

1924.



THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA.

PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS.

Laid on the Table by *Senator Reid*
Senator Reid

Pursuant to Statute
By Command
In return to Order

Testimonian

REPORT

Printed by the Senate.
- 8 MAY 1924.

TOGETHER WITH

MINUTES OF EVIDENCE

RELATING TO THE PROPOSED

ERECTION OF ADDITIONAL BLOCK OF
SEAMEN'S BARRACKS, FLINDERS
NAVAL DEPÔT.

Printed and Published for the GOVERNMENT of the COMMONWEALTH of AUSTRALIA by ALBERT J. MULLEN,
Government Printer for the State of Victoria.

No. —F.3991.—PRICE

MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS
(Fourth Committee.)

The Honorable HENRY GREGORY, M.P., Chairman.

Senate.

Senator John Barnes,†
Senator Hattil Spencer, Pol.†
Senator Patrick Lynch,†
Senator John Newland,†
Senator William Dain,†
Senator Matthew Reid,†

House of Representatives.

Arthur Blakley, Esq., M.P.,
Robert Cook, Esq., M.P.,
David Sydney Jackson, Esq., M.P.,
George Hugh Mackay, Esq., M.P.,
James Mathews, Esq., M.P.,

* Elected to be a Member of the Senate, 30th June, 1923. † Appointed 25th July, 1923. ‡ Resigned 23th June, 1923.

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EXTRACT FROM EXECUTIVE COUNCIL MINUTE No. 4.

DATED 6TH FEBRUARY, 1924.

Department of Works and Railways,
Melbourne, 6th February, 1924.

MINUTE PAPER FOR THE EXECUTIVE COUNCIL.

SUBJECT—REFERENCE TO PUBLIC WORKS COMMITTEE.

Recommended for the approval of His Excellency the Governor-General in Council that in accordance with the Commonwealth Public Works Committee Act 1919-1921, the following work be referred to the Parliamentary Standing Committee on Public Works for investigation and report thereon to the House of Representatives, viz. —

Flinders Naval Depot—Erection of Additional Block to the Seamen's Barracks.

Approved in Council.

FORSTER,
Governor-General.

13th February, 1924.

(Sgd.) P. G. STEWART,
Minister of State for Works and Railways.

LIST OF WITNESSES.

Hyde, Captain George Francis, R.A.N., Second Naval Member of the Australian Naval Board	2A	1
Mackinnal, Horace John, Works Director for Victoria, Commonwealth Department of Works and Railways	5	1
O'Connor, George Francis, Director of Naval Works, Defence Department	1	1
Sneyd, Captain Ralph Stuart, D.S.O., R.N., Superintendent of Training, Flinders Naval Base, Victoria	3	1

FLINDERS NAVAL DEPOT—ERECTION OF ADDITIONAL
BLOCK OF SEAMEN'S BARRACKS.

REPORT.

The Parliamentary Standing Committee on Public Works, to which His Excellency the Governor-General in Council referred for investigation and report to the House of Representatives the question of the erection at Flinders Naval Depot of an additional block of seamen's barracks, has the honour to report as follows:—

INTRODUCTORY.

Following upon the decision arrived at to establish at Hann's Inlet, Westernport, Victoria, a sub-base for destroyers and submarines, the Parliamentary Standing Committee on Public Works on 4th May, 1915, submitted a Report in which it was recommended that approval be given to the erection of a number of buildings at that place to provide residences, barracks, schools of instruction, offices, workshops, &c. Amongst the buildings then approved were—

Seamen's Barracks—

Two brick buildings (each for 342 men) ..	£27,654
Electric light installation	750
Heating installation	1,700
	<hr/>
	£30,104

2. It was explained at the time that the buildings then dealt with comprised only the first section of the work, and that as the establishment developed more buildings would be required.

PRESENT PROPOSAL.

3. The present proposal is to erect to the south of the existing barrack buildings a third block on similar lines capable of accommodating about 300 men. The proposed building is to be of brick construction, of a size approximately 212 feet long by 55 feet 8 inches wide, and of three stories. The ground and first floors will be 12 feet from floor to ceiling with 16-inch hollow walls; the second floor will be 10 feet from floor to ceiling with 11-inch hollow walls. The ground floor will be of concrete, the remaining floors of timber, and the roof of galvanized iron.

4. In addition to the barrack buildings, there will be latrine and lavatory blocks of brick, and a dining block, and a petty officers' dining room of timber construction.

ESTIMATED COST.

5. The estimated cost of the proposal as submitted to the Committee is set down at £33,000, and the time fixed for completion eleven months from date of commencement.

COMMITTEE'S INVESTIGATIONS.

6. The Committee visited Flinders Naval Depot, inspected the existing barracks and the site proposed for the additional block, carefully examined the plans submitted, and took evidence from the Director of Naval Works, the Commonwealth Works Director for Victoria, the Second Naval Member, and the Superintendent of Training at the Depot.

7. It was stated in evidence that although the original idea of having at this place a submarine and destroyer sub-base has been considerably modified, the establishment reasonably meets all the requirements of a naval training depot, and if the Navy is to be continued or increased, an extension of accommodation as such is essential.

8. Evidence was tendered that if normal development is to be maintained, the number of men to be provided for at Flinders is estimated to be not less than 1,000, which number is based upon the minimum requirements to maintain the personnel of the Naval services at present in existence.

9. It was further stated that at the present time the existing buildings are accommodating approximately 70 men more than was intended when they were erected.

10. It was ascertained in evidence that the proposed building is on similar lines to those already erected, with certain improvements which experience has shown to be necessary. The main points of difference are the introduction of concrete floors on the lower story, and the provision of balconies on the eastern flank of the building.

11. In the present barracks, the balconies are placed on the western side of the structures extending from one end of the building to the other, and it is along these that all the traffic has to pass. The glass doors on the balconies are constantly being opened, and in the winter the rooms become damp and draughty, making it difficult to keep them warm. To meet the comfort and convenience of the men, therefore, it is proposed to have the balconies and entrance doors on the more sheltered side.

