No. 157, dated 17th March last, asking for certain information regarding the Pilot Service in Bombay and Sindb, and in reply am directed to forward the accompanying copies of papers noted in the margin, affording the information required, and to state that, under the Acts marginally quoted, the control of Pilots at Bombay and Sind is, subject to certain restrictions, vested in the Trustees of the Ports of Bombay and Karachi respectively.

Letter from the Secretary, Bombay Port Trust, No. 1305, dated 28th March 1877, with statement and pamphlet.  
Memorandum by the Commissioner in Sind, No. 591, dated 29th April 1887, with statement therein referred to.

Section 72 of Bombay Port Trust Act of 1879.  
Section 55 of Karachi Port Trust Act of 1886.

*Note by the Secretary, Port Trust, Bombay.*

The rules under which persons are admitted to the Pilot Service in Bombay are Nos. 19 to 23 in the Bye-laws. When once admission into the service is gained, promotion to 3rd, 2nd and 1st grade Pilots and then to Harbour Masters goes as a rule by seniority.

The Pilots are paid according to Rules Nos. 63 and 67, and the average pay drawn by each grade for the past five years has been—

	R	a.	p.
Harbour Masters . . . . .	767	0	0
1st-grade Pilots . . . . .	547	8	0
2nd „ „ . . . . .	467	5	4
3rd „ „ . . . . .	353	2	8

As Government are aware, proposals for the revision and reduction of these rates are at present under consideration.

The pilots are not entitled to pension, but they have the privilege of joining the Trustees' "Provident Fund." Under the rules of that fund they contribute monthly 5 per cent. of their pay as laid down in Pilotage Rule No. 85, and the trustees contribute a like sum. Both amounts are allowed to accumulate at compound interest at the rate of 4 per cent. per annum, but a Pilot is only entitled to draw the trustees' contribution and interest thereon after at least fifteen years' service.

In the event of his death while in the service, the amount at his credit including trustees' contribution and interest goes to his nominee.

The Leave rules under which the Pilots serve will be found under Nos. 68 and 85 of the pamphlet referred to.

The "professional attainments essential for efficient 'service' cannot well be detailed. It will be seen that pilots have to pass an examination before admission to the service, and the examiners are specified in Rule No. 24. The Pilots are all Europeans domiciled in India."

The rules already referred to will give full information as to the "existing organization and constitution of the department," it being only necessary to add that the control of the pilots is subject to certain restrictions, vested in the Trustees of the Port of Bombay by Section 72 of the Bombay Port Trust Act, 1879.

## Existing organization and constitution of the Pilot Service Department.

Bombay.  
Pilot Service.  
Sec. II.

1	2	3	4						
			NUMBER OF APPOINTMENTS IN EACH CLASS OR GRADE NOW HELD BY—						
			1 Europeans not domiciled in India.	2 Europeans domiciled in India.	3 Eurasians.	4 Natives of India.			
(a) Hindus.	(b) Mahomedans.	(c) Others.				(d) Total.			
Bombay Port Trust.	Three Harbour Masters and fifteen Pilots. There are two vacancies in the Pilot Ser- vice at pre- sent. The appoint- ments are <i>not</i> gazetted.	Three Harbour Masters. Five 1st-grade Pilots. Five 2nd " " Five 3rd " " Paid by fees (see accom- panying letter). Ex- cept Harbour Masters, who are paid partly by fixed salary and partly by fees.	..	Three Harbour Masters. Five 1st- grade Pilots. 1 Five 2nd- grade Pilots. Three 3rd- grade Pilots.	..	..	..	..	..

*Note by Acting Commissioner in Sind.*

There are no fixed regulations as regards admission to this service, but the principles by which the department is guided in making appointments and promotions are—

- (a) To qualify for admission to the Pilot Service at this Port, a candidate must possess a First or Second Mate's Certificate from the Board of Trade, together with certificates of good conduct and sobriety from Masters of Vessels in which he has served.
- (b) A candidate is appointed on probation for three months, after that period should he pass the required examination, as to his qualifications to perform the duties of pilot, he is confirmed and graded in the 3rd class, and permitted to bring in and take out of harbour vessels of light draught; after five years of approved and efficient service in the 3rd class, he is promoted to the 2nd, and after serving the same period in that class is promoted to the 1st class. The Senior Pilot is selected for the appointment from the 1st-class grade, and in addition to the qualifications necessary for the other grades of the service must hold a Board of Trade certificate as Master.

2. Those that joined the service prior to the 1st April 1875 are governed by the Civil Leave and Pension Codes, and are treated both as regards pension and furlough as members of the Uncovenanted Service.

As regards those that join the service subsequently to the abovementioned date, a Provident Fund has been established, to which they contribute 5 per cent. on their monthly salaries, but as regards furlough, they are treated in the same manner as Uncovenanted Servants.

