

MADRAS RECORD OFFICE.

Government of Madras.

Marine DEPARTMENT.

G.O. No. 292

Press
Mis.

Dated 27-7.

1857

Not to be folded or roughly handled

Fort Saint George, Marine Consultation, 28th July 1857.

No. 11. From Lieutenant A. D. TAYLOR, I. N.; to EDWARD MALTBY, Esq., Acting Chief Secretary to Government, dated 15th July 1857, No. 275.

SIR,

I have the honor to acknowledge the receipt of Extract Minutes of Consultation, No. 265, dated 8th July 1857, wherein Government call for my opinion as to the distance at which the Madras Light is visible Sea-ward.

Having perused the correspondence between Government, the Marine Board, and others, and examined the Charts of the Coast, I find that distance is not so great as is generally supposed, the Curvature of the Earth sets a limit upon it.

Taking 128½ feet as the height of the Light above mean Sea-level, calculation gives 12 nautical Miles as the distance at which the Light could be seen from the level of the Sea.

From the deck of a small Vessel, the eye of the observer being from 10 to 15 feet above the Sea, it would be visible from 15½ to 16½ Miles.

15½ or 16½ Miles. Seventeen and half Miles from the Poop, or Fore-castle of a Vessel of about 800 Tons (a height of 25 feet.)

17½ Miles. Eighteen and a half Miles from the Paddle Box of such a Steamer as "Zenobia."

18½ Miles. Twenty Miles from the fore-yard of a large Merchant Ship (or from a height of 55 feet.)

20 Miles. From the fore-yard of a small Vessel it would not be visible at such a distance.

21 Miles. Twenty-one Miles is the farthest it could be seen from the "Zenobia's" fore-top.

22 Miles. Twenty-two Miles from the fore-top Sail yard of a large Vessel, or from the fore-top-gallant yard of a Vessel of less than 500 Tons, (a height of 85 feet.)

25 Miles. Twenty-five Miles from the fore royal yard of a 44 Gun Frigate, (or a height of 145 feet.)

The look out man is seldom stationed higher than the fore-top sail yard, so we may safely assume (22) twenty-two nautical Miles as the greatest distance at which the light can be seen.

The remark in pencil, on the late Lieutenant Fell's original Chart, viz., "*Light visible from lower Cap, bearing S. 22° W. per Compas*" implies without doubt that it was *not* visible from any place below the Cap (about 45 feet above the Sea) not even from the foretop, or he would not have taken the trouble to mount to the Cap. The position of his Vessel, as marked on the Chart was (19½) nineteen and a half Miles from the Madras Light House and one Mile N. E. by E. of the Northern dangerous patch of 3½ fathoms.

If (30) thirty feet, (or ¼ its present height) be added to the column, we should only see the Light one Mile and a half further from the Poop or Fore-castle of a good sized Vessel, or in all (19) nineteen Miles off.

I would not then recommend an increase to the height of the present Light House, which would be a most costly undertaking without equivalent advantage.

If (as I understand to be the case) Ships sometimes in the North East Monsoon make the Land to the North of Madras, so as to sight the Pulicat Hills, and to counteract the effect of the current which runs to the South, during that season, it might be advisable to have a small Green or Red Light on a column 33 feet above the Sea, placed on the projecting point between Pulicat and Ennore; this would be visible 10 or 11 Miles, and would guard Vessels against the dangers of the Pulicat Shoal, on the Eastern side of which deep water is so close, that the lead is of scarcely any use.

Fort Saint George, Marine Consultation, 28th July 1857.

I may here mention that the Chart of the Coast North of Madras, (Sheet Number 3 of Lieutenant Fell's Survey) is not accurately reduced from the Original Manuscript on the large scale. A patch with $2\frac{3}{4}$ fathoms on it, ($1\frac{1}{2}$ Miles to the S. S. W. of the Northern danger of $3\frac{1}{2}$ fathoms) is shewn as having $3\frac{1}{2}$ fathoms on it; this is $17\frac{1}{2}$ Miles from Madras Light.

It is said that the shore abreast of some parts of the Shoal is very free from Surf. If such be the case, and if ever a small Light House be placed near the Pulicat Shoal, I would suggest that it be where experience points out as the smoothest spot during the prevalence of those breezes in which Landing at Madras is difficult, if not altogether impossible.

