M.R.O. 1—32,400—22-11-30

MADRAS RECORD OFFICE.

Government of Madras.

Marine **DEPARTMENT.**

G.O. No. 108-9 Press ~~Mis.~~

Dated 17th March 1857

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3/9/29

Master Attendants Office
Madras 11th February 1857.

№ 52

№ 27

From

Captain G. Biden
Master Attendant

To

I. I. Franklin Esqr.
Secretary to the Marine Board.

Date 11 February 1857 № 52

Sir,

Having returned from Rangoon and Moulmein by H.C. Steamer "Coromandel" on duty as permitted by the Right Honorable the Governor in Council, I have now, with reference to the instructions for my guidance from the Marine Board under date the 23d of December 1856, the honor to submit the following remarks and observations.

2 The "Coromandel", with Troops and Passengers started under steam from this Roadstead, as per margin* about noon on the 31st December, and paping through the Southern Preparis Channel during the night, reached Rangoon at 5-30 P.M. on the 6th ultimo, we experienced very favorable

* His Excellency the Commander in Chief and Staff
The Honorable W. Elliot Esqr.
13 European and Native Commissioned Officers
349 Privates, with other Publics and Private followers of the 37th Grenadiers

favorable weather and a smooth Sea throughout the passage, and having myself felt the heavy rolling of the "Coromandel" when at anchor by the effects of the ground swell in the inner Roadstead, I was agreeably surprised to find her remarkably steady across the Bay, and so great a change I attribute to the dead weight in her hold being counterbalanced, and the center of gravity raised by the number of troops between decks; and I may here observe that as a troop ship I consider the "Coromandel" a most eligible and well qualified Steamer. The troop decks is excellent, it is sufficiently high and is well ventilated but the Iron casing or Bulkheads around the Funnel may safely be reduced in breadth at least 2 feet 4 inches on each side, and the additional space of 4 feet 8 inches would be a great advantage. I cannot however refrain from noticing the berthing of the ships Company on the same decks, that plan which could only be remedied by the construction of a low Forecastle, is decidedly objectionable; there are certain other improvements suggested in the survey report subscribed by Captain Campbell and myself which will also be advantageous, and as Native Troops will in general

general be allotted for her conveyance I strongly recommend that with the exception of a small number of Europeans not exceeding ten persons her Crew should comprise Lascar Seamen, inasmuch as their habits and customs are less repulsive to those of the Sepoys, and they would occupy much less space than an European Crew on the troop decks.

3 The "Coromandel" was evidently slow on her passage to Rangoon, as she never reached the speed of eight knots per hour, this deficiency in her capabilities of steaming was undoubtedly owing to her foul Bottom covered with sea-weed and barnacles, as on her passage from Moulmein when nearly free from such incumbrances, and almost entirely under steam, she averaged upwards of nine knots per hour. Her greatest Log or days run to Burmah was 188 knots, and from Burmah 230 miles from noon to noon with scarcely any current.

4 During our short stay at Rangoon it was found impracticable to dock the "Coromandel" for the purpose of cleansing her bottom, but hopes were entertained that so important an operation could be undertaken at Moulmein, we proceeded there on 10th ultimo and were again disappointed, as the only

dock

docks available for so large a Vessel was occu-
-pied by the ship "Urgent," and instead of there
being Dry Docks at Rangoon and Moulmein,
there are merely excavations or slips where Vessels
may be hauled up and repaired during the
ebb tide, and in fact tide works can only be
performed in Docks so incomplete.

5 In this state of perplexity and disappointment it was satisfactorily ascertained that H. C. Steamer "Pluto," and other iron built vessels invariably found that their bottoms were so well cleansed by floating occasionally in the fresh water streams in Moulmein River, that there was no necessity of either docking or beaching them for the purpose of ridding them from the Sea weed and Barnacles they were encumbered with in their trips to sea; and as it was evident that the quantity of grass on the upper part of the "Coromandel's" bottom had disappeared on the 2nd day of her arrival at Moulmein Captain Campbell had her careened for examination, and so far as could be ascertained all the Barnacles and Sea-weed had been washed off, and her bottom was apparantly well cleansed. This is a very important discovery, as much of the service on which

which the "Coromandel" will be employed is in the open Sea and alternately in fresh water streams, that service may safely be carried on without incurring the expensive and tedious process of putting her into docks.