After 15 years of approved service if they desire to retire, or are invalided, they are refunded the amount of their subscriptions *plus* the contribution of the Port Trust (which is regulated in accordance with the surplus balance to the credit of the Trust at the close of each year, viz., the contribution of the Trust shall be at the minimum rate of 50 per cent. on subscribers' contributions, but in those years in which there may be a surplus revenue, a further contribution of 50 per cent. on current subscription only will be granted by the Trust). Otherwise they are permitted to serve as long as they are capable, or until they attain the age of 55 years, and then retire with the foregoing privileges.

The scale of salaries is as follows:—

	rs.
Probationary Pilot ... ..	100
Third-class do. ... ..	180
Second-class do. ... ..	200
First-class do. ... ..	220
Senior Pilot ... ..	250

3. A theoretical and practical knowledge of seamanship, the handling of steam and sailing vessels, a thorough knowledge of the harbour and its channels, depth of water at the different buoys and piers, strength of tides, and force of wind, and also what is necessary in case of accident to vessels.

4. At present Masters and Mates of Vessels (only Europeans) seek employment in this service, and have proved themselves efficient to discharge the duties required of them.

5. A statement showing the existing organization and constitution of the department, prepared by the Port Officer in the form required, is appended.

Bombay.  
Pilot Service.

6. The Commissioner considers that, as long as they can be induced to accept the posts, qualified English seamen should be chosen for pilot service in preference to any other class.

Sec. II.

Existing organization and constitution of the Pilot Service Department.

1 Department.	2 Total number of gazetted appointments or of appointments not being purely clerical of salaries of Rs. 100 and upwards.	3 Distribution of the gazetted appointments or of appointments mentioned in column 2 amongst classes and grades with rate of pay attached to it.	4 NUMBER OF APPOINTMENTS IN EACH CLASS OR GRADE NOW HELD BY—						
			1 Europeans not domiciled in India.	2 Europeans domiciled in India.	3 Eurasians.	4 Natives of India.			
						(a) Hindus.	(b) Mahomedans.	(c) Others	(d) Total.
Karachi Port Trust.	4	{ 1 Senior Pilot, Rs. 250. 1 1st-class " " 220. 1 2nd-class " " 200. 1 3rd-class " " 180. }	4	..	..	..	..	..	..



BOMBAY.Pilot Service.Section III.—Sittings at Bombay.

Witness No. I.—21st July 1887.

Examination of Captain Potts, Dock Shipping Attendant in the service of the British India Steam Navigation Company.

Bombay.

Pilot Service.

Sec. III.

Captain Potts.

*The President.*

What are the duties of your office?—I am in charge of lascars, and the repairs to ships, and sailmaking.

Where did you receive your technical education?—On the Clyde, in Greenock, and in the Glasgow ship-building yards. I was two years in Gordon's, two years in Lawrence, Hall and Co.'s, and four years in Caird and Co.'s yards as a Naval Constructor. I then went to sea, and, after having served at sea for a period, obtained command of a ship; since 1881, I have held shore appointments in the service of the British India Steam Navigation Company's dock.

The Pilot service in Bombay is under the management of the Port Trust?—Yes.

And the appointments are made by the Board?—Yes.

I believe all the Pilots are domiciled Europeans?—I know that most of them were born in England.

How do you know that?—I come in contact with them frequently.

You have commanded ships plying to and from Calcutta?—Yes, from Calcutta to Singapore by the Burma and Chittagong coasts.

You are acquainted with the Hughli river?—Yes. It is the most difficult pilotage I have any knowledge of.

What is the length of the pilotage water in Bombay?—Ten miles from the dock to the pilot schooner station.

What are the difficulties which present themselves in the navigation of these waters?—Manœuvring and berthing vessels amongst each other, working sailing vessels out of the harbour during the monsoon, and embarking and disembarking at the same period.

The difficulties are principally those which affect sailing ships?—Yes.

There is not much room for tacking?—There is not much water to go either one side or the other.

The Bombay Pilots must be experienced in handling sailing vessels?—Yes.

Has the number of sailing vessels visiting the Indian ports lately increased?—The number of sailing vessels has increased, but the number of steamers is much the same, though their tonnage is greater. Four-masted sailing ships are taking the place of steamers.

Ought a Pilot in this water to have a competent knowledge of navigating a ship?—

Yes; because in the south-west monsoon or in thick weather he might not be able to see his landmarks or any objects which can guide him, and he would have to compute his course and make allowances for tide, and perhaps, if he were driven out to sea, to take observations to ascertain his position. He must be an expert seaman to handle his ship. I believe all the local Pilots have served in sea-going ships as Masters or Mates.

I believe at one time the Port Trustees allowed the Captains of certain steamers plying in this port to qualify themselves to bring in their own ships?—Only in a portion of the pilotage, the open water at the mouth of the harbour, that is, the five first miles from the pilot station to the sunken rock.

Have you known a case of a ship coming in without a Pilot?—As far as the sunken rock, yes.

Do you know whether some of the Captains qualified under these rules?—Some did.

Do you know anything of the Bengal Pilot Service?—I have sailed in and out of Calcutta for more than a year.

Do you consider it an efficient service?—A highly efficient service.

