



Parliamentary Standing Committee on Public Works

21 JUN 1844

### REPORT

relating to the

### RAAF BASE RICHMOND REPLACEMENT MEDICAL CENTRE

(Twelfth Report of 1995)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA
1995

# The Parliament of the Commonwealth of Australia Parliamentary Standing Committee on Public Works

Report Relating to the

## RAAF Base Richmond Replacement Medical Centre

(Twelfth Report of 1995)

#### CONTENTS

	Page
Members of the 31st Parliamentary Standing Committee on Public Works	v
Extract from the Votes and Proceedings of the House of Representatives of 9 February 1995	vi
	Paragraph
THE REFERENCE	1
THE COMMITTEE'S INVESTIGATION	3
BACKGROUND	6
Early Development Recent Developments Current Organisation Committee's Conclusion	6 10 12 15
THE NEED	16
History of Medical Facilities at RAAF Base Richmond Role of RAAF Medical Facilities Comparison of Civilian and RAAF Medical Functions Committee's Conclusion Existing Facilities Benefits and Savings Committee's Conclusion	16 17 23 29 30 36
THE PROPOSAL	41
Site Layout Considerations Scope of Required Facility Design Philosophy Master Planning	41 45 48 50

Energy Efficiency Security Manpower Implications Construction Work Force	51 53 54 58
ENVIRONMENTAL AND HERITAGE CONSIDERATIONS	59
Committee's Recommendation Disposal of Contaminated Materials	61 62
ECONOMIC AND SOCIAL EFFECTS	63
CONSULTATION	65
FUTURE WORKS	66
CONSTRUCTION PROGRAM	68
Committee's Recommendation	70
COST ESTIMATE	71
Committee's Recommendation	72
CONCLUSIONS AND RECOMMENDATIONS	73
APPENDIXES	
Appendix A - List of Witnesses	A-1
Appendix B - Construction Details B-1	to B-14
Appendix C - Project Drawings C-	1 to C-6

# MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

(Thirty-First Committee)

Mr Colin Hollis MP (Chair) Senator Paul Henry Calvert (Vice-Chair)

Senate House of Representatives

Senator Bryant Robert Burns
Senator Shayne Michael Murphy\*
Mr Raymond Allen Braithwaite MP
Mr Russell Neville Gorman MP
Mr Robert George Halverson OBE MP
Hon Benjamin Charles Humphreys MP

\* replaced Senator John Devereux on 10 February 1995

Committee Secretary:

Peter Roberts

Inquiry Secretary:

Denise Denahy

Secretarial Support:

Mahesh Wijeratne Belynda Zolotto

# EXTRACT FROM THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES

No. 121 dated Thursday, 9 February 1995

4 PUBLIC WORKS - PARLIAMENTARY STANDING COMMITTEE - REFERENCE OF WORK - RAAF BASE RICHMOND REPLACEMENT MEDICAL CENTRE

Ms McHugh (Minister for Consumer Affairs), for Mr Walker (Minister for Administrative Services), 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 consideration and report: RAAF Base Richmond replacement medical centre.

Question - put and passed.

#### PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

#### RAAF BASE RICHMOND REPLACEMENT MEDICAL CENTRE

By resolution on 9 February 1995, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report to Parliament the following proposal: RAAF Base Richmond replacement medical centre.

#### THE REFERENCE

- This proposal is for the provision of a replacement medical centre and associated medical facilities at RAAF Base Richmond, NSW. The proposed works consist of:
  - . a medical centre complex
  - . an operational health support and training facility
  - . associated engineering services.
- 2. The estimated cost of the project when referred to the Committee was \$11.4m at July 1993 prices.

#### THE COMMITTEE'S INVESTIGATION

- 3. The Committee received a written submission from the Department of Defence and took evidence from its representatives at a public hearing at RAAF Richmond on 27 April 1995. Evidence was also taken from Ms M Deahm MP, the Federal Member for Macquarie. Prior to the public hearing the Committee inspected existing facilities at RAAF Richmond and the sites for the proposed works.
- 4. Written submissions regarding the project were also received from the following organisations and are incorporated in the Committee's proceedings:
  - . Environment Protection Agency
  - . New South Wales Fire Brigades

- . Commonwealth Department of Primary Industries and Energy
- . Hawkesbury City Council
- . Australian Heritage Commission
- 5. A list of the witnesses who gave evidence at the public hearing is at Appendix A. The Committee's proceedings will be printed as Minutes of Evidence.

#### BACKGROUND

#### Early Development

- RAAF Base Richmond is located approximately 50 kilometres west-northwest of Sydney, between the towns of Richmond and Windsor and covers an area of 394 hectares.
- 7. In July 1921 the Air Board settled on Richmond as the location for the RAAF's airfield to serve the Sydney area. By 1923 the Commonwealth was in the process of acquiring the airfield and its buildings for a price of £9318. Beginning in October 1924 the Committee examined proposals for Richmond to be established as 'the RAAF's No 2 Station'. A five-year program called for the construction of brick stores, hangars and guardroom, and iron-roofed timber buildings for use as headquarters, cottages, barracks, and recreational mess accommodation, all at an estimated cost of £177 400.
- 8. The first RAAF squadron to be located at Richmond was No 3 (Composite) Squadron in July 1925.
- 9. Following the completion of the initial development works for the Base, other works, such as the construction of new Officers' and Sergeants' Messes in 1937, were progressively undertaken commensurate with the expansion of the RAAF and the greater use being made of RAAF Base Richmond. By the outbreak of the Second World War four RAAF flying squadrons were based at Richmond, together with an aircraft depot. Two additional flying squadrons were formed there shortly after the outbreak of the Second World War. During the war Richmond developed into a base of major importance in Australia's defence, albeit that most of the facilities built in that period were of temporary construction.