12. Sufficient space is not provided in the original buildings for reading and writing rooms, and this difficulty is also being overcome in the present structure.

COMMITTEE'S DECISION.

13. Disregarding the policy which led to the establishment of Flinders as a naval sub-base and the later decision apparently arrived at to abandon that idea and to retain the establishment as a Naval Training Depot—both of which were outside the scope of the Committee's inquiry—this proposal was approached purely from the point of view of further accommodation being required for the personnel at this training depot.

After carefully considering all the evidence placed before it, the Committee is of opinion that to eliminate the overcrowding now complained of, and meet future normal development of the Depot, further accommodation is required, and recommends that the erection of the building proposed be proceeded with.

14. The decision arrived at in connexion with this matter is shown in the following extract from the Minutes of proceedings:—

Senator Reid moved:—

That the erection of an additional block to the Seamen's Barracks at Flinders Naval Depot as submitted to the Committee be approved.

Seconded by Mr. Mackay.

Mr. Blakeley moved as an amendment:—

That the Committee is of opinion that the Defence establishments at Flinders Naval Base, Jervis Bay, Duntroon, and Point Cook, should be investigated, with a view to the efficient and economic co-ordination of these sections of the Defence Force of Australia, and that for the time being the proposal to extend the barrack accommodation at Flinders Naval Depot be postponed.

Seconded by Senator Barnes.

The Committee divided on the amendment:—

Ayes (2).

Mr. Blakeley.
Senator Barnes.

Noes (5).

Senator Lynch.
Senator Reid.
Mr. Jackson.
Mr. Mackay.
Mr. Mathews.

and so it passed in the negative.

The Committee then divided on the motion:—

Ayes (6).

Senator Barnes.
Senator Lynch.
Senator Reid.
Mr. Jackson.
Mr. Mackay.
Mr. Mathews.

No (1).
Mr. Blakeley.

and so it was resolved in the affirmative.

15. In the course of its inquiry at the Flinders Naval Depot, it was represented to the Committee that considerable labour and expense are involved because of the distance at which the coal store and meat store are situated from the kitchens. As no kitchen block is included in the proposal under consideration and it is understood that representations are being made with a view to remedying the inconvenience, the matter was not further pursued.

H. GREGORY,

Chairman.

Office of the Parliamentary Standing Committee on Public Works,
Federal Parliament House, 25th March, 1924.

MINUTES OF EVIDENCE.

(Taken at Melbourne.)

WEDNESDAY, 5TH MARCH, 1924.

Present:

Senator Lyne in the Chair;	Mr. Mackay
Senator Reid	Mr. Mathews.
Mr. Jackson	

George Francis O'Connor, Director of Naval Works, Defence Department, sworn and examined.

1. *To Senator Lynch.*—The standard of training laid down for the Flinders Naval Depot is 1,000 men, and in order to maintain that standard it has been found necessary to build another barracks block. For the present financial year only £8,700 has been provided for this work, but the proposal is to proceed with the work as far as possible this year, and include in the programme for the financial year 1924-25 the completion of the block, which it is estimated will cost in all £33,000. At present the dormitories have to accommodate 41 men, whereas it is only reasonable to put 25 in them. The present proposal is the outcome of that overcrowding. Our aim is to allow 600 cubic feet of air space for each man. We are now very much under that figure. The site for the new block was shown on the original plan for the whole establishment. The ultimate requirement will be at least six blocks. The plan before the Committee was prepared by Mr. Mackenall, Works Director for Victoria, and meets the requirements of the Defence Department. It affords several improvements on the block built previously. For instance, experience has proved that concrete floors are better on the ground floor, especially for the purpose of washing-down. The new building will provide better ventilation and a better hot water service. The lavatory accommodation will also be improved. When the new building is erected there will be no margin of accommodation. They are now working on a standard of 700 men, but the extra block will just accommodate the full standard of 1,000 men. There will be no need to build another barracks unless the standard is increased beyond 1,000 men. The site in relation to the other buildings will be quite suitable. The balconies on the existing building are on the western side, and, as the doors into the dormitories lead off the balconies, rain sweeps through them during rough weather. Furthermore, in such conditions no use can be made of the balconies by the men. We have, therefore, decided to put the balconies on the eastern side of the new building and thus secure greater shelter for the men. The existing buildings have served the purpose for which they were intended particularly well. Certain alterations have been made to the doors to open them inwards instead of outwards, and this has been found to be an improvement. All alterations necessary to make the present building suitable have been effected. The defects found in the existing building have been guarded against in planning the new barracks. During this financial year it is proposed to take in hand the building of the three bays on the northern end of the building and the necessary lavatory accommodation. The estimate of £33,000 is £3,000 in excess of the cost of building barracks of a corresponding capacity, and the increase is mostly represented by the increased cost of labour and materials. Since 1917, when the other buildings were erected, wages have increased a good deal. None of the men at present at Flinders are housed outside the depot. Married quarters are provided for the captain, three senior officers, three junior officers, seven warrant officers, and twelve petty officers.

The inmates of the barracks will all be single men. The proposals for next year include married men's quarters for six petty officers and four warrant officers. It is not considered necessary to provide further residences for executive officers.

2. *To Mr. Mackay.*—It is not proposed to go on with the dining room provided for on the plan until next year, but the cost is included in the £33,000. The existing dining room accommodation is not as overcrowded as the accommodation in the dormitories. Men take their meals in relays, whereas they cannot occupy the sleeping quarters in relays. For that reason the existing dining room can be utilized until the new building is finally completed. It is proposed to increase the strength at the depot to 1,000 men.

