

Public Works (1898) Department.

G.O., No. 2461 to

DATED 21 Sep '98.

Lighthouses in to Alaska ^[Despatch Abstract] Residency

Tris: Marine Dept. receiving, with remark,
letter from the Subplot of Works, Legation House etc.,
replying to the observations of the Elder Brothers
of Trinity House on his report. Commence
replied to the P. E. Concerned for information.

Dr

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

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Dr

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following papers:—

From F. W. ASHPITEL, Esq., Superintendent of Works, Lighthouse Division, to the Secretary to Government, Marine Department (through the Presidency Port Officer, Madras), dated Madras, 8th July 1898, No. 1140.

made by the Elder Brethren herewith the following reply to the suggestions No. 442, Marine, dated 1st June Trinity House in their letter printed with G.O.,

(1) At the time the report printed with G.O., No. 245, Marine, dated 1896, was drawn up, it was thought that the Madras light with its power of 18,000 candles would be visible in all weathers at a distance of 18 miles (see paragraph 5 of report) and subsequent enquiries tend to show that this is probable except under exceptional circumstances. Owing, however, to the introduction of the "Feu eclair" system, it is possible, as stated in paragraph 3 of letter, No. 916, dated 14th March 1898, to obtain at the same cost an apparatus giving a much greater intensity than was previously proposed; to effect a considerable reduction in consumption of oil without impairing the efficiency of the light; and, by the adoption of the French burner, to render the maintenance of the light more easy. The proposals forwarded with the letter quoted above provide for a minimum intensity of 54,000 candles for a range of 18 miles, or sufficient in all ordinary weather for a range of 20 miles from a steamer bridge, and for an intensity of 10,000 candles for lights with a range of 14 to 16 miles. In the case of all apparatus recently indented for, the views of the Elder Brethren have, therefore, already been met. The intensities are also, I may remark, considerably in advance of lights recently sent out from England for Calingapatam and Hope Island where apparatus of 500 candle power was supplied for ranges of 13 and 14 miles.

(2) (a) It was suggested in the report printed with G.O., No. 245, Marine, dated 8th April 1896 (pages 14 and 33), that Muttum should be given a distinctive character by converting it from fixed to occulting, but no definite orders were passed on the subject. There is no other light in the vicinity, but as it is always better to give a light a distinctive character, the change can easily be made if considered necessary.

(b) In the proposals forwarded with this office No. 916, dated 14th March 1898, paragraph 2, a flashing light was, at the instance of the Presidency Port Officer, provided for at Santipilli in lieu of the one proposed at Point Calimere, as the existing light is at too great an elevation for its power and too far from the danger it is intended to guard (see pages 5 and 38 of the report printed with G.O., No. 245, Marine, dated 8th April 1896).

(c) Pamban has a poor light exhibited at too great an elevation and it is doubtful whether, if any considerable expense is to be incurred, it will not be better to establish a flashing light. The present light, it is believed, answers sufficiently well and only needs certain small improvements.

(3) The opinion of the Elder Brethren that lights should be exhibited from the Mulki and Sacrifice rocks if the difficulty of effecting reliefs is not insuperable, is probably disputed by no one who has any knowledge of lighthouse engineering, but the question whether this difficulty of reliefs is insuperable must be left to nautical men to decide. I do not know whether any attempt has been made to decide this question practically during the monsoon. The expense of building light houses on the rocks would, of course, be greater than on the mainland, but I know of no particular engineering difficulty about the proposal.

(4) The suggestion of the Elder Brethren that lights of the same character should in general be 120 miles apart differs from the opinion of the French Engineers who have laid down a minimum distance of 80 miles. The limit of 120 miles has, however, been practically adhered to in the sanctioned proposals, with the exception of Seven Pagodas and Armoghan. I do not think that the Elder Brethren will raise any objection to these two lights, which are about 90 miles apart, being of the same character, as the proposed lights in the neighbourhood of Madras will all cut Armoghan with a single flashing and Seven Pagodas with a double flashing light. The establishment of these lights was proposed at the instance of the Presidency Port Officer, who will no doubt give a definite opinion on this point.

(5) Information on this subject has already been given in detail in this office No. 916, dated 14th March 1898.

(6) A central training establishment for keepers would no doubt contribute largely to the efficiency of the lighthouse service, but it would not be worth while except on a small scale, and at all events for the present, in connection with the Public Works Workshops. It would be perfectly easy to give expectant keepers a short training in the management of burners and lamps, and the rest of the training could be provided for by a course of instruction in the fitters' and carpenters' shops. I am not sure whether this has not already been arranged for by the Presidency Port Officer.

(7) I have written for charts on which to show the proposed scheme of lighting and will forward them when received. Meanwhile, it does not seem necessary to delay this report.

