

1964-65-66

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R E P O R T

relating to

FIRST STAGE OF PROGRESSIVE REBUILDING

at

H.M.A.S. "NIRIMBA"

QUAKERS HILL, NEW SOUTH WALES

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

FIRST STAGE OF PROGRESSIVE REBUILDING AT
H.M.A.S. "NIRIMBA", QUAKERS HILL, NEW SOUTH WALES

R E P O R T

By resolution on 31st August, 1966 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for investigation and report, the first stage of the proposed progressive rebuilding in permanent construction of H.M.A.S. "Nirimba" at Quakers Hill, New South Wales.

In explaining the reference the Minister representing the Minister for Works referred only to the proposal to build, in the first instance, four new barrack blocks and a marine engineering demonstration building. The scope of the first stage of the rebuilding programme was subsequently extended to include a new wardroom. The House was informed of this in a statement by the Minister on 28th September, 1966.

The Committee have the honour to report as follows:-

THE COMMITTEE'S INVESTIGATION

1. Written submissions were received from the Departments of the Navy and Works and we took evidence from representatives of these Departments at public hearings in Canberra. The Committee visited H.M.A.S. "Nirimba" to inspect the existing facilities and the sites of the proposed new buildings.

THE PROPOSAL

2. The first stage of the programme for the rebuilding of H.M.A.S. "Nirimba" in permanent construction, which now makes up this reference, includes -

- (a) four 3-storey barrack blocks to accommodate a total of 480 apprentices at a cost of \$1,020,000;

- (b) a marine engineering demonstration building at a cost of \$480,000; and
- (c) a wardroom to provide messing facilities for 50 officers, and living accommodation for 30, at a cost of \$300,000.

H.M.A.S. "NIRIMBA"

3. The Site H.M.A.S. "Nirimba" occupies an area of 350 acres at Quakers Hill some 25 miles west of Sydney between Parramatta and Windsor. The Parramatta/Windsor railway line skirts the eastern boundary. The land is part of a larger area of 900 acres originally hired during World War II and subsequently acquired by the Commonwealth in 1951. The area was first used for the construction of an airfield, known as Schofields, comprising runways, hard standings, hangers and ancillary buildings and services.

4. Schofields was later transferred to the Navy and used to supplement Fleet Air Arm facilities at Nowra. It was subsequently converted to an Apprentices Training School (commissioned as H.M.A.S. "Nirimba") in 1956, with an initial entry of 50 naval artificer apprentices.

5. The balance of the land originally acquired is now used by the Department of Civil Aviation or has been sold.

6. Suitability of Site The Committee considered the suitability of the Quakers Hill area in relation to naval apprentice training functions and needs. A section of the Committee thought that H.M.A.S. "Nirimba" is not ideally located for naval apprentice training purposes but after reviewing the evidence appreciated the difficulties associated with redeveloping Nirimba at this stage on another site.

7. Functions The prime function of Nirimba is the training of naval artificer apprentices who provide the main source of the skilled tradesmen required for the maintenance of the Fleet's propulsion machinery, and weapons and communications systems, as well as for the preservation of ships hulls. The expansion of the Navy

and the introduction of a wide range of complex modern equipment into ships, submarines and aircraft, have precipitated a rapid expansion in the apprentice intake and, we believe, have created a need to modernise this training establishment. Nirimba also undertakes the training of mechanics and direct-entry shipwrights.

8. Apprentices, on entry, are in the 15 to 17 years age group and undergo a $2\frac{1}{2}$ years course at Nirimba, followed by further apprenticeship training at other Naval establishments or at sea. On completion of five years service they are then promoted to Acting Petty Officer rank.

9. Mechanics are selected from the non-tradesmen categories of the marine and air engineering branches of the Navy and undergo two years training at Nirimba. They are then employed as tradesmen in the engineering and air engineering branches.

10. Direct-entry shipwrights are recruited as tradesmen largely from the building and shipbuilding industries and are given six months training in Naval equipment and techniques at Nirimba before being posted.