6. But whilst all apprehensions on so material a question are thus relieved, I consider it my duty to urge that the Marine Board should bring to the Notice of Government the expediency of having dry docks prepared as early as possible at each of those very important Ports Rangoon and Moulmein, where there is every means of affording the shipping interest so much wanting a convenience. The Merchants are very sensible how essential so desirable an aid would prove, but they consider it should be a Government measure. The soil is good at both Ports and I myself inspected a most capacious ship on the Dalla Banks opposite Rangoon, which, under the superintendance of Mr. Berry a Civil Engineer in charge of the Rangoon Docks, can readily be converted into a first rate Dry dock, it is embanked with well built masonry of bricks and

with

with good Gates, which can easily be construct-
-ed, I am well persuaded that a Dock
could be completed capable of receiving the
largest ship or Steamer in the Indian Seas,
and when it is considered how great is the risk of
sending ships to Calcutta for the purpose of
being docked, and how considerable is the cost
of such an undertaking, it is obvious that the
Ports of Rangoon and Moulmein, so progressive
in increase of shipping and situated on
Banks of the finest Rivers in India, should
be furnished with the means so essentially
needful, whereby Trade and Commerce may
be effectually supported and well encouraged,
and I am confident that Dry Docks would
be of the greatest advantage to the merchants
and ship Owners whilst the certain means of
giving all disabled ships in the service of
Government a thorough repair at Ports, less beset
by external difficulties than any other ports in
the Indian Seas, it is very evident that a pro-
-ject of such vast utility should no longer be
delayed.

7 Moulmein has generally been consider-
-ed a port where ships of any class can be readily
docked

docked and repaired, and I myself enter-
-tained the same opinion until I witnessed
what is so very defective in that respect,
there is an abundance of stone in the
neighbourhood for the construction of
Docks and the Moulmein side of the
River, is in all respects, admirably situat-
-ed and well adapted for so important
an object. Ships of the largest class were
in this excellent Port lading with Timber
and some with Rice, and I witnessed with
much pleasure the facility with which those
Vessels and number of Siamese Junks were
being unloaded and laden in a branch of the
River of considerable extent, and suitable
depth.

8 The intricacy of Navigation in
the Seas adjacent to the Coast of Burmah
occupied much of my attention, and well
deserves the most serious consideration. The
Commander of a Steamer can at all times
determine by which route he will proceed,
and every Steamer so well and so skilfully
navigated as is the "Coromandel" would
rarely get into difficulties, but undoubtedly

Vessels

vessels of every description would endeavour to pass through a channel which has for a safeguard at night an efficient illumination, because however well a Ships' Chronometers and Compasses may act and agree, yet there is along the Andamans and in the Channels leading to the Coast of Burmah and in the vicinity of that group, a current of uncertain set and velocity which may baffle all the calculations of the ablest Navigator in dark or cloudy weather when no observation can be taken.

9 It was under a due consideration of this very important subject that in my communication to the Marine Board under date the 6th. of August last I suggested the expediency of fixing Lights on the Little Cocos, the Alguada reef, and on Amherst Point, and after my experience in the "Coromandel" I have now the satisfaction to state that I steadily adhere to those suggestions.

10 With a Light on the Little Cocos the "Coromandel" would have been guided by it and a most anxious night, when passing through the Preparis South Channel outward, and the Preparis North Channel homeward, without any

any other guidance than soundings and the Latitude by Stars would have been avoided, and those precautions, most carfully and diligently attended to by Captain Campbell, carried us safe through, but in the South west Monsoon or when the Heavenly bodies are obscured the danger would be great indeed, and should if possible be obviated. And with regard to the erection of a Light house on the Little Cocos and the necessary Establishment to be maintained, I had the satisfaction of ascertaining from undoubted authority at Rangoon that there is abundance of good water, and efficient means of maintaining a party on the Islet, and good anchorage for a vessel very near its bold shore.

11. I had also the satisfaction to learn at Rangoon that the illumination of that very dangerous shoal the Alguada Reef had been determined, and with a view of constructing a Light house there, an Officer of the Bengal Engineers, authorized to commence the works, went in search of Granite for that purpose in the early part of January last,

last, which he found in abundance on the Island of Caligonky situated about 12 leagues to the Southwards of Amherst Point, where there is good and safe anchorage in both Monsoons.

12 And to mark the much frequented entrance to Rangoon River an obelisk on Elephant Point, and another on the opposite shore, are now being erected by an experienced Civil Engineer. These Beacons, when completed will each stand 150 feet above the level of the sea, and as a guidance to the Mariner after dusk set, a Floating Light Vessel is moored off Elephant Point.