(8) As the suggestions of the Elder Brethren in regard to the apparatus already indented for have been anticipated, I request that the indent may be allowed to go forward. The description of apparatus is not affected by the question raised in paragraph 3 regarding which early orders are requested as the collection of materials at Kaph rock (Mulki) has commenced.

No. 245 G.

Forwarded, observing as follows:—

(a) I have no objection to offer to the suggestion that Muttum light should be made occulting, though I do not consider any change from its present character necessary.

(b) No change in the character of Pamban light is, in my opinion, requisite. As no complaint has been made regarding the light as it is at present, it is clear that its fixed character answers the purposes of the masters of vessels visiting the port. The trade of the port is not large and the vessels visiting it are of small tonnage.

(c) I do not consider it necessary to have a light either on Sacrifice island or Mulki rock. The former will be excellently well marked by the improved light apparatus it is intended to place at Tellicherry and the latter by the light to be placed on Kaph rock on the mainland.

Neither of these lights are required for purposes of general navigation, for both Sacrifice island and the Mulki rocks are out of the track of non-coasting vessels, and as the coasting traffic between Mangalore and Bombay is interrupted during the south-west monsoon months, the light to be placed on Kaph rock could be extinguished during these months without detriment to the shipping. To place a lighthouse on Sacrifice island and Mulki rock would involve a large expenditure, and as I have already pointed out that these dangers will be well marked by lights on the mainland, it seems to me that the suggestion to place the lights on the rocks has been made under some misapprehension as to the purposes for which the lights are required.

(d) As stated in paragraph 4 of Mr. Ashpitel's letter, the fact of the lights referred to therein being less than 120 miles apart will not in any way, in my opinion, affect their individual value to mariners. None of the lights specified are required for general navigation purposes, and their principal purpose is to serve the necessities of vessels approaching Madras port.

(e) Arrangements have been made already to instruct lightkeepers in fitter's work and the management of flashing apparatus. No elaborate system of training is required at present.

(f) In conclusion, I would point out Mr. Ashpitel's scheme for improving the lighting of the Madras coast met with the approval of Captain Powell—my predecessor—whose long service afloat in Indian waters, dating back to the days of the late Indian Navy, renders his approval of considerable value. I would further point out that the scheme has also been accepted by me, and that my experience in navigating vessels along the coasts of India dates back as far as 1869. It is therefore possible that the experience of the Elder Brethren of the Trinity House who are said to be acquainted with the coasts of India has not been of as an intimate a character as that of the Indian Marine officers serving in this Presidency on whom the Government is supposed to depend for advice on nautical subjects.

MADRAS,
11th July 1898.

(Signed) H. A. STREET, Comdr., R.I.M.,
Presidency Port Officer.

From F. W. ASHPITEL, Esq., Superintendent of Works, Lighthouse Division,
to the Secretary to Government, Marine Department, dated Madras, 18th
August 1898, No. 1229.

With reference to your No. 401 E., dated 28th July 1898, I have the honour to inform you that, originally, lights were divided into fixed and revolving, definitions of which will be found at page 6 of my Report on Lighthouse Construction and Illumination, 1895. At that time group flashing apparatus of the present type had not been invented, and the term revolving was used for the only form of flashing (dioptric) apparatus which then existed. When the group flashing system was introduced (*vide* page 6 of the report above quoted), the term revolving was still retained for single flashing lights and is still often used to describe this particular form of apparatus.

2. With regard to Armoghan and Seven Pagodas lights, I would call your attention to this office No. 916, dated 14th March 1898, and its enclosures, which give the programme of lighthouse improvement. From paragraph 2 of this letter you will observe that new apparatus was proposed at Armoghan and Pulicat at the request of the Presidency Port Officer, who was of opinion that the original proposals did not make the lights in the neighbourhood of Madras sufficiently distinctive. With the proposed change, there will, it is thought, be no difficulty in finding Madras during hazy weather as Armoghan will be triple flashing, Pulicat single flashing, Madras double flashing, and Seven Pagodas triple flashing, the two triple flashing lights being upwards of 100 miles apart which exceeds the limiting distance laid down by the French Engineers (*vide* page 2 of the report quoted above).

3. I send herewith the charts promised in my No. 1140, dated 8th July 1898, which clearly illustrate the proposed arrangements.

ORDER—No. 736, Marine, dated 31st August 1898.

Recorded with the remark that the more important suggestions of the Elder Brethren of Trinity House are being provided for.

(True Extract.)

A. K. M. U.

Under Secretary to Government.

To the Presidency Port Officer.
„ Public Works Department. ✓

Exd. T. K. Narayana Aiyangar.