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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

STANDING COMMITTEE ON PUBLIC WORKS
Parliamentary Secretary

DEPARTMENT OF THE SENATE

PAPER No. 1342

DATE

PRESENTED

22 AUG 1979

Mr. G. ...
Clerk of the Senate

REPORT

relating to the proposed relocation of the

ROYAL AUSTRALIAN NAVY RESEARCH LABORATORY

(RANRL)

from

RUSHCUTTERS BAY

to the

ROYAL EDWARD VICTUALLING
YARD PREMISES

at

Pymont N.S.W.

(Fifth Report of 1979)

Michael
TABLED PAPER
22.3.79

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Parliamentary Standing Committee on Public Works

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R E P O R T

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(RANRL)

from

RUSHCUTTERS BAY

to the

ROYAL EDWARD VICTUALLING YARD

PREMISES

at

Pymont, N.S.W.

MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

(Twenty-fifth Committee)

Melville Harold Bungey, Esq., M.P. (Chairman)

Leonard Keith Johnson, Esq., M.P. (Vice-Chairman)

Senate

Senator Bernard Francis
Kilgariff
Senator Jean Isabel Melzer
Senator Harold William Young

House of Representatives

Stephen Edward Calder, Esq.,
D.F.C., M.P.
Benjamin Charles Humphreys, Esq.,
M.P.
Albert William James, Esq., M.P.
Murray Evan Sainsbury, Esq., M.P.

EXTRACT FROM
THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES
NO. 93 DATED 5 APRIL 1979

- 23 PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - ROYAL AUSTRALIAN NAVY RESEARCH LABORATORIES - RELOCATION TO PYRMONT, N.S.W.: Mr. Groom (Minister for Housing and Construction), pursuant to notice, moved -- That, in accordance with the provisions of the Public Works Committee Act 1969, the following proposed work be referred to the Parliamentary Standing Committee on Public Works for investigation and report: Royal Australian Navy Research Laboratories (RANRL) - Relocation to Pyrmont, N.S.W.

Mr. Groom presented plans in connection with the proposed work.

Question - put and passed.

WITNESSES

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

ROYAL AUSTRALIAN NAVY RESEARCH LABORATORY (RANRL) RELOCATION TO PYRMONT, NSW

R E P O R T

By resolution on 5 April 1979, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for investigation and report to the Parliament the proposed relocation of the Royal Australian Navy Research Laboratory from Rushcutters Bay to the Royal Edward Victualling Yard premises at Pyrmont, New South Wales.

The Committee has the honour to report as follows:

THE REFERENCE

1. The proposal referred to the Committee is for the relocation of the Royal Australian Navy Research Laboratory from unsatisfactory accommodation at Rushcutters Bay to the Royal Edward Victualling Yard premises at Pyrmont.
2. The works proposed include alteration and renovation of the existing eight storey building to provide office space, research laboratories and workshop space with necessary amenities areas. The work will be done in a way to preserve the historical status of the building, which is classified by the National Trust and is included in the Register of the National Estate.

3. Construction of a perimeter security fence, gate control, official government vehicle garage, drivers' room and flammable liquids store are also included in the proposal.
4. The estimated cost of the proposal when referred to the Committee was \$2.54 million at February 1979 prices.

THE COMMITTEE'S INVESTIGATION

5. The Committee received a written submission from the Department of Defence and written submissions and drawings from the Department of Housing and Construction and the Department of Administrative Services.
6. The Committee also received written submissions from the Association of Architects, Engineers, Surveyors and Draughtsmen of Australia (NSW Branch), the Professional Officers Association and the female staff of the RAN Research Laboratory. The Committee took evidence from representatives of the foregoing Departments and organisations at a public hearing held in Sydney on 15 and 16 May 1979.
7. Prior to the public hearing, the Committee inspected the existing premises of the Royal Australian Navy Research Laboratory (RANRL) and the proposed premises to be rehabilitated at the Royal Edward Victualling Yard (REVY), Pyrmont.
8. The Committee's proceedings will be printed as Minutes of Evidence.

BACKGROUND

9. History In 1956, the RAN Experimental Laboratory (RANEL) was established on the site occupied by the then HMAS Rushcutter, a naval shore establishment located on the eastern shore of Rushcutters Bay, Edgecliff, NSW.

10. RANEL was originally located in two classrooms and one office in the northern building at HMAS Rushcutter and its civilian staff of 21 was engaged principally with work related to oceanographic measurements.

11. The decade between 1958 and 1968 witnessed an expansion of the laboratory's scientific research tasks related to naval requirements, which necessitated, and was accompanied by, an increase in specialist staff.

12. In 1965, approved positions for professional and technical staff rose from 43 to 58 and RANEL was reorganised into three major scientific groups: Underwater Physics, Operations Research, and Fluid Mechanics and Underwater Weapons. An Engineering and Trials group was formed to provide support to these scientific groups.