There are two methods of gaining admission to that service—(1) service in a training ship in England for two years, and (2) two years service in a sea-going vessel. Are those conditions necessary for the efficiency of a Hughli pilot?—I think so, to enable a man to act in emergency.

It has been suggested to us that in a training ship a man learns nothing of practical seamanship owing to the ship being stationary?—He can supply that deficiency in his service as apprentice or steersman on the river and in the pilot brigs.

And from his schooling in the training ship he is capable of acquiring the necessary knowledge of seamanship?—Yes.

Without that schooling do you think he would make a competent Pilot?—It is very doubtful whether he would.

Have you ever been to Chittagong?—Yes.

What is the nature of the harbour at Chittagong?—It is a river harbour about fourteen miles in length with a bar at the bottom. The pilotage difficulties are not considerable, the river is an

Bombay.  
 Pilot Service.  
 Sec. III.  
 Captain Potts.

open one and a good one, and the principal skill required is in crossing the bar at the proper time and in encountering a kind of set that crosses the bar at an angle of forty-five. After that, the river is open and easily navigated.

The bar is a permanent bar?—Yes.

What sort of pilotage is there at Rangoon and Moulmein?—The Rangoon is a fairly easy river, but the Moulmein is a difficult water.

What is the length of the Moulmein pilotage water?—Fifteen miles, much the same as at Rangoon, only there is less water in the river and the channel takes zigzag turns. There are a few Europeans and a number of Native Pilots at Moulmein; for Rangoon there are two native pilots and twelve or thirteen Europeans; in Chittagong there is one Eurasian Pilot and the rest are Mahomedans.

What has been your experience of native pilots in the Moulmein River?—Unfavorable. I remember once we were passing up the river when I observed that the Pilot, a Native, took the wrong side of the river. Not knowing whether there was any local rule which allowed him to make way for deeper vessels to pass, I reported the matter at the Pilot office, but the same Pilot was appointed to take me to sea. On that occasion we were going down against the tide when I observed a very large vessel coming up with the tide. I asked the Pilot to ease down (being nervous by reason of my experience of his incapacity), and let the vessel get over to her own side and pass up. He replied it was all right, that the Pilots had an understanding with each other, and I allowed him to have his way: the other ship crossed our bows: I had to take charge and bring our ship full speed astern, and the other ship struck the bank and swung round with the tide, and her stern cleared our port bow by a few feet only. The Captain, I believe, wanted to take action against us, but I heard nothing more of it. After that I always tried to get an experienced European Pilot. The Native did not seem conscious of the danger he was incurring. He did not act on the emergency. He refused to act after he had got us into trouble. He did not seem to grasp the emergency; it was a simple matter of stopping for a few moments to allow the other vessel to pass. As a general rule, Masters apply for European or Eurasian Pilots; at that time the Pilots used to come out to us in boats, and it was our practice to look through the glass and avoid the boats that had Native Pilots in them.

I suppose these Native Pilots were not very well educated as a class?—No. The European Pilots were for the most part men who had had a deep-sea training and held rank in ships.

The Natives had never had a chance of commanding large ships?—No. They are mostly men who have had a little service before the mast as ordinary lascars or tindals.

So that it would not be quite fair to compare the efficiency of the two classes?—No.

We were told in Calcutta that some of the Arab Commanders handle their ships skilfully enough?—Some of them do; some of them are experienced seamen and could compare with English shipmasters. They have been brought up in Arab vessels and passed through all the grades.

Have you met any educated navigators among them?—Yes. The Captains of Arab ships are all under the impression that they navigate in the same way as we do. I have known them to go aboard an English vessel at the end of the year and obtain a copy of the nautical almanac and copy out the data for navigation.

Are any of the men you speak of Natives of India?—I should say not. They are men from Zanzibar, as a rule, Muscat, and the Arab ports, such as Jedda.

You have a great number of Native sailors in the Company's service?—All our vessels are manned by lascars.

Where do those men come from principally?—Those who run the vessels from the Persian Gulf to Zanzibar are mostly Surat men; those who take our vessels to Singapore are mostly men from Chittagong; and the men who join the vessels trading between London and Calcutta are mostly Bombay men.

Your Company has a dry dock and workshops here?—Yes.

Have you the pay sheets of your Company with you?—Yes (hands them in).

I see you employ 166 men in the dock department?—That is the permanent staff; as the work increases, we may increase the permanent staff to three or four hundred.

The entire supervision of your dockyard is European?—Yes.

Have you any Natives of Bombay who are first-class mechanical engineers whom you could employ in supervision?—I cannot answer that question, my duties being confined to the shipwright and sail-making departments.

Have you had any experience of Native engineers in your sea service?—No. All our ships have European or Eurasian engineers, and in all the ships I have served, the engineers have been Europeans or Eurasians.

The Hon. Khan Bahadur *Kazi Shahbuddin*.

Would it be practicable to employ Natives of India, Portuguese and East Indians for the Pilot Service here?—Not unless they went through exactly the same routine of service by going to sea as boys to begin with.

Could not young boys belonging to those classes be put on board sea-going ships to learn the business?—I see no reason why they should not if they went through the same apprenticeship.

