

1877.
VICTORIA.

R E P O R T S

ON THE

NAVAL DEFENCES OF VICTORIA,

BY

COMMODORE HOSKINS, R.N.; CAPTAIN TOWNSEND, R.N.;
AND LIEUTENANT DUGDALE, R.N.

PRESENTED TO BOTH HOUSES OF PARLIAMENT BY HIS EXCELLENCY'S COMMAND.

By Authority:

JOHN FERRES, GOVERNMENT PRINTER, MELBOURNE.

APPROXIMATE COST OF PAPER:

Printing (775 copies)

\$ 6 8 0

CORRESPONDENCE RESPECTING THE NAVAL DEFENCES OF VICTORIA.

No. 1.

Commodore Hoskins, R.N., to His Excellency the Governor.

SIR,

Pearl, at Sydney, 16th November 1876.

Having been requested by you to record officially the substance of a correspondence in which, at your request, I gave you my views as to the best course to be pursued for rendering the *Cerberus* thoroughly efficient, and for improving the naval defences of Port Phillip, and also my opinion as to the proposed appointment of a naval officer to be gunnery lieutenant of the *Cerberus*, to superintend the drill of the naval volunteers, and to take charge of and inspect the Torpedo Corps, I have the honor to make you the following report:—

In December of last year I consented to appear before the Royal Commission, somewhat reluctantly, as I had but just arrived from England, and was quite ignorant of all local circumstances and requirements, and had no time to examine closely the charts of the place; but since then the subject has been much in my mind, and I have no doubt as to the main features of the system of defence which you require, and which I should recommend for adoption.

1. The first great and immediate requisite for the defence of the entrance to Port Phillip is, in my opinion, a well-planned and devised torpedo system; and as that class of defence is being daily experimented on and developed at home, I should recommend that the services of an officer of Royal Engineers, specially instructed in that branch, be procured immediately, to examine the locality, and decide on the best principle to be applied to the special case.

I should recommend that he bring out with him, or order before leaving, all the equipment and stores that may be primarily necessary and indispensable, so that no delay may take place in starting the system, and that he may fit things into their places as soon as possible, leaving the extension or elaboration of the system to be proceeded with afterwards; and I have no doubt that the charts and plans to be seen at home will be a sufficient guide to these first requirements.

2. The next question is how the torpedoes, when laid down, are to be covered and protected, as, without being so, they are liable to be taken up or destroyed by an enemy; and I consider that in the *Cerberus* this requirement is already half provided for. She would be a powerful and effective support of the system against any squadron likely to be sent against you, and the combination would alone constitute a moderately complete defence. But as the torpedoes could not be laid down in the narrows, in the strength of the tide, she would not by herself be sufficient, and the point next to be considered is whether another *Cerberus* or land batteries are most desirable. I have no hesitation in recording my strong opinion in favor of the turret ship.

In this opinion I may be thought to be biassed, but I hope to give good and sufficient reasons for it.

These are principally drawn from the position of your city in being so far from the entrance at the Heads.

If you have land batteries there must be a sufficient force of trained artillery men to man them, and these again will require a considerable infantry in support, the whole of which land force, divided on both sides of the entrance, would be so distant from Melbourne, that if the entrance were once forced, they could hardly fall back in time to aid in the last struggle; moreover the men stationed on the opposite sides could not communicate with each other; and again an active enemy might threaten the Heads, and while your forces were expecting them there, effect a landing at night at Western Port, and interpose between them and the capital. The turret ships, on the contrary, could be moved to suit varying conditions, would be able to take up positions to cover successive or varying lines of torpedoes, and in the event of the entrance being forced, might reasonably be expected to be able to fall back on Hobson's Bay, while a signal could at any time recall them to the defence of Melbourne itself from a land attack. Another reason for making the addition a naval one is the unity of effort it would produce, by enabling the senior naval officer to direct himself so large a proportion of the defence, the combined action of ships with land forces being at all times more or less uncertain, and too often productive of disputes resulting in loss of power. Again, with the ships you would be enabled to meet an enemy, if desirable, outside the Heads, and to follow him when anywhere repulsed, and so prevent a renewal of the attack.

For the defence of the inner line of Hobson's Bay and of the city itself, I should recommend the construction of land batteries armed with the heaviest possible guns.

Supposing the entrance to the Heads forced, a battery on each side of the bay would probably be sufficient, with the turret ships fallen back into the best positions, and your local forces concentrated to oppose an attempt to land, or a force which had landed elsewhere, to give every prospect of a final successful resistance.