3. *To Mr. Jackson.*—The lavatory accommodation will be no further removed from the dormitories than is the case in the existing building. In a three-story block it is essential that the latrines should be reached from the dormitories without its being necessary for the men to go outside. In this building they will be reached by gangways from the balconies. The building will be of brick, and as there is a good coverage system at the depot there is no reason to anticipate trouble from the latrines. Each man will be provided with a locker. All lockers are to be movable, so that the whole place can be cleaned from wall to wall. I understand that the roof is to be of galvanized iron. I prefer tiles, but, of course, they are more costly. If the iron roof is treated with "Aralite" cooling paint the building should be very much cooler. We treated the Swan Island mine stores in this way with very good results, lowering the temperature in the stores by 10 to 15 degrees. I have not heard of complaints about the existing building at Flinders.

4. *To Senator Reid.*—The height between the floor and the ceiling in the two lower stories is 12 feet. The height in the case of the third floor is 10 feet. Each floor is ceiled, and as there is a 9-foot pitch on the roof coolness should be achieved. Windows can be opened on either side of the building. The verandahs will be of timber on the second and third floors. Everything is concrete on the ground floor. The staircases will be of hardwood leading to the balconies. There will be no stairs inside.

5. *To Senator Lynch.*—I have no preference for concrete construction as compared with brick work. I think it would look odd to build one barracks in concrete when all the rest of the buildings are in brick.

The witness withdrew.

Captain George Francis Hyde, Royal Australian Navy, Second Naval Member of the Australian Naval Board, sworn and examined.

6. *To Senator Lynch.*—At the present time the naval depot at Flinders is the only training establishment in the Commonwealth for the Royal Australian Navy, and there men receive advanced instruction in gunnery, torpedo work, signalling, wireless, naval cooking, &c. The existing accommodation is insufficient for the number of men we wish to instruct. Moreover, we hope for an increase in the number of men carried, and unless the accommodation is enlarged it will be impossible to instruct all the men who will be required. The present strength of the establishment is between 700 and 800. It should be approximately 100 more, but the accommodation is inadequate, and, in addition, we require quarters for several hundred more men than are at present on the strength. The

feet numbers are those authorized by Parliament, but the actual number of men borne for the maintenance of the establishment is decided by the Naval Board after consultation with the officer commanding. Of course, the number of men borne is governed by the requirements of the fleet. The reduction in fleet numbers is the result, not so much of the Washington Conference as of the policy of economy. Existing housing accommodation is 10 to 15 per cent. below the requirements of to-day, and we have not the number of men in training that we should have to supply the needs of the squadron. I have never been able to discover any particular reason for the selection of Flinders as a naval training depot, but so much money has been already expended there that there would be no justification for shifting the depot. The buildings are not suitable for any other purpose, and, of course, we hope that twenty years hence, when a township has sprung up in the vicinity, the Flinders Settlement will have become a national asset. At the present time the establishment fulfils all the requirements of a training depot, and the proposed additional buildings are only in furtherance of the original plan. I have heard people say that the original intention was that a naval base should be made at Westport, but I have never been able to understand the reason for such a suggestion. It is impossible to say, without the knowledge of the intentions of Parliament, how long the proposed additional accommodation will suffice, but, naturally, if the increase in the navy is commensurate with the increase of the population and wealth of the Commonwealth, the size of the establishment must increase as time goes on. The Naval Board has not sufficient money to keep one training depot going properly, and therefore cannot consider the establishment of a second. Men for the Australian Navy are recruited by the district naval officers in the various States. The majority of recruits come from New South Wales and Victoria. The expense of travelling to and from Western Australia and Queensland is so great, as to considerably militate against recruiting in these States. In England and naval ratings are allowed by the private railway companies to travel the double journey for a single fare and one third, but although the railways of Australia are owned by the Commonwealth and the States our naval ratings get no concessions. Subject to minor modifications, the barracks already in existence at Flinders are quite suitable. Certain minor questions, such as the material to be used on the floors, are still under consideration. The existing and proposed buildings include as much provision for recreation as the Board can afford. We provide rooms for reading and smoking, concerts, lectures, and billiards. Of course, gymnastic training is part of the instructional course. Generally speaking, we are very much worse off in respect of recreational facilities than are similar establishments in England, where the Admiralty is exceedingly generous in the provision it makes for recreation and amusements. If Parliament were to decide to replace the existing squadron by modern ships it would probably be found, three or four years hence, that yet another block of buildings would be necessary. In its main essentials, the building proposed is satisfactory, and I am unable to suggest any major improvements.

7. To Senator Reid.—Boys entering the navy are placed on the training ship *Tingira* at Sydney for twelve months before being drafted into the fleet. After three or four years' service on the ships they are sent to Flinders Naval Base for higher gunnery and torpedo training. Those who enter the navy as ordinary seamen go direct to Flinders depot for preliminary training, lasting six, eight, or ten months before they are sent to sea. Approximately half those receiving instruction are men who have been sent there for higher training in gunnery, torpedo work, signalling, wireless, and cooking. All men have to