Is there anything to prevent their obtaining such training in this country in the rules or practice of your Company for instance?—None that I know of.

Do you ever take apprentices in India?—No; but there is no rule to prevent a man who has obtained a certificate as an officer from taking service with us.

Would you employ Natives as apprentices if they were qualified by their training and physique?—Yes, at home.

Why not here?—There are very few sailing vessels here; nearly all are steamers, and apprentices are only taught their business in sailing ships; every port in Great Britain has a very large number of sailing and coasting vessels; the boy who goes on board at home gains experi-

ence from the way in which the ships are rigged which he would not learn here. In vessels out here it is simply a case of one big sail and the men do not get the same experience.

Would a training in a sailing vessel be quite sufficient to fit a boy for the Pilot Service here?—Yes, if it extended over a sufficient length of time.

Practically speaking there is no prospect of Natives being trained out here as apprentices and afterwards drafted into the mercantile service as officers?—No; they do not present themselves for such service.

Do you think that besides other difficulties there would be any on account of their being Natives?—No, but on account of their want of education there would be.

Bombay.  
Pilot Service.  
Sec. III.  
Captain Potts.

Witness No II.—21st July 1887.

Examination of Captain HEXT, R.N., Director of Indian Marine.

Captain Hext,  
R.N.

The President.

How long have you been Director of Indian Marine?—Four years and five months.

You are acquainted with the navigation of the River Hughli?—As well as an ordinary sea-faring man can be.

Is it necessary that we should have a special service of Pilots for that river?—Most necessary.

Do you consider it is better to have what is called a covenanted service of Pilots than to have licensed Pilots?—The service must be under the control of the Port Commissioners or the Government. You could not, on account of the difficulties of the Hughli, have ordinary Pilots instructed by themselves. I mean to say that no man of local knowledge merely, without thorough instruction in the river, could Pilot the Hughli. A Pilot on the Hughli is dependent on the surveys of the river by the Port Commissioners.

You mean it must be a regular service and not a licensed corps?—Yes.

Do you consider it necessary for the education of a Pilot on the Hughli that he should either have undergone two years' training in a training ship or have served for two years in a sea-going vessel?—It is most necessary.

You think it would be insufficient if he was sent to serve on board the pilot brigs at the Sandheads?—I think after two years on a training ship, service on a pilot brig would finish his education; but he must certainly have served for two years in a training ship, or its equivalent, the sea-going vessel.

Would it be possible to establish a training or apprentice class on any of the vessels of the Indian Marine?—No. The vessels of the Indian Marine are employed only in fair-weather months on the coasts of India during short periods and voyages; the boys would not go on long voyages or get an opportunity of taking sights regularly day to day, nor would they acquire the essential knowledge of handling sailing ships in the steamers we have—which are only jury-masted or of the smallest sailing capacity—which they would learn in a sea-going vessel in the Mercantile Marine.

In connection with a proper training class, would it be necessary to have special instructors appointed?—Of course.

You have no officers at present in your Marine whose duties would allow them leisure to instruct a class of apprentices?—The officers could do the duty provided they have other men appointed in their place; but we have no men who would have leisure to undertake it as well as their own duties.

Have you at any time made the experiment of establishing a training ship here for your own officers?—When I first came out here four years ago I tried, in the monsoon months, sending all the junior officers who I thought lacked the experience which is gained in sea voyages in sailing ships, on the *Cesarewitch*, a sailing vessel belonging to the Indian Marine, but I found the expense of keeping up the crew which was necessary for manning the ship, and the wear and tear of the ship was so great that I had to move Government to substitute a steamer. To keep up a ship to train recruits for the Hughli Pilot Service when the number of pupils would not be more than six at the outside would involve an enormous expense for a very small return.

Is a pilot service for Bombay necessary?—Yes.

What are the principal features of danger in the pilotage waters here?—Bombay has a harbour exceedingly easy of access; but the insurance companies and the general rules of the Mercantile Marine entail taking a Pilot in all the ports. No Captain in the Mercantile Marine, even the most experienced, is allowed, as a rule, by his owners to go into any port without taking a Pilot where a Pilot can be obtained, the consequence being that we have Pilots for the English Channel and Pilots for Plymouth, which is a place you might go into as you would go into a turnpike road for instance; and if any accident happened to a ship which had not a Pilot on board, it would very probably invalidate the insurance.

We have been told that the principal difficulty of the Bombay Harbour consisted in manœuvring the ships?—Yes. The great advantage of having a Pilot who is also a Harbour Master is that he knows the exact position of ships in the harbour and the places available for the incoming ships.

The Bombay Pilot Service and the Harbour Master's service are combined?—Yes.

And are under the management of a Port Trust of which you are a member?—Yes.

Are Natives admitted to the Pilot Service here?—I do not think so. I have never met any.

Do you see any reason why they should not be admitted?—As a rule the Asiatic has not the sea-faring knowledge which is necessary to take angles and bearings and to use certain nautical instruments accurately; but I see no reason why a Native who qualifies himself in these respects should not make an excellent Pilot for Bombay.