11. The Existing Facilities The facilities at Nirimba include some semi-permanent buildings (including four Bellman hangers), a steel framed hanger erected in 1954 and some more modern small timber buildings which have a useful life of at least another ten years. The numerous remaining buildings, which are used principally as barracks, messes and ablution blocks, are single-storey timber framed hutments erected during World War II. Although fairly well maintained, the latter are obsolete and provide relatively poor accommodation. In this connection it is relevant to note that none of the sleeping quarters at Nirimba has under-cover access to toilet, ablution, messing or laundry facilities. The Committee regard the older hutments, particularly those used for sleeping, messing or ablutions purposes, as being sub-standard and inadequate for the task for which they are being used.

12. Establishment The present rebuilding programme for H.M.A.S. "Nirimba" is based on the ultimate establishment being as follows. The present establishment in each category is indicated.

	<u>Ultimate</u>	<u>Present</u>
Officers	50	46
Chief Petty Officers and Petty Officers	185	63
Junior Sailors	180	138
Apprentices	720	660

REBUILDING PROGRAMME

13. The Government recently approved the rebuilding of Nirimba, in phases, at a cost expected to be of the order of \$8m to \$9m. The proposals in the present reference represent the first stage in this programme.

14. It is planned eventually to replace the existing buildings which no longer provide an appropriate standard of accommodation, with structures in permanent materials. The programme broadly envisages the replacement of almost all of the existing barracks and messing quarters as well as obsolete instructional and other buildings. The portions of the programme considered to have highest priority are the works in this reference.

15. Master Plan The master plan according to which the rebuilding programme is to be undertaken, is to be the subject of a later submission to the Committee. Sufficient is known of the outline of the plan at this stage to enable the present proposals to proceed without delay and without inhibiting future planning or building.

16. The main building development of Nirimba is planned on the basis of a north/south centrally disposed axis. This will ultimately be represented by the main class room block which it is thought will have a north/south central core from each side of which the class room wings will radiate. To the north it is proposed to

erect the living, messing and recreation facilities for apprentices. To the east it is planned to build the general services and amenities of the establishment including the swimming pool, gymnasium, squash courts, post office, chapels, etc. Domestic quarters for the ships company and senior sailors are proposed to the south, whilst to the west and north-west workshops and associated instructional facilities are planned. The site chosen for the wardroom is generally south-east of the main development near the main entrance.

17. Based only on the brief information made available to the Committee, we believe that the master plan proposed will provide a satisfactory basis for the rebuilding programme for Nirimba. Subject to this observation, we believe that the sites chosen for the works in this reference are appropriate to their function.

18. Site Development The area of land available at Nirimba is adequate for present needs and it should suffice for most future demands in the way of naval apprentice training. The site is irregular in shape, particularly near the main entrance, due to the encroachment of a privately owned 'L' shaped block of land on the western corner of Eastern and Douglas Roads. This land is currently used for rural purposes. It is in this area that further ships company and officer living quarters would need to be built if the strength of the establishment is increased.

19. The Committee considered that it would be desirable for the Commonwealth to purchase this land so that the possible future land needs of Nirimba are not prejudiced. The acquisition of this land would considerably improve the general amenity of the Navy's area.

20. We thought that if this suggestion is followed, the Commonwealth could propose, as a basis for negotiation, that the owner of the land exchange it, with appropriate adjustments, for part of an unused area of about 15 acres of adjacent Commonwealth land which lies to the south-west of Quakers Road.

21. The Need Some 200 apprentices at Nirimba have sleeping accommodation in single storey buildings erected or refurbished within the last ten years. Whilst this accommodation is reasonably satisfactory, the sleeping quarters of the remainder, which are in the older type of timber framed huts, can only be described as sub-standard and not providing an appropriate degree of amenity. We therefore believe that there is a pressing need for the barrack blocks in this reference.

22. The mess block of the wardroom was destroyed by fire late in August, 1966 and the officers are now messing in alternative but unsatisfactory premises. Although the living quarters were not affected by the fire, they are not good and we believe that accommodation of a better standard should be built as early as possible.