put in a term of shore service, and that is done by including them in the complement at Garden Island or Flinders. Apart from the overcrowding of the existing buildings, we hope that there will be an increase in the general fleet numbers in the next two or three years, and if that is to happen we must provide the extra accommodation in advance. It is estimated that eighteen months will be required to complete the proposed new block of buildings. Unfortunately, owing to insufficient funds, we have not enough trained men to man the ships of the existing squadron. During a great portion of the current financial year recruiting has been discontinued. The uncertainty as to the future of the navy has made parents reluctant to allow their boys to seek a naval career. Officers and men feel that there is a possibility of the naval service being abolished entirely, and those who can get good jobs in other employment are ready to accept them. The navy is really training men for other vocations. We have sent men to England to qualify in torpedo work, or gain other advanced technical knowledge, and after their training has cost the Commonwealth hundreds and thousands of pounds they have found that they could get better jobs outside, and the whole of the country's expenditure upon them has been wasted. Another deterrent to recruiting has been the absence of foreign service, but the arrangement to exchange ships with the Royal Navy will make an enormous difference. Most boys go to sea in order to travel and see the world, and not in the hope of making money out of that vocation, and the fact that the Australian Navy did not offer a prospect of foreign service, robbed the life of one of the principal inducements. I have already mentioned that the absence of railway concessions to naval ratings is a hindrance to recruiting, particularly in the more distant States. The Naval Board does give concessions to boys on the *Tingira*, and to certain other junior ratings, but although the State Governments have been approached for many years for concessions to naval men, and the matter has been on the agenda paper of successive Premiers' Conferences, it has never been brought to a favorable conclusion. The Naval Board gives concessions to men travelling west of Adelaide and north of Brisbane, but even the Commonwealth Railway Department gives no concessions. The expense of a sailor going from Sydney to Albany or Dunbury on leave is prohibitive. In assessing the attractions of life in the Australian Navy it is usual to make a comparison with the Royal Navy. Apart from the railway concessions, the men in the Royal Navy are able to get their tobacco at about 15.00 per lb., as compared with the 22s. per lb. which his Australian compeer has to pay. There is also a rum ration in the Royal Navy, but in the Australian Navy that is not issued. I am quite satisfied that Australians have no greater aversion to naval life and discipline than have the men of any other country, provided they are properly handled. If Parliament adopt a definite naval policy, which would offer some security of employment together with a prospect of foreign service, we should have no difficulty in getting sufficient recruits in Australia. Of course, we cannot expect the same proportion of men to volunteer for naval service in Australia as in England, where the proportion of seafaring population is very much greater. I consider the fire risk in the buildings at Flinders almost negligible.

8. To Mr. Mathews.—Detention quarters were provided at Flinders, but they were found to be absolutely unfit for the purpose. Any men who are sentenced to detention are sent to Garden Island, Sydney. A certain number of men at Flinders are part of the complement of the establishment. Their presence is necessary, partly for maintenance, and partly for instruction of others. Some, too, are doing their shore service, and whilst they are giving instruction, they are also learning. An increase in the buildings

will not necessarily of itself involve an increase in the size of the staff, but, of course, as the number of men receiving instruction increases, so must the number of instructors. Although it may seem that at Jervis Bay and Flinders, the number of men on the staff is out of proportion to the number of trainees, it must be remembered that in each place a considerable engineering staff has to be maintained not only for instruction, but in order to keep the necessary services going. I admit frankly that it would be very much cheaper to send officers and men to England for most of the higher instruction, the Commonwealth paying their fares to and fro, and the cost of their training by the Admiralty. The Imperial authorities train very much larger numbers, and the cost per student is proportionately much less than in Australia. I believe that officers could be trained in England for less than half the cost of training students at Jervis Bay. The existing instructional staff at Flinders is reduced to such an extent that it is impossible to cut it down further without destroying the efficiency of the establishment. You must remember that the Flinders Naval Base was a good deal of a wilderness a few years ago, and was carved out of expenditure on maintenance and improvements is necessary in order to create a settlement in which people can live comfortably.

9. To Mr. Mackay.—The Flinders depot reasonably meets all the requirements of a naval training establishment, and if the navy is to be continued or increased, an enlargement of the accommodation is essential. The proposed new block of buildings will relieve the overcrowding, and enable us to train a sufficient number of men to supply the requirements of the squadron.

10. To Mr. Cook.—When we compare the costs of training in England and Australia it must be remembered that at the Royal Naval College, at Dartmouth, there are approximately 280 cadets, whereas at Jervis Bay the number is only 47. If the Australian sailor is properly handled he is as amenable to discipline as is any other sailor in the world. The citizen trainees, who receive six days' training under the compulsory training law, have never been to sea and do not know one end of a ship from another. They cannot be regarded as efficient personnel. A ship whose crew was completed from the citizen trainees would not be fit to go into action in less than six months. In these days a vessel should be ready to go into action at any time. A few years ago the cry of economy was heard, and a large number of officers and men, upon whose training hundreds of thousands of pounds had been expended, were retrenched. What is required is continuity of policy. In Great Britain, Parliament has been able from time to time to set out a policy spread over a large number of years, and that continuity of policy means a great saving in expenditure.

11. To Mr. Mathews.—I have every reason to believe that the boys on the *Tingira* take kindly to naval discipline. They all look healthy and happy, and they put on weight in a remarkable fashion. They have every possible avenue for making complaints regarding ordinary officers suppressed; complaints; they have not the power to do so. I will not go so far as to say that satisfaction is complete, because in every company there is a small minority of men who invent complaints which have very little foundation. I am sure that we can get sufficient Australians to offer for naval training if a reasonable prospect is held out to them.

12. To Senator Lynch.—As I believe the navy to be a permanent institution, I am of opinion that any buildings erected for the training of naval ratings should be of a permanent character.

(Taken at Flinders.)

FRIDAY, 7th MARCH, 1921.

Present:

Senator Lynch,	in the Chair;
Senator Bates,	Mr. Mackay;
Senator Reid,	Mr. Jackson.
Mr. Cook	

Captain Ralph Stuart Sneyd, D.S.O., R.N., Captain Superintendent of Training, Flinders Naval Base, Victoria, sworn and examined.

13. To the Chairman. The proposal for the erection of increase accommodation for seamen at the Flinders Naval Base originated in the estimates for the financial year 1923-24. The number of ratings at present under my control here is 598, which is considerably below the maximum of 770, which number is not definitely fixed, but depends upon the accommodation in which can be made available, and the men who are required either for training or for other services. If normal development is to be maintained, the number to be provided for is estimated to be not less than 1,000, which number is based upon the minimum requirements to maintain the personnel of the naval services at present in existence. The 1,000 includes the actual instructional staff, those undergoing training here, as well as those required for the maintenance of the base. According to the plans, which I have perused, the number intended to be accommodated in the buildings now in existence was 501, 500 in these buildings we now have 570. There are 208 petty officers and men resident here to-day, but of that number there are 25 to 28 who live in houses at the depot or who are employed in the wardrobe, warrant officers' mess, or other places where they sleep. At present, the existing buildings are accommodating approximately 70 more than was intended when they were erected. We have had approximately 600 men here at one time, which presents the maximum, so far as an experience goes. The proposed new building would be capable of accommodating 302 men. When this question first came up for consideration my predecessor was consulted, and since I have been here the matter has also been discussed with me.