13. In late 1968, the position of Superintendent, which had been occupied by a naval officer since RANEL's inception, passed to a senior civilian scientist.

14. The RAN Experimental Laboratory was renamed the RAN Research Laboratory (RANRL) in 1969 and the Fluid Mechanics and Underwater Weapons group was retitled Underwater Weapons group. RANRL's staff at this time numbered 64.

15. Further organisational changes were made in the early 1970s when the Underwater Physics group was split into two separate groups: Ocean Sciences and Sonar. A Mine Warfare group had also been developed.

16. In 1975, a major reorganisation within the Department of Defence resulted in RANRL being transferred from naval administration to the Defence Science and Technology Organisation, Department of Defence.

17. Present Role The present role of RANRL, which now employs a staff of 91, is to:

- undertake research into underwater acoustics, oceanography, sonar, mining and mine counter-measures;
- conduct operations research studies and analyse maritime exercises;
- provide scientific advice and assistance to the Services;
- engage in research in support of existing weapons and equipment and of possible future developments of new weapons and equipment; and
- keep abreast of local and overseas scientific and technological trends in these fields.

18. The internal organisation, which has been developed to pursue these aims, comprises:

- An Operations Research group, which determines effectiveness of sensors, weapons and tactics used in maritime warfare (excluding mine warfare); advises on ways of improving the effectiveness of current forces; and undertakes studies of the effectiveness of future sensors, weapons and tactics and of particular ships, submarines and aircraft.
- An Ocean Sciences group, which undertakes research into the basic physics of the maritime environment in areas that are likely to be of long term interest to the Navy.

- A Sonar group, which studies the behaviour of systems employing sound transmission underwater to gather information about a distant target; directs research resources towards optimising the efficiency of in-service sonars; decides the optimum characteristics of sonars to be acquired in the future; and advises on acquisition choices.
- A Mine Warfare group, which studies mines and mine countermeasures; analyses mine countermeasures exercises; develops mine countermeasures equipment and techniques, mine warfare planning techniques; and carries out surveys of the mine warfare environment in areas of interest to the Navy.
- An Engineering group, which specialises in ocean engineering and provides engineering expertise and support to the above groups.
- An Administrative section, which provides administrative support to the management and staff of RANRL.

19. Recent Research Some of the recent domestic and international research projects or experiments in which the Ocean Sciences group has participated are:

- Project SASI. A domestic study directed towards obtaining a better understanding of information propagation near the sea surface.
- Project Anzus Eddy. The study of the large ocean eddies around Australia.

- The First GARP Global Experiment. An international global atmospheric research program directed towards the study of atmospheric systems.
- Project JASIN. A joint international air sea experiment, which involved intensive investigations of oceanographic conditions on the sea and air surfaces.

20. Some other general research projects have included:

- theoretical modelling of radar and sonar propagation;
- a study of naval forces required for various aspects of maritime warfare;
- a study of tactical development associated with the new submarine fire control system;
- a study of the effect of ship motion on human performance; and
- studies to support the Navy's acquisition of replacements for the mine countermeasure vessels.

THE NEED

21. Existing Facilities The Royal Australian Navy Research Laboratory (RANRL) is presently located in premises at New Beach Road, Edgecliff, Sydney, New South Wales.

22. The property was acquired by the Commonwealth in two parcels - about 4,948 square metres was transferred at Federation whilst a further 986 square metres was acquired in 1948.

23. Erected on the land are two double storey brick and tile buildings, a double storey timber and galvanised building

and several other buildings of various types of construction all of which are used for research and associated activities. A galvanised boatshed, a slipway for small vessels and a cottage, used as a naval residence, are also situated on the land.

24. The expansion of RANRL's activities, which are expected to continue to increase, has necessarily been accompanied by additional demands for accommodation to the extent that it now occupies all available accommodation, except for the naval cottage and the RAN Sailing Association's buildings, on the site.

25. The southern building and its extension accommodates over two thirds of the staff. The building at the northern end of the site accommodates the remainder.

26. The southern building has, since the establishment of the laboratory, been subjected to makeshift and small-scale expansion which has resulted in a building layout no longer suitable for advanced research work. It is built of timber and, due to its age, it presents an appreciable fire risk.

27. The building at the northern end of the site is in good condition although it does not comply with contemporary standards of office and industrial work space.

28. Generally, the buildings are crowded and the layout of rooms, corridors and floors is impractical. Equipment installation is hampered by the existing layout and electronic security is difficult to maintain.

29. Land Tenure For a number of years formal negotiations have continued between the Commonwealth and New South Wales governments on the release of Commonwealth lands held for Defence purposes around the Sydney area, particularly harbour foreshore lands. Commonwealth/State agreement on the whole land package

transfer has recently been finalised and these arrangements have a direct bearing on the Rushcutters Bay site.

