Marine (1898) Department.

✓

G.O., No. 736 Ma

DATED 31 August 98

2/9/98

[Despatch Abstract.]

Lighthouses in the Madras Presidency

Letter from the Supdt. of Works Lighthouse Dn. replying to the observations of the Elder Brethren of Trinity House on his report on ———, recorded with remark.

110/6

[M
3,000—28-10-09]

2/9/98

BACK PAPERS.

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

FURTHER PAPERS.

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

Government (1898) of Madras.

MARINE.

Recd. *Regd.*	1898.	*Enclosures* *Spare copies*

G.O., No. 736, 31st August 1898.

AUGUST.

Lighthouses in the Madras Presidency

Letter from the Superintendent of Works, Lighthouse division, replying to the observations of the Elder Brethren of Trinity House on his report on —, recorded with remark.

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.

I have the honour to forward herewith the following reply to the suggestions made by the Elder Brethren of Trinity House in their letter printed with G.O., No. 442, Marine, dated 1st June 1898 :—

(1) At the time the report printed with G.O., No. 245, Marine, dated 8th April 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 e'clair" 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.)

Under Secretary to Government.

To the Presidency Port Officer.
„ Public Works Department.

Exd. T. K. Narayana Aiyangar.

~~Marine~~ Marine DEPARTMENT.

Papers to be read in Proceedings :—

Again G.O., dated 189 , No.
Again G.O., dated 189 , No.
Current No. 917 of 1898, dated 15th July, from the Supt. of W. L H Dn.
„ „ 1053 „ 1898, „ 20 Augt , „ —— do ——
„ „ „ 189 , „ , „

ORDER. 736 mar 31st august 1898

8P

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

C.S.

31-8-98.

Charts with T sent on 19-10-98. on receipt from OB2d.
19/10/98

The P. P. O. √31
„ P. W. Department.

12/9/98

[P. W. 4.
500-17-6-98.]

Distinctive Lights

936 m

The Hon Sir Henry Bliss K.C.I.E

Marine Departmen

Note for the Hon: Member

In his letter No 1229 dated 18th August 1898, Mr. Ashpitel replies to the questions put to him in connection with the Hon. Member's note on the previous 'For Orders' sheet.

So far as can be gathered, there is no differen between a 'revolving', and a 'single flashing', light. The distinctive ~~of~~ lights seem to be as follows:—

1. Fixed.
2. Revolving or Single flashing
3. Group flashing, in which there may be 2 or more flashes with short intervals of darkness between each flash, followed by a long period of darkness when the group is complet These lights are generally double flashing or triple flashing

flashing.

In para (4) of his letter No. 1140 dated 8th July 1898, Mr Ashpitel refers, it would now appear, to the proposed arrangements in regard to Armeghon and Seven Pagodas, i.e, the arrangements proposed in his "indent" which is being held back pending the settlement of funds.

The following are these proposed arrangements in the order of the lighthouses from north to South.

1. Armeghon - triple-flashing
2. Pulicat - revolving or single flashing.
3. Madras. double flashing
4. Seven Pagodas - triple flashing.

The triple flashing light at Armeghon will thus "cut" the single flashing light at Pulicat, and the triple flashing light at Seven Pagodas will "cut" the double flashing light at Madras

The

+ para (4) of his letter No 1140 of 8th July 1898.

This seems to be all right

29/8/98

The most distant lights of the group, viz, Armeghon and Seven Pagodas, will be of the same character, i.e, triple flashing, and as they will be between 90 ~~miles~~ and 100 miles apart, the similarity of character will not, as\+ Mr Ashpitel surmises, be objected to by the Elder Brethren of Trinity House.

C.S.

26-8-98

Marine DEPARTMENT.

C. No. 917 of 1898.

~~HIS EXCELLENCY THE GOVERNOR.~~
THE HON'BLE SIR HENRY BLISS, K.C.I.E.
~~THE HON'BLE MR. GROSE, C.I.E.~~

SUBJECT.

Mr. Ashpitel's reply to the remarks of the Elder Brethren on his report on Lighthouses in the Madras Presidency.

FOR ORDERS.

With his despatch recorded in G.O. 442 Marine, dated 1st June 1898, the Secretary of State forwarded -- for the consideration of the Madras Government a letter containing the observations of the Elder Brethren of Trinity House on Mr. Ashpitel's report on Lighthouses in Madras.