23. Whilst on the subject of the standard of living accommodation, we would like to comment that we would not regard the officers and men of Nirimba as being adequately housed until each group has sleeping, toilet, ablution and laundry facilities under the one roof. The Committee thus consider that there is a need for the replacement of all of the present living accommodation.

24. The galleys serving the apprentices messes are at present coping with demands under difficulties. We noted with approval, therefore, that a new mess, galley and recreation centre is to be erected in the second phase of the rebuilding programme.

25. There are at present difficulties in the training of artificer apprentices due to the lack of adequate and properly serviced facilities for the demonstration of engineroom machinery and equipment. This part of the training syllabus is only partly carried out in a dispersed assortment of buildings, few of which have the appropriate services. There is thus a need for the proposed marine engineering demonstration building with the appropriate steam, heat, air, etc. services, cranes and hoists.

26. Sick Bay The present sick bay is handling the medical requirements of Mirimba fairly satisfactorily in the restricted space available. This situation will continue until the new sick bay is completed in a later phase of rebuilding. We believe that the treatment room in the present sick bay should be improved as a minor works project to assist the medical staff in the interim period.

THE BUILDING PROPOSALS

27. Barracks Blocks These are to be identical 3-storey buildings each providing living accommodation for 120 apprentices. The ground floor of each will provide sleeping accommodation for 30, laundry facilities, box rooms, an office, and toilet and ablutions services, whilst the first and second floors will each have sleeping accommodation for 45 apprentices and appropriate toilet and ablution facilities. Sleeping accommodation will generally be in four berth cabins. Two study rooms are to be provided on each floor. The accommodation proposed accords with the Scales and Standards of Accommodation for the Services in Peace.

28. The blocks will be of load bearing brick construction, reinforced concrete floors and stairs and tile roofs. Windows will be aluminium. Internal wall finishes will generally be face brick with tiles in the ablution areas and toilets.

29. Floors, except in the toilets and laundries, will be surfaced with vinyl. Toilet floors will be finished in terrazzo and laundry floors and stairs in granolithic. Ground and first floor ceilings will be painted concrete and the second floor ceilings will be fibrous plaster. The roof space will be insulated.

30. An electricity sub-station is to be erected near the sleeping quarters. Underground reticulation will be provided to each building. Fluorescent lighting will be provided generally, with incandescent reading lamps on each bed head. One power point

to each two beds will be provided in the sleeping quarters and additional power points in the study rooms for heating purposes and in corridors for cleaning appliances. External lighting will be provided for supervision and safety purposes.

31. Sewerage and water supply reticulation will be extended to the new buildings from existing services. Fire protection will be by automatic fire alarms and hydrants. Hoses and extinguishers will be provided at strategic points.

32. Marine Engineering Demonstration Building This building will contain testing and demonstration equipment for the training of apprentice engine room artificers and mechanics in the maintenance and repair techniques required for machinery and equipment in naval vessels. In particular, the building will contain:-

- (a) a high pressure steam boiler and associated feed pumps, condensers and a turbo-generator;
- (b) miscellaneous testing equipment to demonstrate the principles and application of steam generation and control, refrigeration and air conditioning;
- (c) a demonstration section on the internal combustion engine and containing a wide range of diesel engines and associated equipment;
- (d) a general display section containing a selection of miscellaneous equipment used in the Navy.

33. It is to be a conventional steel frame factory type building with concrete floors and brick external walls. The roof construction will allow natural lighting suitable for class room and demonstration purposes. The ceiling height will be 20 feet and a mezzanine floor, including space for instructors rooms, an applied heat laboratory, light refitting facilities and toilets, will cover part of the area. Windows will be aluminium framed and sliding doors will be of metal. Internal walls will be face brick generally with tiles on toilet walls.

34. Internal sliding fire doors will be provided as needed between the sections. Ceilings and finishes generally will be such as to prevent absorption of oil fumes which might constitute a fire hazard. Acoustic insulation of sprayed limpet asbestos will be applied in the two test cells to reduce noise levels.