30. The site now occupied by RANRL forms one part of the Sydney Harbour foreshore lands which is among those designated to be transferred to the State. Relinquishment of the Rushcutters Bay land will require relocation of RANRL.

31. Committee's Conclusion The majority of the buildings at the RAN Research Laboratory at Rushcutters Bay are of an unsatisfactory standard and do not meet the high technical standards desirable for defence related research.

32. The Commonwealth land at Rushcutters Bay, which is one of the areas included in the exchange of Commonwealth land and State land within New South Wales, is to be transferred from the Commonwealth to the Government of New South Wales.

33. The Committee agrees that there is a need for the RAN Research Laboratory to be relocated.

34. Site Criteria In determining the selection of the site for RANRL's proposed new premises, RANRL's research role required that the following criteria be satisfactorily met:

- A berth close to the laboratory. Efficiency, safety and security of experimental equipment are assisted if a ship carrying research equipment can berth close by. At present RANRL makes frequent use of the Navy's oceanographic ships to carry equipment for experimental work.
- Access to water. Some laboratory experiments require access to a body of water larger than can be provided in special tanks.
- Accessibility to related activities. Reasonable access to Navy establishments, the airport, universities, scientific establishments, and industry and commerce is required for Service and professional/technical liaison.

- Accessibility for staff. The site should be reasonably accessible by public transport and should not be distant from built-up areas.

35. A number of sites were investigated which appeared capable of meeting most, if not all, of the above criteria and the Royal Edward Victualling Yard (REVY) at Pyrmont was subsequently selected having regard to the construction costs of a new laboratory which, excluding land, landscaping and external engineering services, was estimated to be of the order of \$4.5 million; accessibility to the Fleet; and the availability of a deep water berth for a research ship adjacent to the laboratory.

36. The Committee noted the results of a RANRL staff survey which indicated that of the sites available the most popular choice was REVY, subject to the adequate provision of car parking facilities.

37. Committee's Conclusion The best available site which meets the Defence criteria is the Royal Edward Victualling Yard at Pyrmont, N.S.W.

THE SITE

38. The Royal Edward Victualling Yard (REVY) REVY is a Naval Stores depot occupying an area of about 0.6 ha and is located on the northern side of Jones Bay Road, Pyrmont, New South Wales.

39. Royal permission to attach the name of King Edward VII to the establishment was given on 22 January 1907.

40. The property was transferred to the Commonwealth in two parcels of approximately 1,252.25 square metres and 4,995.5 square metres, and it was agreed at the time (1907 and 1928 respectively) that both parcels be treated as Transferred Properties. These two parcels of land, augmented slightly by some minor boundary adjustments in 1963, comprise the present Commonwealth holding.

41. Location The site is about 2 km from Sydney Town Hall Station which provides access to the suburban rail network and about 0.8 km distant from Union Street and Pyrmont Bridge Road along which limited government bus services to and from the city are routed. Entrance to the site, which is bound by Jones Bay on the west and the Darling Island Railway Lands on the east, is from Jones Bay Road.

42. The Committee noted, and supports, the concern held by the staff of RANRL, particularly the female staff, regarding the risk to personal safety which may exist in the general waterfront area, and in particular the 0.8 km distance required to be traversed by bus commuters during the late afternoon and at night.

43. The NSW Maritime Services Board owns the land adjoining the northern boundary, and a strip of land 8 metres wide through the Railway Yards along the eastern boundary giving access to land at the northern end of the site.

44. The site proposed for RANRL is the northern most section of the site comprising about 2,238 square metres. This area is level, roughly rectangular in shape and possesses a water frontage.

45. The remainder of the REVY site will continue to be used as a naval stores storage and distribution facility for the time being and access to RANRL will be available through this area.

46. It is proposed that the site to be occupied exclusively by RANRL will be fenced and secured from the naval stores activities.

47. Zoning Under the City of Sydney Town Planning Scheme the land is zoned "Special Uses (Port Purposes)". Much of the surrounding land is similarly zoned with large areas also zoned as "Industrial" and "Special Uses (Railway)".

48. Environmental Impact and Local Authority Liaison The proposal has been examined and cleared by the then Department of Environment, Housing and Community Development in accordance with the provisions of the Environment Protection (Impact of Proposals) Act 1974.

49. The proposal has been cleared to proceed in that it has no significant environmental impact. A Certificate of Compliance to this effect was issued on 19 April 1978.

50. Discussions have taken place with the Sydney City Council and the proposals are in compliance with the Town and Country Planning - City of Sydney Planning Scheme Ordinance issued in pursuance of the Local Government Act 1919 : Part XIIA gazetted 16 July 1971, NSW Government Gazette No 78 of 1971 and the Ultimo/Pyrmont/Haymarket Action Plan (Interim Development Order pending).