2. Mr. Ashpitel now replies to --- these observations.

3. As regards the suggestion to increase the proposed limit of the power of the lights to 18,000 candles, it is explained that the suggestion has since been anticipated, & to some extent provided for, in the indent* which has been prepared for submission to the Home Government. The despatch of this indent is delayed on a question of funds. Vide G.O. Nos. 588-9 Marine, dated 6th July 1898.

* put up with C No. 989 in circulation

4. The Elder Brethren suggest that it would be desirable to give the following

following lights (which are now white, fixed) a distinctive character by making them occulting:-

142. Point Muttum,
176. Pamban Pass,
190. Santapilli.

As regards Muttum, Mr. Ashpitel says that he suggested that the light should be given a distinctive character by converting it from fixed to occulting, but that no definite orders were passed on the subject. This is not quite accurate. He did not make any definite proposal to this effect. Columns 4 and 6 of the statement printed on page 14 of G.O.No. 245 Marine dated 8th April 1896 show that he proposed to retain the present colour and character of the light. In column 18 he, however, added that "Occulting apparatus may be fixed if considered necessary"; and on page 33 he says, after inspection of the lighthouse, that this conversion "does not seem very necessary"; there being no other lights in the neighbourhood. The reason that the Government passed no definite orders was thus because no definite proposal had been made. Mr. Ashpitel now says that it is always better to give a light a distinctive character, and that the change can easily be made. The Presidency Port Officer offers no objection to the proposed change, though he does not consider it necessary.

Pamban Pass. Mr. Ashpitel says that the light here is "poor" and exhibited at too great an elevation, and that if any considerable expense is to be incurred, it might be better to establish a flashing light. He, however, adds that the present light is believed to answer sufficiently well, and only needs certain small improvements. The Presidency Port Officer considers no change necessary, pointing out that no complaint has been made, that the trade of the port is not large, and that the vessels visiting it are of small tonnage.

Santapilli. A flashing light is provided for this port in the indent to be sent home.

Mulki and Sacrifice Rocks. The Elder Brethren propose that, if possible, lights at these places should be established on the rocks themselves, and not on the mainland---- which is at a distance of between 4½ and 5 miles. Mr. Ashpitel sees no engineering difficulties in carrying out these suggestions. The expense will, however, be greater. The difficulty, if any should arise, would consist in effecting reliefs in rough weather. This is a matter which

which he leaves nautical men to decide. The Presidency Port Officer points out that neither of these lights is required for general navigation, and that the~~se~~ dangers of these rocks will be well marked, so far as coasting vessels are concerned, by lights on the mainland.

5. In para 5 of their letter, the Elder Brethren propose 120 miles as the limit at which distinctive lights should be placed, instead of 80 miles as proposed in Mr. Ashpitel's report. The 120 mile limit has, Mr. Ashpitel points out, been ~~previously~~ practically adhered to in the sanctioned proposals, the only exceptions being "Seven Pagodas" and "Armoghan" which are about 90 miles apart. Neither Mr. Ashpitel nor the Presidency Port Officer considers that there is any great objection here. The lights are not required for general navigation, their principal purpose being to serve vessels approaching the port of Madras, which is intermediate.

6. In para 5(a) of their letter, the Elder Brethren suggest as regards the exact character of lights to be established, that each case should be carefully considered as the time for installing the light approaches. Mr. Ashpitel points out that he has attended to the matter in the preparation of his indent for

Armeghan is described as a 'revolving' light & Seven Pagodas as a 'single flashing' light & I suppose the two are too synonymous to be 'distinctive' - I know from personal experience that mariners have a difficulty in finding harbours in hazy or rainy weather & should have thought that it was advisable to have very distinctive lights as guides thereto

23.7.98

for light apparatus.

7. Para 6 deals with the question of the reorganisation of the existing system for working the lights. Special importance is attached to the necessity for a central training establishment where men can be taught the management of the lamps and burners, and how to repair them. The Presidency Port Officer states that arrangements have already been made to instruct lightkeepers in fitters' work and the management of flashing apparatus. He is of opinion that no elaborate system of training is required at present.

8. In the last clause of his endorsement, the Presidency Port Officer makes some general remarks on the proposals of the Elder Brethren of the Trinity House. These are sent to the Madras Government merely for consideration and do not seem to require any specific reply from Govt.

The x "are being" seems more correct, as the indent, which provides for some of the suggestions, is being withheld.