13 I am much indebted to the Commissioners, Sir A. Bogle, for an excellent opportunity of visiting and inspecting, in his company, Amherst Point, and witnessing in my trip to and fro in H.C. Steamer "Pluto" the intricate passage up and down the Salween or Moulmain River, which is now much facilitated by experienced Pilots and the available services of a steam tug; however the main object I had in view was, by a personal inspection of Amherst Point, to determine, according to the best of my judgment

judgment, the most eligible position for a Light House in the immediate vicinity of Amherst Point, which I will briefly discribe. This well known promontory stands boldly out about 40 feet above the level of the sea, it has on its Southwest, and Northwest sides ledges of Rocks above water, and awash at half ebb, and the equally dangerous flats comprising the Godwin Sands — Those, the Amherst Banks and Shoals are subject to very frequent changes, and through the narrows of a very intricate navigation the tides set with much force and Flag Staff on Amherst point, and distant scarcely one mile is a small Island covered with jungle trees, named Green Island, it is half a mile in length and about a quarter of a mile broad, and between the Point and the Islet is a ledge of Rocks above water at half ebb, and a reef projects from its western extreme, it is elevated about 80 feet, but by cutting down the timber except two tall trees, found useful as a Landmark, a good light on the point would not be intercepted by Green Island at the distance of a mile

to

to the Southward thereof. Several Commanders of ships, frequenting Moulmein, advocate the erection of a Lighthouse on Green Island, because it is somewhat nearer the Reefs to the Southward and Westward of Amherst Point, but taking into consideration that a light house Establishment on Green Island would be entirely dependent on Amherst Point for a supply of water and provisions, and that all communication would be cut off in the South west monsoon when so essential a safe guard would be of the utmost consequence, I am very certain that a first rate Light elevated 120 feet above the level of the sea on a Column of masonry 80 feet high on Point Amherst, would in all respects prove the best safeguard. And in the event of such a determination I beg the two conspicuous trees on Green Island may not be cut down as I was assured by experienced Pilots and several Commanders of Ships at Amherst Point that they are excellent leading marks.

14. At present a Lantern is displayed from the lower mast head of the Flagstaff, and Blue Lights are occasionally burnt and a Gun, within a few yards, is in readiness should

should any Vessel be seen standing into danger; But when it is known that the Trade to Moulmein is increasing, that ships of the largest Class resort to that Port, and its entrance is beset with extreme danger, and also that serious disasters have happened and are very liable to occur, it will be readily conceded that the system of guidance and precaution at Amherst Point, should be of a superior order, and such as will give safety to life and property.

15 I made repeated enquiries about the Mergui Coal and heard from the Commander of the E.I.C. Steamer "Pluto" that it is of a very good quality, it can be put on board Steamers for 7 and 8 Rupees per Ton, but there is a scarcity of labour. There must however, be some difficulty in obtaining a large quantity, inasmuch as the Government and Merchants at Rangoon and Moulmein prefer having the Coal they require from England, whilst at Rangoon large quantities of Burdwan Coal are received from Calcutta as well as supplies from England,

the

the price of the former fixed at 32 Rs. per ton, and that of the latter at 43 Rs. per ton, and a ship was delivering Coal at the Dalla extensive Depôt when I visited that place.

16 The worm is most destructive to Timber built ships in the Rangoon and Moulmein Rivers, the English Ship "Chesapeake", of 800 tons, was so worm eaten at Rangoon that she was condemned and sold, and the ship "Urgent" was materially injured by the same destructive worm.

17 At this critical period, when shipping, and especially Steam Vessels are so much in demand, and are so exceedingly expensively to hire, the services of the "Coromandel" must be valuable in the extreme; and will assuredly carry conviction to the Honorable the Court of Directors how much in a pecuniary point of view, would be the saving ensured by supplying this Presidency with another or even two Steamers, and I venture to say that the dictates of sound policy urge the necessity of so invaluable a resource.

18. And in the event of such a boon being granted, I would recommend that

that Steam Transports should be of a larger burthen than is the "Coromandel", with a sunk Poop and Forecastle, as lightly built as may be, whereby the berthing of the ship's Crew in the Forecastle would materially add to the Troop deck, and obviate a hindrance to the comfort of both Soldiers and Seamen, as with all the advantages possessed by the "Coromandel" it cannot be denied that should any malignant disease infect her Troop deck and render it necessary to provide a spacious sick Bay, the consequences of infection, when both parties are blended together, would be serious. In a word the Crew should be accommodated elsewhere and not placed in such proximity with Troops upon the same decks

Master Attendant's Office
Madras 11th February 1857.