51. The following authorities were also consulted during the design development of the project to ensure that all planning aspects were compatible with their respective developments in the area:

- (a) Australian Heritage Commission
- (b) NSW Planning and Environment Commission
- (c) Maritime Services Board

- (d) NSW Public Transport Commission
- (e) NSW Board of Fire Commissioners
- (f) Sydney County Council (Electricity Authority)
- (g) Metropolitan Water Sewerage and Drainage Board

52. Committee's Conclusion The site selected is suitable.

THE PROPOSAL

53. The proposal concerns the relocation of the Royal Australian Navy Research Laboratory from unsatisfactory accommodation at Rushcutters Bay to premises to be rehabilitated within the Royal Edward Victualling Yard at Pyrmont.

54. The works proposed include the alteration and renovation of the existing eight storey, Naval Stores, building at Pyrmont to provide office space, research laboratories and workshop space with necessary amenities areas. Also included in the proposal are: the construction of a perimeter security fence, gate control, official government vehicle garage, drivers' room and flammable liquids store, the removal of wooden and stucco building adjacent to the Naval Stores building, the removal of a covered shed to the north and adjacent to the existing police office, and the refurbishment of an open landing shed.

55. The work will be done in a way to preserve the historical status of the Naval Stores building, which has been classified by the National Trust and included in the Register of the National Estate compiled by the Australian Heritage Commission.

56. Existing Accommodation at Pyrmont The site contains three multi-storey warehouse buildings: a Main Warehouse

comprising two multi-storey buildings designated Store A and Store B on the site plan, and the Naval Stores building designated Site C and Site D as shown in the site plan at the end of this report.

57. A two-storey weatherboard and stucco building, a single storey brick gatehouse, and a fibrous asbestos cement garage structure also occupy the REVY site.

58. The Main Warehouse, which is used and will continue to be used for the time being as part of the Navy's storage and distribution system for naval stores, is a patterned red brick warehouse designed about 1910 comprising one five-storey wing and one six-storey wing joined by a water tower of pseudo Romanesque design. The building is roofed with Marseilles patterned tiles.

59. The Naval Stores building is eight storeys in height, constructed with a concrete encased steel frame, concrete floors and roof, and loadbearing external brick walls. Footings are supported on timber piles, which have been tested recently by the Forestry Commission of New South Wales and found to be in good condition. This building is clad in dark red bricks with Flemish gabled parapets and stone base. Built about 1915 to the NSW Government Architect's design, this is a good example of multi-level dockside warehouse architecture, which is rare in Australia.

60. The elevations incorporate arched window openings, cantilevered steel fire stairs and framed asbestos cement lined lift towers.

61. The proposed relocation and rehabilitation project directly affects the Naval Stores building.

62. National Trust Listing The Main Warehouse and Naval Store buildings are classified by the National Trust of Australia

(NSW). This listing includes those parts of the physical environment both natural and man made which in the Trust's view are essential to the heritage of Australia and which must be preserved.

63. Proposed Use of the Naval Stores Building The functions to be housed in the renovated building include:

- research activities in the fields of sonar detection and underwater acoustics, mine warfare and countermeasures, oceanography, and exercise analysis;
- engineering services to support the research work including workshops and maintenance facilities; and
- administrative staff records.

64. Planning and Design The overall planning and design objective is to provide the required accommodation to satisfy the various functional activities and special requirements of RANRL in an efficient and economical manner while retaining the external character of the building as recommended by the Australian Heritage Commission.

65. The functional research areas, engineering workshops and back-up facilities have been designed to conform with the special requirements of either existing equipment or equipment that has been planned for purchase in the future.

66. Some individual offices are required to ensure the confidentiality necessary in the type of work carried out within the establishment. Generally the allocation of space where multi-personnel offices are provided is in conformity with the Department of Administrative Services' "New Guidelines for Space Allocation in Commonwealth Office Buildings", 1978.

67. The principal characteristics of the facility, which are required for RANRL's research role, are:

- Adequate Buildings and Facilities. Approximately 4,100 square metres of office, workshop, laboratory and administrative space is required while additional space to afford an eventual expansion to 4,900 square metres is desirable.
- Physical Security. Appropriate control of access, surveillance and complete security are required.
- Adaptability and Future Expansion. Reasonable scope for adapting and expanding facilities is desirable.

68. Adequate Buildings and Facilities The Committee was informed by the Department of Defence that insufficient space was available in the rehabilitated Naval Stores building to accommodate 700 square metres of stores presently stored at Rydalmere.

69. It was stated that the efficiency of RANRL would be improved if these stores could be transferred to the Pyrmont site. Such action is precluded in the immediate future however, as it is the Navy's firm intention to continue its naval stores activities in the Main Warehouse at the Pyrmont site until 1983.

