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T A S M A N I A.

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NAUTICAL SURVEY.

COMMUNICATION FROM THE HYDROGRAPHER AT THE  
ADMIRALTY.

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Laid upon the Table by Mr. Colonial Treasurer, and ordered by the House to be  
printed, 28 September, 1860.



*Government House, Sydney, New South Wales,  
19th September, 1860.*

SIR,

I HAVE the honour to forward a copy of a Memorandum which has recently been transmitted to me by Captain Washington, the Hydrographer at the Admiralty, and was addressed by him to the Lords Commissioners of the Admiralty, upon an application made by the Government of Victoria for assistance in effecting a Nautical Survey of the Coasts of that Colony.

Captain Washington, in this Memorandum, after alluding to the various modes in which such a Survey might be carried on, suggests that if some general agreement could be come to by which all the Australian Colonies would jointly contribute to the expense of the Survey, the work might then be taken up in a comprehensive manner and carried out with more vigour. A Steamer might be sent out, and three or more Surveying parties in Boats might be organised and set to work, with advantage to the Colonies, and to Navigation in general. Should this proposition be adopted, Captain Washington is prepared to advise that an amount equivalent to the annual expense of a Steamer of 600 or 800 tons burthen—that is £10,000 per annum—should be contributed by the Admiralty, on condition that an equal amount should be furnished by the Colonies; or, more generally, that the Admiralty should be prepared to incur half the cost of the Nautical Survey of the Colonies, provided that the cost of this to the Imperial Government did not exceed £10,000 per annum.

Having brought this proposal under the consideration of my Executive Council, I have to report their entire concurrence with the proposition of the Hydrographer, and the willingness of the Government of New South Wales to take upon itself its proportionate share of the cost of a Nautical Survey of Australia, in which all the Colonies have an interest; and I trust that Your Excellency will empower me to communicate to Her Majesty's Government the concurrence of your Government in the proposal submitted, and the expression of a wish that no delay should take place in carrying it into effect.

I have the honour to be,

Sir,

Your Excellency's most obedient Servant,  
W. DENISON.

*His Excellency Sir H. E. F. Young, C.B.*

(COPY.)

*MEMO. on an Application for a Nautical Survey of the Coasts of the Colony of Victoria, Australia.*

I ENTIRELY concur in opinion with the Governor of Victoria, that the Australian Colonies have within the last few years made most liberal provision for lighting their coasts, and that Bass's Strait especially will shortly be as well lighted as the English Channel. I further agree as to the imperfect state of the Charts of a great portion of those coasts; and considering the large amount of traffic that now passes along those shores, and that powerful steamers carrying mails and passengers pass to and fro every month, I am of opinion that a detailed survey of the coasts is urgently called for.

2. Latterly only one surveying vessel, H. M. S. *Herald*, has been employed in Australia, and that ship's services have been chiefly confined to the eastern coast north of Port Jackson, where the outlying reefs and undefined dangers were greater than on the south coast. But the rapid progress of the Australian Colonies has far outstripped the powers of one surveying vessel (and that only a sailing vessel), to keep pace with their growing wants and requirements; and I consider that the time has come for two, if not three, separate surveying parties to go to work in earnest upon the more frequented, and the least known portions of the shores of those Colonies.

3. There will be some difficulty in finding competent Officers who can be spared to send out for the whole work; but, having foreseen the probable demand, I have made arrangements by which one complete boat party could be ready to start in about six-weeks from the present time.

4. From the great and increasing importance and wealth of the Colony of Victoria, I take it for granted that she would be willing, and even desirous, to show her interest in the survey by sharing the cost of it with the Imperial Government. Indeed the limited vote for the Hydrographic Department of the Admiralty would not admit of the whole expense being borne by it, nor would it be consistent with justice to other parts of the world, where surveys are even more wanted, as in the China Sea and the Eastern Archipelago.

5. Omitting the discoveries and explorations of Cook and Flinders, between the years 1770 and 1807, and the running surveys of Captain P. P. King from 1817 to 1822, we may consider the survey of the shores of Australia to have commenced in the year 1837; and for 18 years since that period one or more surveying vessels have constantly been employed on the coasts and in the adjoining seas, at a total cost to the Admiralty of about £150,000, or £8500 per annum. All the charts connected with these surveys, and two volumes of sailing directions, have been published. Australia, therefore, has had a fair share of Admiralty assistance. At the same time I am aware that there is much more work to be done, and that detailed surveys of New South Wales, Victoria, South Australia, Tasmania, and Queensland are much wanted.

6. There are two modes of conducting a Nautical Survey,—one afloat, or from a vessel constantly employed off the coast, the other by boats from the shore. A Steamer sufficiently powerful to be trusted on a lee shore on the coast of South Australia or Victoria, and with the necessary accommodation for a staff of surveyors, must be of from 600 to 800 tons burthen, with a crew of 120 men. The expense of such a vessel, including coals and stores, would not be less than from £10,000 to £12,000 a year. A surveying party of three Officers, and two whaleboats working from the shore, would probably not exceed £3500 to £4000 a year.

7. The latter plan is far more economical, and for the first one or two years would, I consider, be equally efficient (if Victoria alone is to be considered), especially as it is understood that no triangulation has been carried over the Colony; and that all the stations would have to be fixed by the Nautical Surveyors: and this must be done before a vessel could work with advantage.

8. Should the Colony of Victoria assent to this arrangement, I would propose that the selection and appointment of the Officers, and the conduct of the survey, should rest with the Admiralty; that the Surveyors should be borne for full pay on the books of the Senior Officer's Ship on the Australian Station; that the Admiralty should provide chronometers and instruments of all sorts requisite for the survey, and undertake to engrave and publish the Charts as soon as made, free of all expense to the Colony. All that would remain for the Colonial Government would be to furnish crews for the boats, the means of transport and locomotion along the shores of the Colony, and to grant to the Officers and Assistants, and the six Seamen, as leading men and leadsmen, that they may take out with them the usual Colonial allowance, to compensate for the difference between the cost of living at home and in the Colonies.

9. With respect to the order of precedence in the surveys, of course the Admiralty would consult with the Colonial Government as to the part of the coast to be first surveyed: provided always, that general public interests should have priority over local wants. Thus the coast from Cape Northumberland (north-westward about 100 miles) to Cape Bernouilli, with its outlying reefs, would demand immediate attention; and although that position is actually within the limits of the Colony of South Australia, a correct survey of it would benefit Melbourne equally with Adelaide.

10. A very much better arrangement would be, if some general agreement could be come to by which all the five Colonies, including Tasmania and Queensland, would jointly contribute to the expense of the Survey. The work might then be taken up in a far more comprehensive manner, and be carried out with more vigour. A Steamer might be sent out, and three or more surveying parties in boats might be organised and set to work with great advantage to the Colonies, and to navigation in general. If the Colonies could be induced to offer such a proposition, I am of opinion that the Imperial Government should meet it half way; and I submit that in that case the Admiralty contribution towards the Australian survey might be £10,000 a year, or a similar amount to that contributed by the Colonies.

JOHN WASHINGTON, *Hydrographer.*

*Admiralty, 21st June, 1860.*