I have the honor to be &c.
(Signed) Chris Biden
Master Attendant

(True Copy)

Secretary Marine Board

№829

№26 From J. S. Franklin Esq.re
Secretary Marine Board.

To

F. Prycroft Esq.re
Chief Secretary to Government
Fort Saint George.

dated 24 February 1857 №829

Sir

I have the honor by desire
of the Marine Board to forward
the accompanying Report from Captain
+ Copy Biden who embarked in the Honorable
Company's Steamer "Coromandel" on the
31st. December last for Rangoon and
Moulmein, under the orders of Government
of the 22d. of that month.

2 This report may be classed
under two heads, namely; the state and
efficiency of the "Coromandel"; and the
measures proposed for facilitating the
approaches by sea to Burmah, and the
introduction of dry docks at Rangoon
and Moulmein.

3 As regards the "Coromandel"
the Government will be glad to learn
that Captain Biden pronounces
her

№297
Extract Minutes
Consultation

An a letter from the
Secretary Marine Board
to the Chief Secretary to
Government dated 24
February 1857 №829

From
Captain G Biden.

Reports on his
voyage to and from Rangoon
and on the Capabilities of
the H.C.S. Coromandel
and suggests certain
embellishments to render
the vessel more suitable
for conveyance of troops.

Rd 1857
En 2078

her to be a most eligible and well qualified steamer, and that the excessive rolling complained of has been to a considerable extent corrected by judiciously removing the dead weight from the hold, and that the simple remedy has been discovered for clearing the barnacles and decay weed from her bottom, of sending her into fresh water.

4 The points noticed as susceptible of improvement are

1st that the iron casing round the funnel should be reduced in breadth 2 feet 4 inches on each side -

2dly that the Ships Company be not berthed on the same deck with the troops -

3dly that the crew be composed of natives, with the exception of a small number of Europeans, not exceeding ten.

4thly that other steam transports should be of larger burthen than the "Coromandel" to admit of a sunk poop and forecastle, and thereby afford more space between decks for the troops.

5 The proposed casing round the funnel which is composed of Corrugated iron was noticed in England as about to occupy more space than was necessary; and Captain Campbell, I believe, arranged for its reduction as recommended by Captain Biden; but it seems that by some oversight his representations were unattended to. It was so built to give a freer circulation of air to the stoke hole, but the ventilation there is so effectual by means of a fanner worked by the Engine, that the additional space might be thrown into the lower deck without inconvenience.

6 Regarding the crew the Board agree with Captain Biden that they ought not to be placed on the same deck with the troops and that they should be composed of natives who require less space, and whose habits are more congenial to the sepoys. It was not intended by the designers of the "Coromandel" that the crew should be berthed on the same deck. A lower forecastle below the troop deck was

was built expressly for their accomodation but although well ventilated it is too small for the purpose. It has therefore become necessary to assign a portion of the lower deck for their use. With a native crew this will not occupy very much and it will be in the least eligible part of the deck. But in building another vessel for transport service the Board fully approve the suggestion that the Crew should be berthed in a forecastle distinct from the troops.

7. They also look upon Captain Biden's suggestion of a sunk poop as well worthy of consideration. This was expressly mentioned in the Board's former application as one of the requisites a vessel built for Madras should possess, but of course it would considerably increase the tonnage. Since a Steamer was first applied for, the demand for the transport of troops has much augmented consequent on the whole of Pegue being garrisoned by Madras Regiments, and the Board submit that the necessity of hiring the "Oriental" clearly shews that more steamers are needed. The "Oriental" is engaged at 2,000 Rupees a day, and at least one lac of Rupees will be expended on her hire, over and above the expence of Coals, before she has completed the work assigned to her. Yet notwithstanding that the "Coromandel" and "Zenobia" are also employed on similar service, it will still be necessary that transports be engaged to for much that has to be sent to Burmah which those vessels cannot take.

The Board would therefore respectfully advise that a strong representation should be submitted to the Honorable Court of Directors on the absolute necessity of providing this Presidency with two more Steamers one 300 tons larger burthen than the "Coromandel" and the other about 300 tons smaller drawing not more than 10 feet.

8 Having thus reviewed that

that portion of Captain Bedens report relative to the "Coromandel" they proceed to notice the recommendations for facilitating the navigation round Burmah, and the construction of docks-

9 This officer recommends
1st that dry docks be constructed by Government at Rangoon and Moulmein.

2d that a light be established on the Little Cocos.