70. Adaptability and Future Expansion The Committee was informed by the Department of Defence that the Naval Stores building will not be large enough to accommodate RANRL's long term requirements and further, that it would be difficult for RANRL to operate with any sort of efficiency if RANRL was required to co-exist with the naval stores operations.

HISTORICAL CONSIDERATIONS

71. The Department of Defence has been informed that the Australian Heritage Commission does not object to the re-habilitation of the building and its use as a naval laboratory, provided that the following conditions are complied with:

- preservation of the stairways, cable storage bins and external hoist is ensured;
- electrical and mechanical work is to fit in and be unobtrusive or concealed wherever possible;
- the external features of the four lift motor rooms on the roof of the building are to be retained;
- any reclamation of Jones Bay including that which could affect the building piles will be raised with the Maritime Services Board; and
- the wharf landing shelter structure is to be retained.

72. These conditions have been accepted and the total estimated costs attributable to the Australian Heritage Commission's recommendations are about \$11,000.

73. Potential Uses of the Building The listing of the Naval Stores building by both the Australian Heritage Commission and the National Trust imposes considerable constraints upon the Commonwealth's use of the building and within these constraints the following alternatives were considered:

- Retain the building for its original purpose. As the naval stores activities are being transferred progressively to the Naval Stores depot at Zetland and there is no known requirement for further storage space at REVY, it is apparent that the

building structure has outlived its designed function.

- Demolish the building and apply the site to another use. In view of the restrictions placed on this course of action by the building's historic significance, demolition by the Commonwealth is, in the absence of exceptional circumstances, effectively precluded.
- Adapt the building to a new use.

74. The Department of Housing and Construction has calculated that the cost of constructing purpose-built accommodation for RANRL offering similar facilities as allowed for at Pyrmont would be in the order of \$4.5 million excluding land and other ancillary costs.

75. It is clear that it is substantially cheaper to convert the existing building (at an estimated cost of \$2.54m) than to construct a new one and that the difference in cost could not be offset by the sale of the property, the current market value of which was \$265,000 at February 1979 prices.

76. Committee's Conclusion The adaption of the existing eight-storey Naval Stores building within the Royal Edward Victualling Yard for use by RANRL offers a satisfactory and cost effective solution to the Defence need. It also provides an opportunity for the Commonwealth to discharge its obligations with regard to the National Estate by utilising a property which otherwise would be difficult to use fully and efficiently.

CONSTRUCTION

77. External Treatment Close liaison with the Australian Heritage Commission has taken place with respect to the

restoration of the building facades. Some remedial work will be carried out to brickwork at roof level and where brick facing has been affected by corroding steel lintels.

78. Existing windows, fire escape stairs and loading platforms will be refurbished and brought to their original state.

79. In respect of the Heritage Commission's wishes, the existing wharfside crane attached to the western facade of the Naval Stores building will also be refurbished as a piece of early Australian machinery of historical value. The crane is not required to be operative however and this will allow the removal of a corrugated iron shed housing crane operation gear.

80. Openings behind loading platforms are presently fitted with roller shutter doors. These will be removed and openings tastefully treated by installation of new windows with tinted glass giving the appearance of voids and thus retaining the intent of the original design whilst satisfying the requirements of the user.

81. All windows shall be fitted with venetian blinds internally.

82. As the existing roof covering and flashings are in poor condition, allowing water penetration to the top floor, the covering will be removed and a new topping, flashings and membrane provided.

83. Internal Treatment In order to retain the character of the building, all internal walls, columns and ceilings will be sandblasted. Walls will remain as face brick finish; columns and ceilings will be painted. As there is a strong ceiling pattern formed by main and secondary floor beams, new partitions will be positioned, as far as possible, to coincide with the

structural grid. Internal partitions throughout the building will be steel stud with plasterboard lining except for rendered and tiled brickwork to "wet areas". Suspended ceilings will be provided in toilet areas, conference room, lecture theatre, areas where partitions do not coincide with the building module and in corridors for concealing return air ducts. Floor finishes will consist of carpet to offices and corridors and sheet vinyl to laboratories with cement rendered finish to workshop areas.

84. Amenities Staff amenities will be provided within the building generally in compliance with "Standards of Amenities for Staff in Commonwealth Offices" published by the office of the Public Service Board 1968.

85. Toilets will be provided at each floor level in accordance with the above standards.

86. A central tea room (staff facilities) will be located on the 5th floor level.

87. A small tea area will be provided to service the lecture theatre during seminars and other similar activities.

88. A recreation area will be provided on the 4th floor level for active recreation. Sufficient space will normally be available in the staff tea room on the 5th level for general recreation.