I consider the design of the proposed building to be as satisfactory as it could be on the available site. The only defects in the existing building are the large number of glass doors on the western side of the building, which is exposed to the prevailing bad weather. The balconies are also on the western side of the structure, and extend from one end of the building to the other: it is along these that all the traffic has to pass. The glass doors are constantly being opened, and in the winter, particularly, the buildings become cold and draughty, and it is exceedingly difficult to keep them warm. It is proposed to overcome these defects in the new building by placing the doors and balconies on the eastern side of the structure, which is well sheltered from the prevailing westerly weather. I do not know of any other defects of any consequence in the existing building. The proposed alteration in design will make structural damage has been caused by the beating in of the rain through the glass doors on the western side, but it has made the building uncomfortably cold and damp in the winter, and during certain stormy periods in the summer time. Sufficient space has not been provided in the existing building for reading and writing rooms, particularly for the ratings below those of petty officers; but in the proposed building this defect will be overcome by providing sufficient space for recreation. The additional space in the proposed building could be utilized by the occupants of the existing buildings. The petty officers have sufficient room for recreation, but from 400 to 600 men have only to do their writing and reading. The proposed site is the

best available as regards heating, lighting, and sewerage. The aspect is as good as that of the others, and with the exception of the modifications I have mentioned, I do not think the design could be improved upon. In the new building certain spaces which were set aside for latrine rooms in the existing buildings will be disposed with as they are of no real value for the storage of baggage. The corresponding part in the new structure will be utilized in making the dormitories larger. Viewing the proposal as a whole, I consider it essential to meet the expenditure of £33,000 to meet the pressing need that now exists as well as to provide accommodation for the 200 months with men under training, we would probably be 200 short of the maximum number required but accommodation could be provided for the additional number without inflicting undue hardship or discomfort upon them. It would, of course, mean encroaching upon the space, but that is being done at present. I understand the space provided, as shown on the plan, is that fixed by the authorities in control of public buildings. The space was not fixed by any standard recognised in the British Navy, or, so far as I know, by any officers associated with the Department of the Navy. We would be justified in temporarily encroaching upon the accommodation provided in the larger rooms to the extent of 50 per cent.

14. *To Senator Reid.*—The ground floor in the dormitories is utilized for sleeping purposes, and I do not think it is more uncomfortable there than on any of the other floors. Approximately one-half of the ground floor is used for recreation purposes, and the balance for sleeping accommodation. The lavatory accommodation at the rear of the dormitories is sufficient for each block, and I do not think any improvement could be made in connexion with that to be provided for the new block. Although the supply of water to the bath is excellent, the steam heating apparatus has not been altogether satisfactory. This, however, is being replaced by a more modern system, which should be entirely efficient. In the winter time the balconies are used only as a means of communication between the different dormitories in the block. To transfer the balconies and doors from the western to the eastern side of the building would involve a good deal of structural alteration to the walls, and although such an alteration would add to the comfort of the men, I doubt whether it is a feasible proposition, because the position of the existing windows on the eastern side would have to be altered, and provision would also have to be made for the doors. It is unnecessary to have balconies on both sides of the building, because if balconies were placed on the eastern side those on the western side would be very little used. The expenditure would not be justified.

15. *To Senator Hutches.*—When the existing buildings were accommodating 700 men, the occupants were, of course, somewhat crowded. To maintain the naval services at present in existence the number we should have in this establishment is estimated at not less than 1,000. Some ratings would be undergoing training at sea, but, approximately, 500 would be under training here the whole time.

16. *To Mr. Mackay.*—The plan provides for a dining-room of the same size as those in connexion with the existing block, and in the same place relatively. The dining-rooms are satisfactory and, as far as I know, no improvements are needed. The coal storage room is about 500 yards in a direct line, and, by road, more than half-a-mile from the dining-rooms and galley. This is a source of great inconvenience and expense, because men have to be employed almost continuously carrying material to the galley, and a motor lorry can be employed in that service during four trips a day. Supplies are received by rail from

Melbourne in practically all cases, and are delivered at the store and coal storage. Five men and six mules are employed, two hours and a half a day in supplying the kitchens. If the stores and coal storage accommodation were removed to a site near the galley and the railway siding extended, much of the expense now incurred in transferring goods could be avoided. The delivery of coal is equally inconvenient. The daily quantity of coal consumed for heating and cooking purposes is 8 tons, which quantity has to be conveyed from the coal dump at the railway siding to the heating boiler house and the galley. From six to eight men and one motor lorry are engaged on this work for the greater part of their time. Taking the average annual cost to the country of the junior rating, including his cost in every way, at £300 per annum, I consider it costs £5,000 to £6,000 a year to convey the coal and food from the point where it is landed from the railway to the places where it is used. Some improvement should be made to enable this work to be done more economically. I have included in this year's estimates a sum for extending the railway siding in the direction indicated, and if the amount is voted we should be able to effect a considerable saving.

17. *To Mr. Jackson.*—Corrugated iron naturally radiates the heat on hot days, but, generally speaking, owing to the height of the roofs and the ventilation provided, no serious objection can be taken to the iron roofs on the existing building. I do not think any advantage would be gained by using glass.

18. *To Mr. Cook.*—I have occupied my present position for only nine months, and I am aware that time has had very little opportunity of becoming intimately acquainted with the Australian coast-line. I am unable to say whether this is the best place at which a base of this kind should be located. The question of whether the general suitability of the site should not be fully considered before further expenditure is incurred is one upon which I should not be expected to give an answer at this moment. My personal opinion is that it would be advisable to spend very large sums in endeavouring to make this place suitable for large vessels to enter. As a training establishment, however, I consider it entirely suitable, and one which ought to be maintained, even at considerable expense. The ideal site is, of course, one where repairs, docking of ships, a naval depot, and naval training could be carried out.