Have you had any applications from Natives for employment in the service?—I do not remember having had any.

Bombay.  
 Pilot Service.  
 Sec. III.  
 Captain Hext,  
 R.N.

We have been told that some Arab commanders are very skilful in the handling of their ships?—Very few. Some Captains of the Zanzibar steamers are; but from my knowledge of the Persian Gulf, where I had to do with a great many vessels running from Zanzibar, their knowledge of navigation is very, very, crude. They know the points on the coast by sight and how to measure their distances, but very few know how to take the longitude from their chronometers and by sights. There is no reason, however, why they should not learn these matters. Of the Commanders of such ships that run from Muscat with salt to Jedda and go round as far as Calcutta there are very few whom you could call skilful navigators.

Is there not a line of steamers worked entirely by Natives here?—Shepherd's coasting line is, I believe, run entirely by Natives with Native masters.

What class of Natives take these appointments?—Men from Kulkagunj and down the coast that way, and some are from the northward of Bombay. It is only a coasting line to the different small ports.

Would these men make competent Pilots?—I should think they would hardly know the points of the compass. We have had cases of collision here, the reports of which certainly showed a very small knowledge of navigation on the part of Native commanders. I do not see how you can expect them to have the knowledge; you might as well try to make a lawyer of one as a seaman unless he has gone through a certain education.

We have heard that the pilotage is difficult when vessels are beating out against the monsoon, there being so little sea room?—It is no doubt a narrow but not a difficult harbour to beat out of.

Are sailing vessels disappearing from the mercantile marine which trades to the East?—No. In Calcutta I should say they were decidedly increasing again, though in Bombay they are comparatively rare.

What class of ships do you allude to?—Very large ships indeed: four-masted ships, three-masted ships, vessels of 270 and 280 feet long.

The Hon. Khan Bahadur *Kazi Shahbuddin*.

How do you account for the fact that the number of sailing vessels trading to Calcutta is increasing?—I apprehend the reasons to be that for the delivery of certain cargoes there is no great hurry, that all the space on these ships being available for cargo they are able to carry an enormous amount, and that having no engineers to pay and every possible appliance for hoisting their sails, they run with exceedingly small crews, whom moreover they pay off on arriving in Calcutta, and there is also the saving which they make in the Suez Canal dues: the consequence is that cargoes which there is no hurry to get on the market, jute for instance, go home almost entirely in these ships.

What general education should be possessed by an efficient Pilot?—A Pilot in this harbour would not require to be a highly educated man. He should know the three Rs and have a certain knowledge of mathematics.

Any special education?—Experience as a seaman. He must have served his apprenticeship as a

seaman, and not only that, must have served most probably for years at sea before he gains the necessary experience.

Could he not obtain that by serving as a simple apprentice for two years or so on a sailing vessel?—No, because an apprentice does not, as a rule, get the necessary instruction. The system of apprenticing lads on sea-going vessels is not like it used to be when an apprentice paid a premium and was educated by the Captain in navigation. Nowadays the boys are made to work very much as the crew, and there is very little instruction given to apprentices except in the best ships. A boy or a man may go to sea for twenty years and may learn to reef a topsail or furl a royal, but to handle a ship is a very different affair.

Do you think there are Natives of India who could acquire the necessary qualifications, provided they had the means of doing so?—Undoubtedly.

Do not the means exist in India?—Not at present; of course you can make them exist.

You say that a training ship in India would be too costly for the requirements of the Pilot Service?—Most certainly it would. The requirements of Bombay are very, very small. Those of the Hughli are larger no doubt.

Is Karachi a difficult port?—No, except as regards the tides. There are only four or five Pilots in Karachi. The only Pilot Service in India which is really worth considering is the Hughli.

Do you know Chittagong?—No.

We are told that the Pilots at Chittagong are with one exception all Natives?—I have never been to Chittagong, but you constantly find in the Arabian ports, Jedda for instance, that the Arab Pilot comes aboard with no knowledge whatever except of the place. He manages to get on very well, but the chances are that if he met another ship coming in from another direction there would be a collision. I have been very glad, as Captain of a ship, to make use of the local knowledge of these men.

Do you consider it impossible for Natives to be made competent Pilots?—I think if you can find Natives who are fit to be Judges, you can surely find Natives who would be fit to be Pilots.

We have been told that they do not possess the resource which enables a man to act on emergencies: is that your opinion also?—I think, taking ten Natives and ten Europeans, you would find that the ten Europeans were better in the matter of resource, but, at the same time, you would undoubtedly find many Natives with ample resource. The Hughli is an exceptionally difficult service. You come up in a south-west monsoon and no land in sight, with a very heavy sea running, the weather very misty and you can hardly see three ships' lengths ahead of you, and you are lucky under such circumstances if you find the light-ship; still you have to proceed for many miles amid shoals on either side before you can find the buoy. Only a fortnight ago I was going to Calcutta in weather of this sort and I literally wondered at the Pilot taking the ship in, and he seemed to take it in as a matter of course. I think you would find, under these circumstances, that most Pilots, unless with very steady nerve, would prefer to wait until the tide turned, and I think that a Native of India would, as a rule, fail in the

nerve necessary for taking his ship in. Our seamen, you must remember, are the result of many generations of seamen. I do not mean to say that Natives are incapable and may not be capable of doing these things, but our sailors are the result of very many years of experience, and I do not think these things are learned in a day or born in a people.