89. Engineering Services Air conditioning is proposed throughout the building with the exception of ground floor workshops and mezzanine level. Justification for this is based on the need for security of the building (permitting the windows to be permanently locked except as required for window cleaning) and to provide environmental control for efficient operation of computers, tape storage etc, and the need to prevent equipment being contaminated by dust generated in the adjacent railway

yards. Air conditioning package units will be provided at the ground floor level to the PABX and to the functional research area housing laminar flow cabinets.

90. Mechanical Ventilation The kitchen to the staff tea room, internal rooms and toilets will be provided with mechanical ventilation.

91. Miscellaneous Mechanical Services Miscellaneous mechanical services and equipment will consist of the following:

- Kitchen, level 5 - hydrotherm, stove, pie warmer; tea room, level 7 - hydrotherm;
- hot water supply;
- compressed air systems;
- spray paint booth;
- cranes and hoists.

92. Lifts Two 8-person lifts will be provided in the proposed centrally formed lift well and one new goods lift will operate in one of the four existing lift shafts. Shafts not used will become part of the general floor area. Lift machine rooms on the roof will be reconstructed in conformity with the original design as required by the Australian Heritage Commission. Those not used as lift machine rooms will be used as cooling towers and storage space. To avoid the cost of providing lift over-runs beneath the multi-piled ground floor, the passenger lifts are entered at mezzanine level.

93. Electrical Single phase and 3 phase supplies will be provided to all lighting, power points and equipment. Electrical screening has been provided to computer rooms and screened rooms where required for security.

94. Wharf and yard lighting and other security measures will be installed.

95. Fire Detection A thermal fire alarm detection system will be provided throughout the building.

96. Hydraulics New sanitary fittings will be connected to the existing sewer available within the site.

97. Trade waste from laboratories is minimal and discussions with the Metropolitan Water Sewerage and Drainage Board have indicated that an interceptor trap with manual Ph dosing prior to entering the sewer system will satisfy the Board's requirements.

98. Fire Suppression System Two hydrants and hose reels are located on each wing of each floor and are supplied by mains water through a booster pump located in the existing pump house between Stores 'A' and 'B'. Fire extinguishers will also be provided where required.

99. Security System External doors and other nominated doors shall be protected by a security alarm system.

100. Landscaping The area will be enhanced by some landscaping in the form of small trees and shrubs in large tubs to soften the effect of the security fence across the site.

101. Committee's Conclusion The Committee recommends the proposed alteration and renovation work as detailed in this reference.

GENERAL OBSERVATIONS

102. The Committee noted that the proposal contained no permanent provision for car parking or for berthing services for research or naval ships alongside. The provision of such facilities was determined by the Department of Defence to be part of the longer term development of the site.

103. Car Parking Shortly before the Committee's hearings commenced, discussions by the Department of Administrative Services on behalf of the Department of Defence were commenced with the NSW Maritime Services Board (MSB) and these negotiations sought to provide a temporary solution, until the relocation of the naval stores activities from Pyrmont to Zetland, for the provision of car parking.

104. The temporary solution being pursued is for the provision of car parking through a combination of off-street parking and the leasing of MSB land, which adjoins the Pyrmont site. Such a scheme, if agreed by the MSB, is estimated to cost \$50,000 exclusive of leasing costs, and will provide 30 car spaces on the cleared MSB land.

105. Off-street parking in the Pyrmont area, which it is intended should take the overflow of RANRL vehicles, poses a number of difficulties: the presence of passenger ships, and the number and types of other vessels berthed in the vicinity all have an effect, and at times a pronounced effect, on the availability of parking space; on occasions, vehicles in the area have been subjected to acts of vandalism; and while parking is 'unrestricted, it is not known whether metering will be introduced in the future.

106. No regular public rail, road or water transport system is available which could be expected to ease the demands of those employees who intend to commute by car to work.

107. The government bus services to and from the Pyrmont site have been scheduled primarily to meet the demands of the area's industrial workforce and are restricted to two limited periods, namely, 6.38 - 7.23 a.m. and 4.15 - 4.30 p.m. The existing timetable severely limits the extent to which the RANRL staff would be able to participate in the flexible working hours system, a condition of employment which staff members presently enjoy.

108. A recent survey among RANRL staff indicated that over a quarter of the staff, a majority of whom were highly skilled and professional staff, will seek employment elsewhere if RANRL moves

to Pyrmont without a solution to the car parking problem. If private car parking is provided only 9% of staff, which approximates the annual turnover rate, indicated their intention to leave.

109. A permanent solution for car parking to meet RANRL's requirements appears to depend upon the relocation of the naval stores activities to Zetland, which is not scheduled until 1983.

110. Some analysis carried out by the Department of Housing and Construction indicates that 34 car spaces could be provided for an (April 1977) estimated cost of \$149,000. An additional 27 spaces would be available at minimal cost once the naval stores activities have been relocated.

111. The Department of Defence stated that no decision had been made regarding the permanent solution of car parking due to the cost factor, and the doubt surrounding the future use of the Main Warehouse once the naval stores activities have been relocated.