19. *To the Chairman.*—I have given careful consideration to the fact that to erect the proposed building on the southern instead of on the northern end of the block will have the effect, in a sense, of upsetting the balance provided in the original plan. If the proposed building were erected on the northern end of the block it would entail provision being made for the new cooking arrangements, and an extension of the heating and sewerage system which, at present, passes the proposed site on the southern end. If the building is erected on the site proposed, no connection is necessary, but, on the northern end, extensions would have to be made. To that extent the proposal is more economical. I have been asked if I think any more money should be spent on this base in the direction indicated before a thorough inquiry is made to ascertain if a more suitable site is available for developing on the whole of naval defence. To maintain this place, to provide material and means of training must involve expenditure in the future, and how much, or how little, depends entirely upon the naval services to be provided. We must train our own men in our own establishment. We have been depending, to a large extent, upon the Royal Navy to supply trained men, either by loan or by transfer. We cannot continue to do that. The Royal Navy has been reduced to a minimum, and cannot supply men because they are not available. We must train our own men, and this is the only place available for the purpose. To interfere with its natural growth, supposing the naval service is to extend, would

be suicidal. As the service increases, so must the training opportunities be extended. The extensions proposed are not necessitated by an increased service, but are merely to meet the requirements of the present complement as provided for by the current estimates. Therefore, I could not say that it was unnecessary to spend more money on this site until some future policy has been determined, because that might mean the discontinuance of training, and for all practical purposes of actual training this base is quite suitable. It is not economical, however, in some respects for the reasons I have mentioned, and also because it is the fact that men have to be sent to and from Sydney by train. I have not sufficient knowledge of the local conditions to say if it is possible to find a place where all the naval activities mentioned could be accommodated in the one spot. In Great Britain there are two or three places where there is a dock-yard, a naval depot, and a training establishment, such as at Portsmouth, Devonport, and Chatham, which renders the work more efficient and economical. This base is recognised as essentially a training station. It is not possible to undertake other than minor repairs here; other repairs must necessarily be done at Cockatoo Island or Garden Island.

(Taken at Melbourne.)

MONDAY, MARCH 10th, 1924.

Present:

Senator Lynton in the Chair;	Mr. Jackson
Senator Barnes	Mr. Mackay
Senators Reid	Mr. Mathews.
Mr. Cook	

Honore John Mackenall, Works Director, Victoria, sworn and examined.

20. *To the Acting Chairman.*—The plans of the proposed seamen's barracks, Pflinders, were prepared in my office and were approved by the Navy Department. The only respect in which they differ from those of the existing building is that the verandah is to be placed on the eastern instead of the western side. This has been done, at the request of the commander of the depot, in order to give the men protection from the weather, the eastern side being sheltered, will render communication between the barracks and dormitories easier in wet weather. The proposed building will consist of three stories, will be 212 feet long by 55 ft. 8 in. wide. The building will be in brick. The two lower floors will be 10 in. work—9 in. solid with a 2½ in. hollow, and 4½ in. inside wall, to ensure a damp-proof building. The upper floor will be in 11 in. work—two 4½ in. brick work with a 2 in. hollow. In addition to the barrack buildings there will be latrine blocks also a dining room block and a petty officers' dining room. The latter will be in wood corresponding with the existing buildings but the latrines and lavatory blocks will be built in brick. The barracks, with the exception that the verandahs will be on the eastern, instead of the western, side, and a small central bay, will be identical with the existing buildings. The ground floors will be in constant heating which naval men insist on is very injurious to all wood work. The trouble is that the navy people treat buildings as they would treat a ship. For cleaning purposes they turn on the hydrant and flood the floor pushing the water in front of them with a squeegee. Under the treatment of the weather the crete interior rapidly, and in addition dampness is soon noticeable. We have had the same difficulty in buildings occupied by military people. The sleeping accommodation in the proposed barracks is on the upper floors. It has not been thought necessary to put those

floors in concrete, because they have a better chance of drying out. About eighteen months ago we were obliged to substitute concrete for wood in the ground floor of one of the existing buildings because the timber had rotted as a result of the treatment I have mentioned. There will be no verandah on the western side, but the hollow exterior wall will be a sufficient safeguard against weather and dampness. The eastern side is a fine healthy aspect, especially for sleeping accommodation. In an exposed position like Pflinders the rains are generally almost horizontal so if the frames for the barrack rooms are set on the eastern side as in the case in the existing buildings, the rooms would get wet. Nearly all the wet weather comes from that direction. On present-day costs the estimates for the proposed new buildings is £33,000. The estimates for the existing buildings which were erected in about 1915 were approximately 50 per cent. lower. Since then materials and labour have advanced about 100 per cent. At the present time the minimum award for bricklayers is £8 17s. 6d. per week compared with £3 11s. 6d. in 1915, but we cannot always get bricklayers for present award rates. It is estimated that it will take ten or eleven months to put up the buildings. The policy is to do all work by contract but in practice, and owing to the difficulty in getting satisfactory tenders, we are doing a considerable amount by direct labour. We do this rather unwillingly because of the great difficulty in obtaining labour at the present time. As the naval base is now, I think the site for the proposed new barracks is quite suitable. The alternative proposal of placing this block on the north side instead of the south was not considered. The location was settled by the naval authorities and was very necessary to prevent the plans, keeping in mind the original design for the construction of the whole group of buildings. The new buildings will be nearer the officers' administration section and in that way will make for better supervision. I do not think that any extra expense will be incurred by erecting the block on the south side instead of the north. Some of the mains might be a trifle nearer, but this will be made good by the very small extra expense. I have not heard of any complaints with regard to the transport of coal but there is a proposition for next year's estimates for the construction of a loop line into the engine house at the back of the warrant officers' quarters. Personally I do not think that would be a paying proposition. I admit that the present method for the transport of coal is very wasteful. There is some saving in the siting of the engine house, but I do not think the loop line would be an economic proposition. The labour used for the transport of coal is the naval ratings and it has to be there anyhow. It is possible, of course, that if the present unwholesome method of handling the coal were replaced by a more efficient system, the labour at present available for that purpose could be utilized in other directions. I would not like to offer an opinion as to the possibility of complaints arising from the fact that the proposed barracks may be more comfortable than the existing buildings. That would be a question which only the officer-in-charge could answer. Personally I do not think there will be any marked difference in the comfort of the several buildings, with the exception of the storm shelter. Whether the proposed new barracks will not be so exposed when they leave their rooms I prefer brick work to concrete for a building of this description. It is easier to make a brick building damp proof with only one building to erect and it is less expensive. For concrete work a great deal of centering has to be provided, and when the building is finished it is not so easy as it is to transfer the "forming" to other buildings. This is a considerable economic waste of results. Generally speaking brick work is cheaper than concrete except in cases where a contractor is doing a lot of "type" work. A company that is constantly on concrete can utilize the whole of the materials, practically to the last penny, but for a building of this kind bricks would be cheaper.