The guns in these batteries ought to be 18 tons at least, and would be better if 25 tons; and the site might be selected by the engineer officer sent out.

The new turret ship should carry 25-ton guns; she should be fitted with all the newest improvements, and she should, if possible, be also fitted for and provided with the Whitehead torpedo. This is now being done at home with all our large ships, turret and broadside; and the power of employing that most formidable weapon is another reason for adding a turret ship rather than land batteries to the defences.

The *Cerberus* I consider very efficient and well cared for, and with the addition of the steam-steering gear, which I understand is already ordered, will probably be very handy. It would be very advantageous if she also could be fitted for the Whitehead torpedo, but I do not imagine that it would be possible, though it might be worth while to ascertain.

With reference to the appointment of a gunnery officer: if the increase of the naval force is decided on, I should recommend the appointment of a captain of the Royal Navy for the chief command, with a staff of say two lieutenants, two gunners, one or more torpedo engineers, and a sufficient number of gunnery and torpedo instructors.

He might be on the same footing as the officer who formerly commanded the Bombay Marine, and be replaced with his staff at stated intervals, by which means the introduction of new ideas, and the results of further experience would be ensured.

Many captains newly promoted would, I imagine, be glad of such employment during the time they would otherwise be kept on enforced half-pay.

The details might be easily arranged when the Admiralty had given their consent to the plan.

In giving the above sketch of what I consider desirable, in compliance with your request, I have looked only at the naval defensive side of the question, and have not of course taken into consideration its political, economic, or other bearings; nor have I thought it necessary to dwell on the advantage it would be to a colony without a regular army to develop a force which already exists, and make the most of one arm, rather than to divide effort and authority by having several of equal importance.

Should my suggestions, from any reason of cost or otherwise, not be considered feasible or desirable to adopt, I should recommend that batteries of the heaviest possible guns should be constructed on the Heads to command the entrance and cover the torpedo system, which I consider a *sine qua non*. The engineer officer would probably, in view of the double requirement, be the best judge of the sites, and it should be left for him to decide upon them.

In this case I should recommend that the services of two qualified gunners and a torpedo engineer should be obtained from the Admiralty with the necessary instructions; that they be appointed to the commodore's ship to give them their naval time, and that they be relieved at stated intervals; the latter provision being absolutely necessary to ensure the knowledge of the latest appliances and inventions, &c.

The gunnery lieutenant of one of our ships visiting the port might, on requisition, examine and report on all the details of the drills and gear, and, if the colonies united in the request, and could show reason for it, it is possible the Admiralty might appoint a special officer for the purpose of visiting and inspecting all the colonial naval defences periodically and systematically.

It cannot be too much insisted on that all engines of war, to be effective, must be periodically examined, tested, and worked; there is no certainty of their efficiency in case of need without it—indeed the certainty is the other way.

The gunnery lieutenant of the *Wolverene*, which vessel is shortly expected, is an officer in whose capacity and judgment I have confidence, and he will be in possession of all the newest plans and inventions from his recent experience at Portsmouth, &c.; and I shall be happy, should Your Excellency wish it, to send him to Melbourne for a short time in order that he may be consulted; but as the ship is newly commissioned, I shall only be able to spare his services for a very limited period.

I shall be happy at any time to give any further information which may be in my power and which the Government of Victoria may desire.

I have the honor to be, Sir,

Your Excellency's obedient servant,

(Signed)

A. H. HOSKINS,

Commodore.

His Excellency Sir George F. Bowen, G.C.M.G.,
Governor of Victoria.

No. 2.

His Excellency the Governor to Commodore Hoskins, R.N.

SIR,

Government House, Melbourne, 24th November 1876.

I have the honor to acknowledge the receipt of your letter of the 16th instant, respecting the Naval Defences of Port Phillip, and to convey to you my own thanks, and those of the Victorian Government, for the valuable recommendations contained therein. They will be taken into careful consideration.

2. With respect to your offer to send here, for a short time, the gunnery lieutenant of the *Wolverene*, to point out the best methods for rendering the *Cerberus* thoroughly efficient, to establish a good Torpedo Corps, and to instruct the naval gunners and naval volunteers, &c., I am requested by Sir James McCulloch to state that the Government accepts, with many thanks, this offer; and will be glad to give the officer in question whatever remuneration or allowances you may think right during his stay at Melbourne.

I have, &c.,

G. F. BOWEN.

Commodore Hoskins, R.N., &c., &c., &c.,
H.M.S. *Pearl*, Sydney.

No. 3.

Lieutenant Dugdale, R.N., to His Excellency the Governor of Victoria.