Have you known seamen belonging to the Kathiawar coast?—I have met them in their boats.

Are you aware that they go in these small boats to Shanghai, Mauritius, and even to the Cape?—I know they go to Singapore. I do not wish to impute the slightest want of courage or nerve to Native seamen; in fact I have the highest possible opinion of lascar seamen; but at the same time I have a strong feeling that unless you were exceptionally lucky in your selection, a Native Pilot's nerves would fail him in taking a very valuable ship into Calcutta river in thick weather.

Bombay.  
 Pilot Service.  
 Sec. III.  
 Captain Hext,  
 R.N.

PROCEEDINGS  
OF  
THE SUB-COMMITTEE,  
PUBLIC SERVICE COMMISSION.

MADRAS.  
*Pilot Service.*

Section I.—Note by the Sub-Committee.

Pilots are maintained at four ports in this Presidency, Madras, Pámban, Keelakarai and Cochin. Madras.  
Pilot Service.  
Section I.

At the Port and Harbour of Madras there are two Pilots, the Senior Pilot receiving a salary of R300 a month and the Junior a salary of R200, with extra fees for attendance on Sundays and holidays and for overtime work.

There are no rules regulating the appointment of Pilots, but the Port Officer at Madras is vested with authority to admit qualified persons to those posts and to promote the less paid Pilot to the higher paid post in case of a vacancy.

The Port Officer is of opinion that the Pilots at Madras should hold Masters' certificates of the Board of Trade. The Pilots are at present Europeans, but a Eurasian formerly held the post of Junior Pilot.

The Pilots are placed under the immediate orders of the Assistant Port Officer.

At Pámban the Head Pilot is the Port Officer, a European, and draws a consolidated salary of R300 a month.

The other Pilots at Pámban, of whom eleven are Mahomedans and two are Natives of India of another sect, hold licenses authorising them to pilot vessels through the channels. These licenses are issued only to persons who pass an examination touching their knowledge of the channels and currents at Pámban, held by a Board composed of the Port Officer, the Superintendent of Sea Customs, two of the Senior Pilots and an experienced Commander of a Native vessel in the roads. Of the pilotage fees one-fifth is paid to the licensed Pilot and the remainder credited to the Government for the maintenance of beacons, buoys, dredging, &c. The Port Officer of Madras grants, suspends and revokes the licenses of the Pámban Pilots.

The Pilot staff at Keelakarai is also a licensed service, consisting of fifteen Natives, of whom nine are Mahomedans and six Natives of another creed. Candidates are required to pass an examination to prove their knowledge of the channels and currents between Keelakarai and Pámban and their ability to conduct vessels through the Keelakarai channels. The Board of Examiners is composed of the Head Pilot at Pámban and two Keelakarai Pilots who have had at least ten years' experience in the channels. Four-fifths of the pilotage fees are paid to the Pilots and one-fifth is credited to Government. The Port Officer at Madras grants, suspends and revokes the licenses of the Pilots, who are placed under his control and also under the control of the Government Head Pilot at Pámban.

There are two Pilots at the port of Cochin, who are appointed by the Port Officer of Madras. The Senior Pilot is a Eurasian, the Junior Pilot a Mahomedan. Three-fifths of the pilotage fees are paid to the Pilots and two-fifths are credited to Government, but the Pilots are guaranteed minimum incomes to be made up, if necessary, from the two-fifths credited to Government. In pursuance of this arrangement the Senior Pilot receives R100 and the Junior Pilot R40 monthly.

At present no Pilot at any port in this Presidency receives a pension; but at Cochin, when a Senior Pilot became incapable after a service of sixteen years, a gratuity of R960 was granted to him.

The Port Officer of Madras considers that it will be inexpedient to appoint Native Pilots at Madras until the harbour is open to country craft. In Pámban and Keelakarai Natives alone should, in his judgment, be employed. He considers it advisable to maintain the existing arrangements respecting the nationality of the Pilots at Cochin.

In his evidence before the Sub-Committee, the Port Officer explained that his reasons for thinking that the Pilots of Madras must, for the present, be Europeans were that the Pilots are required to hold Masters' Certificates and must be qualified to bring into the harbour large ships, and that no other class of men have sufficient knowledge or experience to handle large ships.

Madras.  
He mentioned that, at times, the state of the weather rendered it difficult to bring into the harbour and berth a ship.

Pilot Service.  
Section I. He stated that on the Madras Coast the Native Pilots are principally obtained from Hindus, Mahomedans and Lubbays; but the crafts which they handle scarcely ever exceed 500 tons burden and are of small draught; and that at Cochin the larger ships are always piloted by the Head Pilot.