3d that a light be established on Amherst point at an elevation of 120 feet above the sea level, and

4th that the trees on Green Island be cut down with the exception of two large ones useful as land marks.

10 These suggestions the Board consider of great value even when viewed merely with relation to the increasing Steam communication between this Presidency and Burmah consequent on the large force now permanently stationed in that Country They are fully aware of the great difficulty and anxiety experienced by Commanders of ships in passing at night through the Preparis channels which are the direct routes to Rangoon and Moulmein, and they are aware that on one occasion the "Hugh Lindsay" had a narrow escape of being wrecked there owing to an unexpected current which took her out of her course. The advantage to the Mercantile Community in the rapidly increasing transactions with Burmah would be equally great. They would therefore solicit that Government would be pleased to submit these recommendations to the Supreme Government for favorable consideration.

11 The construction of docks also at Rangoon and Moulmein would doubtless prove of great effect in promoting the prosperity of those ports, and as they rise in importance their necessity will be more called for. It will be however for the Supreme Government to judge whether they should be undertaken

undertaken at the expence of the State or by private enterprize.

That they are much required there can be no doubt, and that they would afford a great convenience for the repair and examination of Government vessels attached to the Madras Presidency is evident from there being no place nearer than Calcutta, which is quite out of the line of their employment, at which they could now be docked.

12 With these observations the Board beg to conclude by recording their opinion that Captain Biden's trip has enabled him to furnish much valuable information, and that his suggestions are deserving of the warm support of the Madras Government.

I have the honor to be
Sir,
Your most Obedient
Servant

Madras
Marine Board Office
24th. Febuary 1857.
Exd. PD

Marine Dept.

Disp.d 18th

No. 109

To.

The Secy. to the Govt. of India.

Sir,

I am directed by the Right Honorable the Governor in Council to transmit, for the consideration of the Government of India, Copy of a letter from the Marine Board dated the 24th ultimo. No. 829. together with Copy of a report addressed to them by Captain Biden, Master Attendant at Madras, containing the observations made by that experienced nautical Officer in a late visit paid by him to Rangoon and Moulmein in the Hon: Co's. Steam Troop Ship "Cromandel"

2. Captain Biden, I am instructed to state, was ordered by this Govt. to accompany the "Cromandel" on her

Marine Dept.
From Secy. to Govt. of India
To the Secretary Marine Board
No. 109 dated 17 August 1857
Rec.d 24th Augt. 1857
Ansd. 31st Augt.

Marine 1857 Stuart
Rec.d 25th February 1857
No. 829
Forwards a Report from Captain Biden of the Steamer "Cromandel" on his 31st December last for Rangoon & Moulmein - Recommending for the a vessel eligible and well adapted for the Irrawaddy Flotilla Service - Also suggesting certain improvements to be made in the Cromandel.

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her first trip across the Bay for the purpose of reporting on her qualities as a Steamer and Transport, and suggesting any alterations that might seem to be required the more fully to fit her for the duty on which she will have to be employed. His recommendations on these points in para 2 of his letter will be considered here in the Military Department.

The object of this Govt in now forwarding his letter is, I am directed to explain, to invite the attention of the Govt of India to those parts of it which relate to the measures to be taken for facilitating the approaches by Sea to Burmah, and to the repairs of Vessels at Rangoon and Moulmein.—

3. Captain Biden, it will be seen, recommends,

That

1st That Dry Docks be constructed by Govt at Rangoon and Moulmein.—

2d That a light be established on the Little Cocos.—

3d That a light be established on Amherst point at an elevation of 120 feet above the Sea level — and

4th That the Trees on Green Island be cut down with the exception of two large ones useful as landmarks.

4. The Govt concur with the Marine Board in considering these Suggestions to be of great value, even when viewed merely with relation to the increasing Steam Communication between this Presidency and Burmah, Consequent on the large Force now permanently stationed in that Country. They are also of opinion that the construction of Docks at Rangoon and Moulmein would greatly tend

tend to promote the prosperity of those Ports, and would doubtless prove of great convenience for the repair and examination of Govt Vessels. It will however be for the consideration of the Supreme Govt whether the Construction of these Docks should be undertaken at the expense of the State or left to private enterprize

I have &c

Fort St George,
17th March 1807

c Strank
Regt

Ld England 12th May
3 & 8 of 1837 Para 6

Marine 1857 Depatch
In Cons: 17 March
No. 109.

To
The Secy: to the Govt. of
India

D/17th March/57.

121 of 25

26 — 28