R.S.
31 Aug 98

I agree, but like the Sec., have some doubts as to the Seven Pagodas & Armeghan lights being sufficiently unlike one another. What is the difference between a revolving & a single flashing light? They may be exactly the same, so far as I can see; or they may have such different periods as to be quite different. The proposed light at the Seven Pagodas is shown on p. 16 of G.O. $\frac{245\ \text{Mar}}{8.4.98}$ as triple flashing; - Here it is now stated to be single flashing - Please look into the matter again -

KS
25/7/98

C.S. The papers may be recorded with the remark that the ~~most~~ more important suggestions of the Elder Brethren have been already provided for, & the remainder are not considered necessary by those best acquainted with the coast

23.7.98

Marine

~~Public Works~~ (1898) Department.

CURRENT No. 1053

From The Supdt of Works
Light House Dn.
Madras.

Order

No. 1229

Dated 18th August 1898
Received } 20-8-98
Registered }
Enclosures * 4 Charts.
Spare copies
* sent by bangi separately

not received at Madras.

SUBJECT.

'Revolving' & 'flashing' light

Affording explanation on the difference between a —.

Marine

BACK PAPERS.

	No.	Date.
G.	442	1-6-98
	245	8-4-96

FURTHER PAPERS.

No.	Date.

OFFICE OF THE SUPT. OF WORKS, LIGHT-HOUSE DIVN.,
Egmore, Madras,

No. 1229 Dated 18th August 1898.

From

F. W. ASHPITEL, Esq.,
SUPERINTENDENT OF WORKS,
LIGHT-HOUSE DIVISION,
Madras,

To

THE Secretary to Government,
Marine Department.

SIR,

With reference to your No. 401E dated 28th July 1898 I have the honor 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 Armoghem and Seven Padogas light I would call your attention to this office No. 916 dated 14th March 1898 and its enclosures which give the programme

× Covering letter forwarding the indent put up with G. No 989 in circulation

of

of lighthouse improvement. From para 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.

* These were said to be about 90 miles apart. Vide para 4 of the previous letter

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

I have the honor to be,
Sir,
Your most obedt. servt.,

Superintendent of works
Light-House Dept.

C 18-8-98

Enclo: Charts

No. 401 E.

Government of Madras,
Marine DEPARTMENT.

MEMORANDUM.

G.O. 588

Dated ~~Madras~~ Ooty, 28th July 1898.

With reference to para (4) of his letter No 1140 of 8 July 98 the Supt. of L.H. Dept. is requested to explain the exact difference between a 'revolving' & a 'flashing' light – At page 16 of G.O. 205 Marine of 8 April 96, the light proposed for Seven Pagodas is described as 'triple flashing', & the Armeghon light as 'revolving' – yet they are described in the ~~sea~~ above letter as being 'of the same character' – It should also be pointed out what the single flashing light is with which Armeghon light is said to act –

2. There is no doubt that mariners have sometimes a difficulty in finding Madras in wet & hazy weather & it is thought that the finding lights thereto should be very distinctive

W.A.L.
27-7-98

To
the Supdt. of Works
L.H. Dept.

D/ No 28/7/98.

[P. W. 41.
1,000—28-2-98.]

[illegible] d/25/7/98.

Mr. Ashfield, on pp 6-7 of his general report, gives the definitions of "Revolving" and "Flashing" lights; but the language is highly technical.

I have extracted the following from the Encyclopaedia Britannica which is more intelligible to non-professional persons.

Revolving light. Certain optical agents are made to revolve round the central lamp, and the sailor receives a full flash when the axis of one of the emerging beams passes his eye, and as soon as it passes him he is in darkness until the next beam comes round.

Fixed light varied by flashes. This distinction is produced by straight refractory prisms on a revolving frame, outside of a fixed light apparatus so that when the upright prisms come in line with the observer the

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C No 917

The indent for light apparatus sent to you yesterday for C.A.W.'s orders, must I think be read over with reference to G.O. No. 442 Marine d/1-6-98 – I called for this G.O. in connection with the indent, but it was still in the Press & the Record Section was unable to trace it. Some of the memos. were [illegible] instead –

Please take C.A.W.'s orders.

11.6.98

C.A.W.

Seen

Submitted for orders.
The indent is now with you

13/6/98

Marine

lic Works (1898) Department.

CURRENT No. 917

Order

From The Supdt. of works,
Light House Division
Madras

No. 1140

Dated 8th July 1898
Received } 15-7-98
Registered }
Enclosures –
Spare copies –

SUBJECT.

Reporting on the suggesti
made by the Elder
Brethren of Trinity
House on the subject
of the coast lights of
the Madras Presiden

light, is w[illegible]
power of the revolving
a broad flash as in
annular lens being
produced in place of
a narrow strip of rays
as in the [illegible]
fixed light.