35. Electricity will come by underground cable from a sub-station to be installed near the workshop. Artificial lighting will be generally from fluorescent fittings conforming to the appropriate Australian Standard Lighting Code. External lighting will be provided for safety and security.

36. An oil fired high pressure steam boiler will provide steam to a turbo-generator and other equipment used for training and test purposes. High pressure air and low pressure liquid petroleum gas will be reticulated as necessary. A 3-ton gantry crane and three hoists (two of one ton capacity and one of 30 cwt. capacity) will be provided. A unit air conditioner will serve the diesel injector test room. Hot water will be supplied to the tea room, sinks and basins in the same room.

37. Wardroom The proposed wardroom is required to provide full living accommodation for 30 officers plus messing, ante room, galley and change room facilities for a further 20 officers who will live out. The standards proposed accord with the Scales and Standards of Accommodation for the Services in Peace.

38. The sleeping wing to accommodate 24 junior and four senior officers will be a 2-storey structure connected to the single storey mess wing. The latter, besides providing kitchen and dining space, will have an ante room and bar, games room and a viewing room. The kitchen will be equipped according to the 25-50 man scale.

39. The construction and materials for the sleeping wing will be similar to the barracks blocks referred to above. The mess wing will be of steel framed construction with brick infill panels and concrete floors. The roof will be galvanised steel deck and the windows will be aluminium framed.

40. The Committee recommend the construction of the works in this reference.

ESTIMATES OF COST

41. The estimated cost of the works when referred to the Committee, was \$1,800,000 as follows:

BARRACK BLOCKS

Building work	\$756,000	
Electrical	\$76,000	
Mechanical	\$50,000	
Hydraulics	\$84,000	
Road works	\$32,000	
Furniture	<u>\$22,000</u>	\$1,020,000

MARINE ENGINEERING DEMONSTRATION BUILDING

Building works	\$180,000	
Electrical	\$28,000	
Mechanical	\$220,000	
Hydraulics	\$45,000	
Road works	<u>\$7,000</u>	\$480,000

WARDROOM

Building work	\$192,000	
Electrical	\$28,000	
Mechanical	\$28,000	
Hydraulics	\$37,000	
Road works	<u>\$15,000</u>	\$300,000
		<u>\$1,800,000</u>

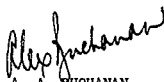
PROGRAMME

42. It is expected that after an approval to proceed is given, the preparation of working drawings and tender documents, the calling of tenders and the letting of a contract, will take about nine months. The works are expected to be completed in 18 months from that time.

RECOMMENDATIONS AND CONCLUSIONS

43. The summary of recommendations and conclusions of the Committee is set out below. Alongside each is shown the paragraph in the report to which it refers.

	<u>Paragraph</u>
1. THERE IS A NEED TO MODERNISE H.M.A.S. "NIRIMBA".	7
2. THE SITES CHOSEN FOR THE WORKS IN THIS REFERENCE ARE APPROPRIATE TO THEIR FUNCTION.	17
3. THERE IS A PRESSING NEED FOR THE BARRACKS BLOCKS.	21
4. WARDROOM ACCOMMODATION OF A BETTER STANDARD SHOULD BE BUILT.	22
5. THE NEW APPRENTICES MESS, GALLEY AND RECREATION CENTRE IS TO BE ERECTED IN THE SECOND PHASE OF THE REBUILDING PROGRAMME.	24
6. THERE IS A NEED FOR THE PROPOSED MARINE ENGINEERING DEMONSTRATION BUILDING.	25
7. THE TREATMENT ROOM IN THE PRESENT SICK BAY SHOULD BE IMPROVED.	26
8. THE COMMITTEE RECOMMEND THE CONSTRUCTION OF THE WORKS IN THIS REFERENCE.	40
9. THE ESTIMATED COST OF THE WORKS WHEN REFERRED TO THE COMMITTEE WAS \$1,800,000.	41


A. A. BUCHANAN
Chairman

Parliamentary Standing Committee
on Public Works,
Parliament House,
CANBERRA A.C.T.

11TH OCTOBER, 1966.