In returning the papers I would call your attention to a clerical error in the letter of the Secretary Marine Board, No. 1820—in which 10 feet (instead of 10 yards or perhaps 40 feet) is said to be the height above the Sea-level, of the look-out on the "Zenobia's" paddle boxes.

(Signed) A. D. TAYLOR,
Lieutenant, Indian Navy.

No 12.

ORDER THEREON, No. 292; dated 27th July 1857.

Resolved to forward copy of this letter to the Marine Board, with reference to Extract Minutes Consultation of the 8th July, No. 265.

2. The result of Mr. Taylor's calculations is, the Government observe, that, in the case of a large Vessel, the Madras Light could be seen from the fore-top-sail yard (the usual lookout place) at a distance of *Twenty-two Miles*.

3. Now the Northern most danger of the Pulicat Shoal is stated by the Board to lie at 19 Miles from the Light, so that to large Vessels in the vicinity of the danger the Light, from the above computation, would be of assistance. But to smaller Ships, where the usual look out place is of course some feet nearer the level of the Sea, it would not be so. Lieutenant

Para: 4 of the Board's letter above. Fell, whose Vessel was the small Brig *Krishna* of about 180 Tons, saw the Light from the lower cap, when about a Mile N. E. of the Northern danger; but, as justly observed by Lieutenant Taylor, his mention of the cap is a proof that he could not see the Light at any place below that (about 45 feet above the Sea) "not even from the fore-top, or he would not have taken the trouble to "mount to the cap."

4. In considering the remedy, Lieutenant Taylor would not recommend heightening the present Light House; the expense attendant on the undertaking would be greater than the advantages to be derived. He proposes, however, to erect a small green or red Light on a column 33 feet above the Sea, at some spot on the projecting point between Pulicat and Ennore. Such a Light, he conceives, would be visible 10 or 11 Miles and be a perfect warning to Vessels against the dangers of the Pulicat Shoals.

5. The Governor in Council recommends the above proposal to the consideration of the Board, who will furnish an early opinion on its merits.

Exd. J. A. Wilson.

No 292 Marine Sept

Vote. Min. Cons. under date 27 July 1857

Read the following taken from L. D. Taylor. T. N. } here entered 15th July/57.

Resolved to forward copy of his letter to the Marine Bd., with reference to Ex. Min. C. of the 2nd July. No 265.

2. The result of Mr. Taylor's calculations is, he says, that, in the case of a large vessel, the Madras Light could be seen from the foretop-sail yard (the usual look out place) at a distance of twenty two miles.

3. Now the Northernmost danger of the Pulicat shoal is stated by the Bd. to lie at 19 miles from the Light, so that to large vessels in the vicinity of the danger the Light, from the above computation, would be of assistance. But to smaller ships, where the usual look out place is of course some feet nearer the level of the sea, it would not be so. L. D. Fell, whose vessel was the small brig *Krishna* of about 180 tons, saw the Light from the lower cap, when about a mile N. E. of the Northern danger; but, as justly observed by L. D. Taylor, his mention of the cap is a proof that he could not see the Light at any place below that (about 45 feet above the sea) "not even from the foretop, or he would not

6th April/57.
No 1406.

Para 4. of the Bd's letter above.

"have taken the trouble to mount to the cap".

4. In considering the remedy, Lt Taylor who not recommend heightening the present Light house; he as peruse absent in the undertaking with the greatest view the advantages to be derived. He proposes, however, to erect a small green or red light on a column 33 feet above the sea, at some spot on the projecting point between Pulicat & Inmore. Such a light, he conceives, will be visible 10 or 11 miles and be a perfect warning to vessels against the dangers of the Pulicat shoals.

5. The G. in C. commends the above proposal to the consideration of the P. M., who will furnish an early opinion on its merits.

11-11-1858

Replied to 27/27/1858
27/6/1858

J. H.

Received 29

Marine Lt. to Capt.
14th July 1858

21/7/58
14-4-09

To the Marine Board

Dispt 31st

Further from the Marine Board 13th Nov 57 No. 486

27 July 1859

10/2/92

Marine 1837 Dept

Sub Lt Com. 28 July