and more satisfactory. The building is designed to provide 600 cubic feet space per man. I understand the authorities have been cramped for room for some time now and that the accommodation in the existing building is overtaxed.

21. *To Mr. Mackay.*—If, as has been suggested, the construction of the proposed loop line for the handling of coal and stores will result in the saving of 25,000 a year I should say that it would be an economy to build the line, but I should like to know how the figures are made up. I contend that the labour—naval ratings—would be there anyhow. Whether in the event of the loop line being built, it would be possible to utilize that labour more profitably in other directions, is for the Navy people to say. Bricks for the building would be obtained in Melbourne and trucked from the kiln right into the siding. We might get the bricks from Oakleigh but that would not be much nearer than Melbourne. As a matter of fact we would have to purchase bricks where we can get them. Owing to the immense amount of building work going on in the city there is a scarcity of bricks. The position is a little easier just at present, but there were times, during the past year, when we have had to ask for concessions from the brick companies in order to get supplies. At present we are not large buyers of cement, although we use a large quantity of that material through our contracts and departmental day labour. We do our buying through the Supply and Tender Board; but if we required a large amount of cement and considered the contract rates unsatisfactory we would go into the open market and see if we could do better. The roof of the barracks will be of galvanized iron. As a protection against deterioration, we treat all galvanized iron buildings near the seaside with cement and oil. The three dining-rooms will provide accommodation for 300 men, 100 in each room, and the petty officers' dining-room will accommodate 42 men. All the cooking arrangements will be carried out in one kitchen. There is no provision for heating the dormitories, but the dining-rooms and recreation rooms will be heated. I have not heard of any complaints concerning the position of the lavatories and as the sewerage scheme is good and there is a plentiful water supply, there should be no reason for complaint.

22. *To Senator Barnes.*—The plans for the existing buildings were designed in the head-office. The chief architect, Mr. Murdoch, was responsible for them. If it were possible to caulk the floors, as is done in the case of ship's decking, there might not be any objection to the constant losing to which they are subjected by the navy people, but there is a marked difference between the two styles of work. It is impossible to make good the junctions between the floor and the wall of a building, and so it is not possible to prevent damage through the hosing of the floors. I disagree entirely with the practice of hosing these places, but we never seem to be able to eliminate it either in the case of the naval or military authorities. They insist on turning on the water and sometimes it may be seen flowing two inches deep over the floor, just as it flows over a ship's deck and the men, using a squeegee, push it ahead of them. No building will stand treatment like that. It seems to be the practice of the navy people, whenever they are in a naval building, to regard themselves as "aboard," and so they carry on, as if they were really on board ship. Immediately they go outside they regard themselves as "ashore." It was the same at the Williamson depot. When a man stepped outside the building he felt that he had gone ashore. When I mentioned the difficulty about getting labour to carry out departmental work by day labour I did not wish to convey the impression that we could get no labour but that in view of the immense amount of work going on we found it extremely difficult, and have to compete for the men by paying higher award rates than other people would pay.

23. *To the Acting Chairman.*—We are obliged to pay above award rates. We cannot get men for the minimum wage. Such bricklayers as we have been able to get receive 32s. a day including their allowances. Generally speaking, if we send bricklayers to country work we have to pay them 30s. a day plus 30s. a week for board.

24. *To Senator Reid.*—The award rate is £6 17s. 6d. week. The position is the same in all trades, but it is exceedingly difficult in regard to bricklayers' and plasterers' trades. In country work we never attempt any of the higher class of plumbing, but confine ourselves to roofing and the simpler work. Formerly carpenters were allowed to fix galvanized iron roofing, but that is now a plumber's job.

25. *To Senator Barnes.*—I think departmental supervision, in the case of day labour, is more efficient than the supervision of private contractors and that in consequence we get better work done by day labour than under contract. From this point of view I prefer day labour but it means twice the amount of work for me and the responsible officers. We have to watch carefully all material that comes on to a job whereas in the case of contract work that responsibility falls on the contractor and we simply continue anything that we consider unsuitable. That, however, is not so much why Government work is done by contract. It is a question of Ministerial policy. I think we get a better job by day labour but where competition is healthy, contract work is cheaper because usually a contractor is a man of some substance and being able to ensure continuity of work is able to keep his men together, but frequently we are able to do work by day labour at a cheaper rate than the contract price. For instance at one of our finishing-off the petty officers' dining-room, a single-story building. That work was estimated to cost £1,854 but the only tender received was for £2,395, so we determined to do it by day labour. The cost at that date and it is nearly finished, is £1,637 and I estimate that we shall complete it for £1,720. We have to remember, however, that we had a stack of bricks that were bought at 30s. per 1,000 less than current market rates, but even if we make an allowance on that account, we shall be well under the contract price. The lack of continuity in work, however, is the drawback here. Although work may be required for various departments the actual contracts are handled by the Works Department. As soon as approval has been given for work, whether it is a £30,000 building or an office chair, the department concerned want the work carried out in a hurry, and looks to us to get it done without delay. The reason for this is obvious. The Departmental vote has to be expended within the financial year, if possible. Wherever possible we get supplies of bricks locally. For instance we are doing some building at Mildura and using Mildura bricks. The cost of Melbourne bricks would be excessive.