He professed himself to be well acquainted with navigation of the Hughli and gave it as his opinion that, to qualify for service as a Pilot on that river, a youth should undergo two years' apprenticeship on a sailing vessel or a two years' course of instruction in a training ship; but he added that he thought boys might be trained in the brigs at the Sandheads if there was room in those vessels to accommodate them.

He stated that he had apprenticed two boys at Madras in vessels of a suitable class belonging to Messrs. John Allen and Company, where the boys would undergo no special hardships and would mess separately from the crew.

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MADRAS.  
Pilot Service.

Section II.—Note by the Departmental Member.

*Note by the Port Officer, Madras.*

Pilots are maintained in Madras, Pámban, Keelakarai and Cochin. In Madras, there are two pilots, one the senior pilot on Rs (300) three hundred a month, and the other the junior pilot on Rs. (200) two hundred. They draw a fee of Rs. (10) ten for attendance on Sundays and holidays and for overtime work. The pilot's posts have not yet been made permanent, a much needed measure. They were formerly called Harbour Master and Assistant Harbour Master, but those designations were changed as above, under G.O., Marine No. 561, dated 8th October 1886. There are no regulations in force, but the Port officer, Madras, is vested with the authority for admitting persons to those posts and of promoting the less paid man to the higher post in case of vacancy. They are placed under the immediate orders of the Assistant Port officer and directions have been sanctioned by Government for their guidance, *vide* enclosure No. 1. The scale of pilotage fees, authorised to be levied, is hereto annexed, No. 2. Two boats are maintained for the use of the pilots, and the crews are as follows:—

Madras.  
Pilot Service.  
Sec. II.  
—  
Lt. J. H.  
Taylor.

	RS.	
2 Tindals at Rs. 15 each ... ..	30	monthly.
16 Boatmen „ „ 12 „ ... ..	192	„
Total	222	

There is a bill-collector on Rs. (17) seventeen a month for collecting the pilotage fees, also two peons on Rs. (7) seven and (8) eight, respectively.

In Pámban, pilotage rules have been sanctioned by Government, *vide* G.O., Marine No. 196, dated 4th June 1875—copy attached, No. 3. Under those rules licenses are granted to a sufficient number of qualified persons authorising them to pilot vessels through the channel. Applicants for license are required to pass an examination touching their knowledge of the channels and currents of Pámban before a committee composed of the Port officer and Government Head Pilot, Superintendent of Sea Customs, two of the senior Pilots (to be taken indiscriminately on the day of examination) and an experienced Commander of a Native vessel in the roads, *vide* G.O., Marine No. 279, dated 15th June 1881. Pilotage fees are charged according to the scale annexed to the rules, and the collection from each vessel is divided in the proportion of one-fifth to be paid to the pilot, and the remainder to be credited to Government for the maintenance of beacons, buoys, dredging, &c. The Port officer is also Government Head Pilot and draws a consolidated salary of Rs. (300) three hundred. The Port officer, Madras, is authorised to grant, suspend and revoke the licenses of the Pámban pilots, under G.O., Marine No. 95, dated 3rd May 1865.

In Keelakarai, pilotage rules have been sanctioned by Government and published in the *Fort St. George Gazette*, dated 1st August 1854, page 866—copy enclosed, No. 4. Licenses are granted to men who have passed an examination touching their knowledge of the channels and currents between Keelakarai and Pámban, to conduct vessels through the Keelakarai channels. The examining Committee is composed of the Government Head Pilot at Pámban, two Keelakarai pilots, who have had at least 10 years' experience in the channels. The pilotage fees chargeable are given in the rules and the share payable to the pilots is  $\frac{1}{4}$ ths of the collection on each vessel. They are under the control of the Port officer and Government Head Pilot, Pámban. Under G.O., Marine No. 49, dated 2nd March 1867, the Port officer, Madras, is vested with the power of granting, suspending and revoking the licenses of the Keelakarai pilots.

In Cochin there are two pilots. No regulations have been sanctioned. The pilots are appointed by the Port officer, Madras, and their promotion is also under his directions. Pilotage fees are levied according to the scale sanctioned in G.O., Marine No. 150, dated 1st March 1877. The pilotage collections are divided between the pilots and the Government in the proportion of  $\frac{1}{4}$ ths to the former and  $\frac{3}{4}$ ths to the latter, under a guarantee that should the pilots' share of  $\frac{1}{4}$ ths fall short of Rs. (1,920) one thousand nine hundred and twenty annually, the difference shall be made up from the  $\frac{3}{4}$ ths credited to Government, and following this principle the senior pilot is paid Rs. (100) one hundred a month and the junior pilot Rs. (40) forty, so that they may rely on a certain monthly income for their maintenance, *vide* G.O., Marine No. 77, dated 25th February 1876, and No 161, dated 6th April 1886. A boat is supplied by Government for their use, and a crew allowed for it for the working season; the cost not to exceed Rs. (261) two hundred and sixty-one annually. This boat is also used departmentally.