112. The Committee considers that any additional capital outlay involved in the provision of permanent car space would, in the long term, be more than offset by the direct and indirect costs incurred in the training of replacement staff and the recruitment of skilled and professional staff to a location with little or no permanent car parking facilities.

113. Berthing The proposal contains no provision for full berthing services for ships alongside, or additional facilities, including parking, for members of the research vessels or warships which will berth alongside the Pyrmont site for periods of up to one week.

114. The Department of Defence recognised that such services which presently exist were not entirely adequate but it was the Department's policy to provide a wide range of services at a later date. This aspect had, however, been raised only briefly with the Department of Housing and Construction.

115. The Committee noted that with the planned increased activity occasioned by berthing at the Pyrmont site, and the addition of RANRL staff, the physical security which the naval stores activities presently enjoys may be lessened if the two establishments co-exist for any lengthy period.

116. Objections to the Proposed Arrangements The present proposal is incomplete in that it does not ensure, in the immediate or the long term an efficient solution to the pursuit of defence related research.

117. The proposal should seek to incorporate all those inter-related features which are fundamental to RANRL's efficient operations namely, adequate space for present activities, adaptability and future expansion, car parking and berthing facilities.

118. The need to demonstrate the Commonwealth's intention to satisfy the conditions of the land exchange agreement as expeditiously as possible is agreed. Such action, however, should not be initiated until RANRL's immediate and long term requirements can be efficiently and effectively met at the alternative site.

119. Committee's Conclusion The Research Laboratory's immediate and long term requirements should be satisfactorily resolved prior to its relocation following the completion of the work in late 1981. Every effort should be made by the Department of Defence to advance the date for the transfer of the naval stores from REVY to Zetland before the relocation of RANRL.

ESTIMATE OF COST

120. The estimated cost of the work when referred to the Committee at February 1979 prices was \$2.54 million made up as follows:

	\$
Building works	1,148,000
Mechanical services	879,000
Electrical services	306,000
Civil works and services	207,000
	2,540,000

PROGRAM

121. The Department of Defence plans to vacate the existing Rushcutters Bay site in late 1981 or early 1982. Subject to the availability of funds, it is planned that building work should start in early 1980 with a completion date late in 1981.

RECOMMENDATIONS AND CONCLUSIONS

122. 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.

Paragraph

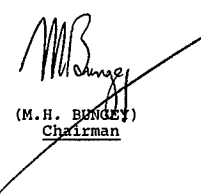
1. THE MAJORITY OF THE BUILDINGS AT THE RAN RESEARCH LABORATORY AT RUSHCUTTERS BAY ARE OF AN UNSATISFACTORY STANDARD AND DO NOT MEET THE HIGH TECHNICAL STANDARD DESIRABLE FOR DEFENCE RELATED RESEARCH. 31
2. THE COMMONWEALTH LAND AT RUSHCUTTERS BAY, WHICH IS ONE OF THE AREAS INCLUDED IN THE EXCHANGE OF COMMONWEALTH LAND AND STATE LAND WITHIN NEW SOUTH WALES, IS TO BE TRANSFERRED FROM THE COMMONWEALTH TO THE GOVERNMENT OF NEW SOUTH WALES. 32

Paragraph

3. THE COMMITTEE AGREES THAT THERE IS A
NEED FOR THE RAN RESEARCH LABORATORY
TO BE RELOCATED. 33
4. THE BEST AVAILABLE SITE WHICH MEETS THE
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5. THE SITE SELECTED IS SUITABLE. 52
6. THE ADAPTION OF THE EXISTING EIGHT-STOREY
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8. THE COMMITTEE RECOMMENDS THE PROPOSED
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9. THE RESEARCH LABORATORY'S IMMEDIATE
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DATE FOR THE TRANSFER OF THE NAVAL
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RELOCATION OF RANRL. 119