SIR,

Melbourne, 12th February 1877.

I have the honor to inform Your Excellency that, in obedience to your commands, I have inspected the Naval Forces of Victoria, and made myself acquainted with the interior economy and the drill system pursued in your ships.

The *Cerberus*, your armored turret ship, is a very powerful vessel, mounting four 18-ton guns, drawing little water, and is a good steamer. The hull and interior are in a good condition and fairly clean. The turrets, guns, ammunition, carriages, and slides are in very good order, and have been well cared for. The ship's engines work very smoothly and well. The officers and ship's company are instructed in gunnery by Mr. Tubbs, gunner, Royal Navy, who is a good instructor and takes great interest in his duty.

Such a powerful vessel should undoubtedly be always kept properly officered and manned; otherwise she is of no value as a protection to the harbors of this colony. It is not necessary for me to lay before Your Excellency the regulations under which your officers and men are entered.

The following statement will show how the *Cerberus* ought to be manned:—

OFFICERS.

- 1 captain.
 - 1 lieutenant, who should be the executive officer, and also have charge of the *gunnery* department.
 - 1 lieutenant, who should assist the captain in navigating, and have charge of the *stores*.
 - 1 sub-lieutenant.
 - 1 paymaster.
 - 1 chief engineer.
 - 1 engineer.
 - 3 gunners, who should be good gunnery instructors, and one a torpedo instructor.
 - 1 boatswain.
 - 1 carpenter.
- For War Service*.—One doctor and two additional engineers would be required.

SHIP'S COMPANY.

- Ship's police, servants, and cooks, as at present.
 - 2 carpenters' mates.
 - 1 armorer.
 - 15 petty officers (seamen).
 - 2 leading stokers.
 - 8 stokers.
 - 30 able seamen.
 - 9 boys, including 3 buglers.
- The petty officers, seamen, and stokers should, after very careful selection, be engaged for three years.
- For War Service*.—Thirty able seamen and 10 stokers would be required in addition to the above.

The following suggestions will tend to make the *Cerberus* more efficient :—

- (1.) The men to be regularly drilled in all the exercises, including aiming drill, judging distance practice, and skirmishing.
 - (2.) All men who prove themselves to be good and quick shots to be specially trained for the duties of captain of turret.
 - (3.) Four rounds to be fired from each turret gun, quarterly, at targets placed at known and unknown distances.
 - (4.) Nos. 1, 2, 3, 4, 5, 6, 7 to fire two rounds, quarterly, from 12-pounders.
 - (5.) Annual prize firing (as laid down in the Admiralty Gunnery Manual) to be carried out during the most convenient time of the year.
- The ship's company to be filled up for war service during this exercise.
- (6.) Ten rounds to be fired quarterly from each rifle.

I have witnessed the *Cerberus* at target practice. The firing was very slow indeed, but fairly accurate. The *Cerberus* is very well adapted for the defence of your harbors.

The torpedoes will be very useful in the channels, and could be supported by vessels of the *Cerberus* class, and gunboats, steam launches, &c.

Your wooden line of battle-ship, *Nelson*, might, in the case of an emergency, be anchored on a shoal near the South Channel; her guns manned by your Naval Artillery Volunteers.

I recommend that the 32-pounders be moved from the main to the upper deck and half the 64-pounders from the lower to the main deck; the guns being placed in every other port. This will give the guns' crews more room. No money should be spent on the *Nelson*, except what is necessary to keep her as a hulk.

I have inspected your Naval Reserve. It consists of about 216 men, ten per cent. of whom are seamen; the remainder being chiefly recruited from the stevedore population. They are a fine body of men; I cannot call them efficient as a Naval Reserve, there being so few seamen in the force. The title Naval Artillery Volunteers would be much more suitable. The retainer you give does not have the effect of confining their labor to the precincts of the port. Under these circumstances a force of Naval Artillery Volunteers would be more efficient and less costly.

I have the honor to be, Sir,

Your most obedient humble servant,

EDWARD S. DUGDALE,

Lieutenant, Royal Navy.

His Excellency Sir G. F. Bowen, G.C.M.G., &c., &c., &c.,
Governor of Victoria.

No. 4.

His Excellency the Governor to Commodore Hoskins, R.N.

SIR,

Government House, Melbourne, 20th February 1877.

Adverting to previous correspondence on the same subject, I now request you to accept my thanks, and those of the Victorian Government, for sending hither Lieutenant Dugdale, R.N., to inspect the naval forces maintained by this colony. At the same time I would ask you to convey to Lieutenant Dugdale our high sense of the value of the services which he has rendered.