26. *To Mr. Jackson.*—Bricklayers do not now lay the same number of bricks as formerly. No doubt this is due to the fact that many bricklayers are only partially trained in their work. Originally the hot water service pipes were put in earthenware pipes, with the result that whenever anything went wrong there was difficulty in locating the trouble. It is essential that, if any leakages occur, the trouble shall be discovered and remedied at once, hence the decision to have the hot water service in overhead pipes. I have to be able to speak with authority concerning the effect of sea air on galvanized iron roofing there, but the practice is to treat all galvanized iron in buildings near the sea with cement and oil, thus an immense amount of trouble is avoided. The fort work buildings at Nojean, and Queensland are a constant source

of trouble. Most of these buildings were erected during the war. At one place we are renewing with weatherboard.

27. *To Senator Reid.*—From my experience I doubt if bricklayers at present lay more than 400 bricks per day but I am quite sure that the quality of the work done by day labour is equal to work done on contract. On one of our big jobs, for the arsenal committee, a contractor running into £30,000, one of the contractors, country told me on one occasion when I was condemning certain brick work that it was most difficult to get good men, and that he had had to dismiss quite a number for incompetence. When I asked him how many bricks they were laying per day he said they were not doing more than 350.

28. *To Mr. Cook.*—Ten years ago on similar work a bricklayer would lay between 700 and 800 bricks per day. I should like to add, however, that the number of bricks which a man can lay depends entirely upon the class of work. I have seen as many as 1,500 to 2,000 done on certain work but it would be unreasonable to expect a high average on every class of work. Recently we invited tenders for some buildings at the cordite factory and as the lowest was £1,000 above the departmental estimate we recommended that it be done by day labour. I think we will be able to complete the job at the departmental figure.

29. *To Senator Reid.*—The bathroom accommodation in the new buildings is accessible from the ends of the balcony. I estimate that it would cost an extra £3,000 to add balconies along the eastern side of the proposed new barracks and as it would not be a great saving in the distance which the men would have to travel, it would not be an economy. The ceilings to the third floor accommodation will be of fine corrugated galvanized iron. This is really a Queensland practice, introduced in Commonwealth work by Mr. Murdoch. It is more satisfactory than wooden linings or expanded metal which is not galvanized, and unsuitable for buildings near the seaside. With the galvanized iron there is no dust and it is considered more sanitary. It does not increase the heat of the room. Ventilation of the building is provided by the eaves and through the roof by ducts, with cowls attached to them. When we hand over a building to the Navy Department, we have no further responsibility and therefore we cannot interfere with the manner in which they treat it, but if we were the landlord we would not allow them to hose the floors.

30. *To Mr. Cook.*—I was not responsible for the original design of the barracks but I approve of them. They are a replica of existing buildings and in design have been found to be quite satisfactory. A multiple-story building, such as is proposed for the barracks, is always more economical than a single-story structure. I consider the proposed buildings absolutely essential for the number of men to be accommodated. I understand that the naval authorities have been putting 40 men in accommodation intended originally for 25, thus

reducing the air space of 350 cubic feet per man, which is insufficient. Unless we strike drought conditions, thus interfering with Government and private enterprise schemes there is no likelihood of building costs coming down in the near future. Ten years ago bricklayers were getting £3 11s. 6d. compared with 16 17s. 6d. minimum award rate to-day. Carpenter's ten years ago got £3 9s. 8d. compared with £6 11s. 1d. award rate to-day and, speaking generally, skilled labour is not so efficient as it was ten years ago. I may add that we are not able to get any man in any trade for award rates to-day. We advise the Naval Board head of the position and get a covering authority for in excess expenditure.

31. *To Mr. Mackay.*—I should say it would hardly pay to construct a light tramway to deliver the bricks from the railway to the job. We could get the naval lorry to carry the material for us. In certain circumstances the naval men, I find, are inclined to help us. They are undergoing training and have certain duties to perform but I know the Captain of the depot is usually anxious to take on anything. As a matter of fact he would take on the building work, but for obvious reasons we cannot allow him to do that. A light tramway as suggested would not do. This work would have to be carried out in accordance with Victorian Railway standards, otherwise they could not get their rolling stock and engines over the section. Mr. Murdoch has not supervised the estimates but he approved of the plan for the proposed building. The departmental practice is to allow the Departmental Tender Board to handle all contracts. If the lowest tender is below the departmental estimate it is accepted by the Supply and Tender Board without reference to the Works Department, but if it is above the estimate the matter is then submitted to the Director General of Works, nominally, for report as to what he thinks should be done. In the case of Victoria as I think work, it would of course come before me. There is an agreement between the architects and master builders that, in the case of all contracts over £5,000 in value the quantities shall be taken out by qualified quantity surveyors for the information of contractors. There are only four or five quantity surveyors practising in Melbourne and sometimes we have to wait two or three weeks before a contract can be advertised.

32. *To the Acting Chairman.*—We have no qualified commercial quantity surveyor in the department, and an assistant who is qualified to take out builders' quantities which are got out in a different way, but we must employ these outside men who guarantee the correctness of their quantities to the contractor and accept the responsibility for any error. The writing room accommodation will be a room 17 ft. 6 in. by 33 ft. in the proposed new building. This has been asked for by the men. It will be close to the recreation room. The building trade is exceedingly busy at the present time, so busy in fact that it is almost impossible for us to get country work done.

The Committee adjourned.