A "single flashing" light is when there is only one flash in each revolution of the ~~apparatus~~ frame. "double flashing" would contain two, & "triple flashing" three flashes in each revolution. The Madras light ~~[illegible]~~ gives two flashes at irregular intervals.

R.S.
27 July 98

I don't understand the difference, vide memo. [illegible]

27.7.98

cont

BACK PAPERS.

No.	Date.
G.o 588	of 6-7-98
442	of 1-6-98
317	of 29-4-98
316	of 29-4-98
~~2 3460~~	~~of 24-8-97~~
Des no 3	of 23-4-97
Des no. 3	of 8-4-97
245-b	of 8-4-97

8

FURTHER PAP

E DIVN.

No.	Date
7989	/98

equal, as [illegible]
power of the [illegible]

OFFICE OF THE SUPT. OF WORKS, LIGHT-HOUSE DIVN.,
Egmore, Madras,

No. 1140 Dated 8th July 1898.

PRESIDENCY
9 JUL 98
PORT OFFICE

From
F. W. ASHPITEL, Esq.,
SUPERINTENDENT OF WORKS,
LIGHT-HOUSE DIVISION,
Madras,

To
THE Secretary to Government,
Marine Department.
Through the Presidency Port Officer, Madras.

SIR,

I have the honor to forward herewith the following reply to the suggestions made by the Elder Brethren of Trinity House in their letter printed with Government Order No. 442 Marine dated 1st June 1898.

(1) At the time the report printed with Government Order No. 245 Marine dated 8th April 189 was drawn up it was thought that the Madras light with its power of 18,100 candles would be visible in all weathers at a distanc of 18 miles (see para 5 of report), and subsequent enquiries tend to shew that this is probable except under exceptional circumstances.

Owing

wing, however, to the introduction of the "Feu 'éclair" system it ~~was~~ is possible, as stated in para 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 54000 candles for a range of 18 miles or ufficient in all ordinary weather for a range of 20 miles from a steamer bridge; and for an ntensity of 10,000 candles for lights with a range of 14 to 16 miles. In the case of all pparatus recently indented for the views of the Elder Brethren have, therefore, already been et. The intensities are also, I may remark,

+ 90588-9
6-7-98
Flag-H

Considerably

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considerably in advance of lights recently sent out from England for Calingapatam and Hope Islan 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 Government Order No. 245 marine dated 8th April 1896 (pages 14 and 33) that Muttum should be given a distinctive character by converting it fro fixed to occulting but no definite orders were passe on the subject. There is no other light in the vicinit 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 para 2 a flashing light was, at the instance of the Presidency Port Officer, provided for at Sant -pilli in lieu of the one proposed at Point Calim as the existing light is at too great an elevat for its power and too far from the danger it w intended to guard (see pages 5 and 38 of the repor printed with Government Order No. 245 marine dated

?

90588-9
6-7-98

April

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(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 ~~only~~ 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 lighthouses on the rocks would of course be greater than on the mainland but I know of no particular Engineering difficulty about the proposal.

The

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This apparently
means that the
two lights with
be of the same
Character i.e.
triple flashing
when the [illegible]
since proposed
has been complied
with R.S.
25 Aug 98

?
Character of
lights at each
place — R.S.

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

A.

(6) A central training establishment for keepers would no doubt contribute largely to the efficiency of the light house service but it would not be worthwhile 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

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...ed on
...tion of
...rwards
L.S.
Mr Ashpitel
Has since been
informed that
the indent for
apparatus is
withheld - vide
588 Marine of
6 July 98. L.S.

in regard to the apparatus already indented for have been anticipated I request that the indent may be [illegible]d to go forward. The description of apparatus is not affected by the question raised in para 3. regarding which early orders are requested as the collection of materials at Kaple Rock (Mulki) has commenced.

I have the honor to be,
Sir,
Your most Obedt. Servant,

W Ashpitel
Superintendent of Works.
Light House Division

C 7.7.98.

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 present, it is clear that its fixed character

answers

nswers the purposes of the Masters of vessels isiting the port. The trade of the port is ot large and the vessels visiting it are of mall 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 S. W. 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 Rocks has been made under some mis-pprehension as to the purposes for which

the

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the lights are required.

(d). As stated in para 4 of Mr. Ash 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 fitters 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 bac to the days of the late Indian Navy renders his approval of considerab value. I would further point out that the scheme has also been acc by me, and that [illegible]

ating vessels along the coasts
ndia dates back as far as 1869.
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.

H. Hathet

Presidency Port Office, } Commander, R. I. M.,
Madras, 11th July 1898. } Presidency Port Officer

JHC