Madras.  
Pilot Service.  
Sec. II.  
Lt. J. H.  
Taylor.

As regards the second head. At Madras the question is left undecided. The Accountant-General reported in his letter to Government, No. 1070, dated 17th March 1881, that if the pay of the pilot was to be debited entirely to pilotage fees, and if those fees were retained as Imperial or Provincial receipts, the pilot would be entitled to leave, pension, &c., under the ordinary rules. If, on the other hand, the pay was not to be met from pilotage receipts, or if those receipts were to be treated as Port Fund receipts and not as Imperial or Provincial receipts, then the pilot's service could only count for pension if with the sanction of the local Government he subscribed for a pension under rule II of section 46 (b), Civil Pension Code. The leave allowances in the latter case would have to be met from the same source as his pay was met. In G.O., No. 24, Financial, dated 6th January 1882, the Government were pleased to rule as follows: Both Port and Pilotage Funds being Provincial, the Government would have no objection to crediting the amount of the net surplus under the latter to the Port Funds at the end of each year, on the understanding that the Port Fund undertook to do what would be legitimately chargeable against pilotage fees. In Pámban, Keelakarai and Cochin *nil*. There has been a case at Cochin, where the senior pilot, on becoming incapacitated after a service of 16 years, was granted a gratuity of Rs. (960) nine hundred and sixty. At the same port the pilots memorialised to be admitted to the benefits of the Uncovenanted Civil Service which the Government refused, *vide* G.O., Petition, dated 12th January 1880.

Referring to the third head. For Madras and Cochin the pilots should hold Masters' certificate of competency. For Pámban and Keelakarai a knowledge of the channels and currents are required on the part of the pilots, with the capacity of navigating vessels through the channels.

In respect of the fourth head. In Madras both the pilots are Europeans. The post of junior pilot was once held by a Eurasian. Natives are not recommended here till the harbour is open to country craft. In Pámban and Keelakarai the pilots are Natives and, under existing conditions, they will be confined to that class. In Cochin the senior pilot is Eurasian, and the junior pilot is Native. It is advisable to maintain this arrangement.

With regard to the fifth head, the particulars required are furnished in the form given:—

Existing organization and constitution of the Pilot Service Department.

1 Department.	2 Total number of gazetted appointments or of appointments not being purely clerical of salaries of Rs. 100 and upwards.	3 Distribution of the gazetted appointments and of other appointments mentioned in column 2 amongst classes and grades, with rate of pay attached to each.	4 NUMBER OF APPOINTMENTS IN EACH CLASS OR GRADE NOW HELD BY—						
			1 Europeans not domiciled in India.	2 Europeans domiciled in India.	3 Eurasians.	4 Natives of India.			
						(a) Hindus.	(b) Mohamedans.	(c) Others.	(d) Total.
Marine Department, Madras.	....	....	2	..	..	..	..	..	2
Marine Department, Pámban.	* One.	....	1	..	..	..	11	2	14
Marine Department, Keelakarai.	....	....	..	..	..	..	9	6	15
Marine Department, Cochin.	....	....	..	..	1	..	1	..	2

\* Port Officer and Government Head Pilot receiving no pilotage for Pilot work.

MADRAS.  
*Pilot Service.*

Section III.—Sittings at Madras.

Witness No. I.—1st August 1887.

Examination of Lieutenant J. H. TAYLOR, R.N.R., Port Officer, Madras.

*The President.*

I observe from your Note that you consider that the local Pilots should be Europeans for the present. Why are you of that opinion?—Because they have to bring into the Harbour large ships, and no other class of men have the nautical knowledge and experience of handling large ships. A Pilot here is required to have a Board of Trade Master's certificate. The weather here at times renders the entrance to the Harbour difficult, but no Native can bring in a steamer.

The pilotage offers no great difficulty so far as depths are concerned?—No; the difficulty is in entering the Harbour and berthing your ship.

Are you acquainted with the River Hughli?—Very well.

Is it in your opinion necessary that before a youth is qualified to be a Pilot on the Hughli, he should have served an apprenticeship for two years in a sea-going sailing vessel, or have received a two years' course of instruction on board a training ship?—Certainly.

Have you apprenticed any boys here?—Yes, two.

Were they apprenticed to vessels of a class you would recommend for youngsters?—Yes, they belonged to the John Allen's line.

Will these boys have to undergo any special hardships?—No, and they will mess separately from the crew.

And you think that a nautical education of that kind is necessary for a Pilot on the Hughli apart from the training he would get at the Sandheads?—They might learn on the brigs if there was room for them. Of course, much of the knowledge which is useful on the Hughli is heaving the lead.

Of what class are the Native Pilots on the coast?—I think they are a mixture of Hindus, Moplas and Lubbays.

Do they pilot any large craft?—Up to about 500 tons. At Cochin ships run up to 1,000 tons, but they never draw much water, and large steamers are always piloted by the Head Pilot. The largest ship that has run through the Pamban Channel is about 500 tons.

Madras.  
Pilot Service.  
Sec. III.  
Lt. J. H.  
Taylor.