2. That officer will, of course, have placed you in possession of a copy of the valuable report which he addressed to me on the 12th instant.

3. At the instance of my constitutional advisers, I now request you to have the goodness to acquaint me with your opinion of the suggestions made by Lieutenant Dugdale, and to specify exactly (in continuation of your letter of the 16th November ultimo) what you recommend the Government and Parliament of this colony to do with the object of improving our naval defences.

I have, &c.,

(Signed)

G. F. BOWEN.

Commodore Hoskins, R.N., &c., &c., &c.,
H.M.S. *Wolverene*, Sydney.

No. 5.

Commodore Hoskins, R.N., to His Excellency the Governor.

SIR,

Wolverene, at Hobart Town, 21st March 1877.

In compliance with the request contained in the third paragraph of your letter of 20th February 1877, I have the honor to inform you that I approve of the report made by Lieutenant Dugdale on the *Cerberus* and Naval Forces of Victoria, and concur with the suggestions made by him for rendering them efficient.

But it is evident to me that the only course for the Victorian Government to pursue, in order to put them in a really satisfactory state, is to obtain the services of a competent officer from England, who will be able to work out all the details of organization and equipment under the Minister responsible for the naval administration.

It is quite impossible for me to state exactly what I should recommend the Government and Parliament of the colony to do with the object of improving its naval defences. I have already given my general opinion on the subject, and the details must be enquired into and worked out on the spot, and in connection with those responsible to the Parliament. Further, as officers of high rank are shortly expected to report on the general question of Defence, and the naval portion of it must in great measure depend on that report, it seems to me that to go further into the matter at present would be labor thrown away.

I have the honor to be, Sir,

Your Excellency's obedient servant,

A. H. HOSKINS,

His Excellency Sir George F. Bowen, G.C.M.G., &c., &c., &c.,
Governor of Victoria, Melbourne.

Commodore.

No. 6.

INSPECTION OF "CERBERUS" AND "NELSON."

REPORT OF CAPTAIN TOWNSEND, R.N., TO HIS EXCELLENCY THE GOVERNOR.

SIR,

H.M.S. Nymphé, at Melbourne, 3rd July 1877.

In compliance with the request contained in your letter of the 27th ultimo, I have the honor to inform you that I have inspected the *Cerberus* and *Nelson*, belonging to the Victorian Government, and beg leave to report as follows:—

1st. With reference to the *Cerberus*: This vessel, so far as regards her equipment in general, appears to be in good order, her crew fairly up in their drill, and the ship clean throughout; she is not, however, provided with any system of protection against torpedoes; and I would wish to call Your Excellency's attention to this point, recommending at the same time that outriggers and nets similar to those fitted to the turret ships of the Royal Navy, or upon the plan submitted by Captain Panter, be at once supplied; also, that measures be taken to ascertain whether she could not be fitted for the service of the Whitehead torpedo. It being obvious that this vessel will have to act in conjunction with torpedoes, which are now universally adopted for the protection and defence of ports and harbors, it is essentially necessary that her officers should be thoroughly acquainted with the practical working of this system of modern

warfare; none of her officers have gone through the requisite course of instruction as now carried out at Portsmouth and Chatham; and only one of her officers (Captain Panter) has qualified in gunnery. That so powerful and valuable a vessel should have but one such on board seriously affects her efficiency; any casualty occurring to him might possibly be attended with serious consequences. It is therefore desirable that the appointment of thoroughly competent officers, on the system as proposed by Commodore Hoskins, in his report of 16th November 1876, be carried out. The periodical change would ensure having officers intimately acquainted with all the newest improvements and systems. Under such officers a torpedo corps might be formed, and a school of instruction established, which would be invaluable in the event of a hostile attack.

2nd. As regards the *Nelson*: This vessel's hull is defective in several places, particularly in the after part; to render her fit for active service a considerable outlay would be necessary. She at present has no crew, and twenty of her guns are of an old pattern and but little suited for the requirements of the present day. Her engines and boilers are reported to be in good order. Taking all these circumstances into consideration, as well as her great age and heavy draught of water, which would prevent her moving amongst the shoals of the Bay without incurring considerable risk, this expenditure cannot be recommended. A smaller vessel, capable of going to sea if requisite, with all modern improvements, would be much more efficient as a means of defence.

I have the honor to be,

Sir,

Your Excellency's most obedient servant,

SAMUEL P. TOWNSEND,

Captain.

His Excellency Sir George F. Bowen, G.C.M.G., &c., &c., &c.,
Governor of Victoria.