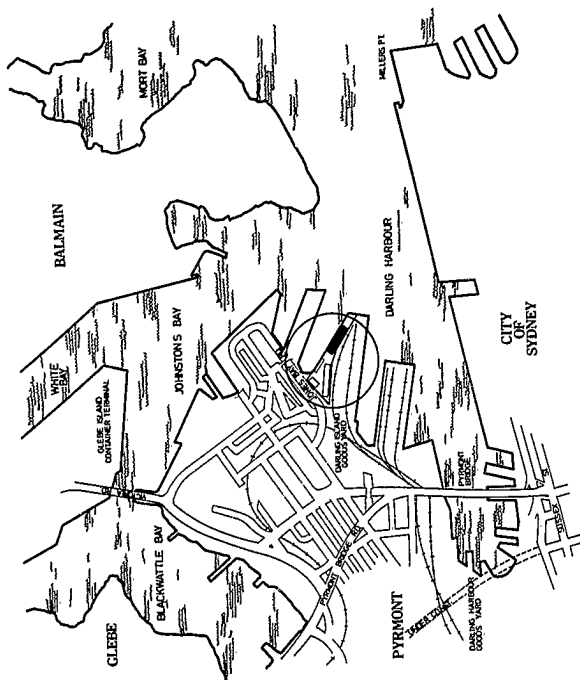
Paragraph

11. THE ESTIMATED COST OF THE WORK WHEN
REFERRED TO THE COMMITTEE WAS \$2.54
MILLION AT FEBRUARY 1979 PRICES. 120


(M.H. BUNDLEY)
Chairman

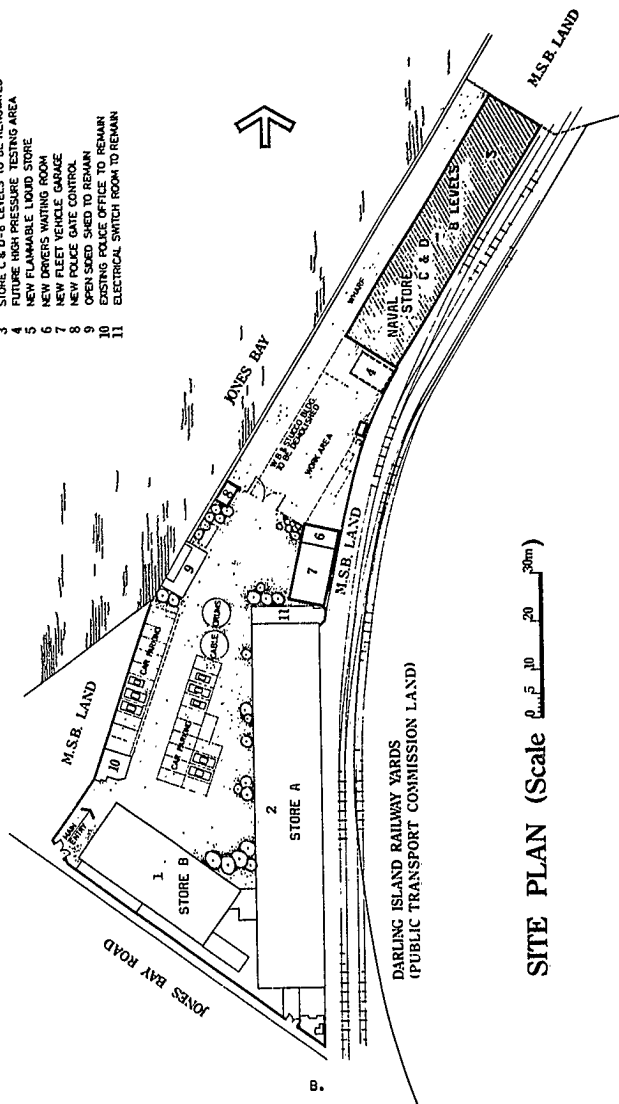
Parliamentary Standing Committee on Public Works,
Parliament House,
CANBERRA, A.C.T.

5 July 1979.

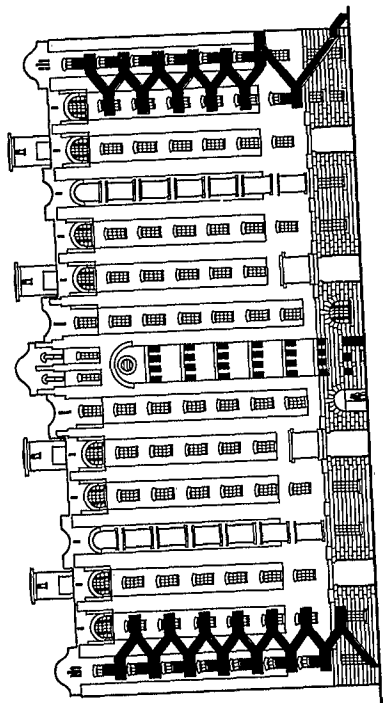


LOCALITY PLAN (Scale 0 500m)

- 1 STORE A
- 2 STORE B
- 3 STORE C & D - 8 LEVELS TO BE RENOVATED
- 4 FUTURE HIGH PRESSURE TESTING AREA
- 5 NEW FLAMMABLE LIQUID STORE
- 6 NEW DRIVERS WAITING ROOM
- 7 NEW FLEET VEHICLE GARAGE
- 8 NEW POLICE GATE CONTROL
- 9 OPEN SOLED SHED TO REMAIN
- 10 EXISTING POLICE OFFICE TO REMAIN
- 11 ELECTRICAL SWITCH ROOM TO REMAIN



SITE PLAN (Scale 0 5 10 20 30m)



NAVAL STORE - WEST ELEVATION