#### Recent Developments

- 10. Since the Second World War, large scale development and expansion of the infrastructure at RAAF Base Richmond has continued. Most of the temporary Second World War buildings have been demolished or replaced with permanent structures, and many other new facilities have been built to meet changing operational requirements. Today Richmond is a large composite base accommodating the RAAF's major airlift squadrons, engineering, training, logistical support units and a medical care unit.
- 11. More recent Committee hearings of proposals to develop the Base include:
  - . 25 August 1980 Aircraft Corrosion Control Facility (10th Report of 1980)
  - . 8 April 1987 Air Movements Cargo Hangar (4th Report of 1987)
  - . 2 September 1992 Equipment storage facilities associated with the Defence Logistics Redevelopment Project Air Force aspects (7th Report of 1992)

#### **Current Organisation**

- 12. With the rationalisation of the Australian Defence Force(ADF) following the Force Structure Review in 1991, there was a reorganisation of some units based at Richmond. In addition, No 38 Squadron (equipped with Caribou aircraft) was relocated to Amberley and No 176 Air Dispatch Squadron (Army) was relocated entirely to Richmond. Richmond still remains the main base for the RAAF Airlift Group.
- 13. Units currently located at Richmond are:
  - . Airlift Group
  - . 303 Air Base Wing (which includes the medical centre)
  - . 503 Wing
  - . Air Transportable Telecommunications Unit
  - . No 22 (Reserve) Squadron
  - . Air Command Band

- . 176 Air Dispatch Squadron Army
- . Naos 15 and 68 Ground Liaison Section Army
- . USAF Air Mobility Command Detachment.
- 14. At the public hearing the Committee raised with Defence the question of the long term future of RAAF Richmond and also the impact of the development of the Badgerys Creek Airport on flying operations at RAAF Richmond. Defence assured the Committee that the RAAF will occupy the base until at least the year 2015. The development of Badgerys Creek will require careful liaison between the RAAF and the Civil Aviation Authority in relation to airspace management. Defence believes that the impact on flying operations from RAAF Richmond will be manageable.

#### Committee's Conclusion

15. The Committee is satisfied that on the evidence presented by the Department of Defence that RAAF Base Richmond will continue to be occupied by the RAAF until at least the year 2015.

#### THE NEED

#### History of Medical Facilities at RAAF Base Richmond

16. When the Base was first developed a medical section was incorporated as a flight of Richmond's Base Squadron. In the Second World War the medical facility was expanded and No 3 RAAF Hospital was formed as a discrete element. It provided medical support to Richmond as well as providing hospital treatment for other externally based RAAF establishments. In 1991 rationalisation of ADF medical facilities dictated that No 3 RAAF Hospital would provide medical treatment on a tri-service basis to all ADF units within proximity of Richmond, in the same way as No 6 RAAF Hospital provides hospital support to Melbourne based ADF units.

#### Role of RAAF Medical Facilities

17. The ADF provides medical and dental treatment to serving members with the intention of maintaining the highest standards of medical, dental and physical fitness. Such treatment is provided both in the deployed and base environments.

- 18. "The Defence of Australia 1987" required the ADF to have capabilities to support operations in a contingency situation. These included medical capabilities. In a report dated 30 November 1990, a working party formed to review the ADF's policy for the provision of hospital care concluded, inter alia, that Nos 3 and 6 RAAF Hospitals would provide the RAAF's Air Transportable Hospitals for deployment treatment, as well as providing base medical treatment, to ensure that Service personnel remain fit and available for operational duties. Both medical units serve all ADF personnel in their defined medical catchment areas.
- 19. The Defence White Paper 1994, "Defending Australia", is not at variance in regard to the requirement for medical capabilities for the ADF in the context of supporting self reliance, global security, and the civilian community.
- 20. As No 3 RAAF Hospital is located on the ADF's major air transport base, it has the added responsibility for aeromedical evacuations and casualty staging. Also, aeromedical evacuation is performed as required and approved against civilian requests.
- 21. The roles of RAAF Base Richmond's medical centre include the following:
  - . medical treatment services
  - fitness assessment
  - . operational health support
  - . aviation medicine
  - aeromedical evacuation
  - . environmental health
  - disaster health services
  - . health promotion
  - . medical logistics
  - . diagnostic and screening services.

22. The defined medical catchment area encompasses the following establishments:

Establishment	Personnel
RAAF Base Richmond RAAF Support Unit Glenbrook RAAF Telecommunication Unit Sydney No 1 Central Ammunition Depot Kingswood No 2 Stores Depot Auburn	2320 331 203 247 67
Total	3168

#### Comparison of Civilian and RAAF Medical Functions

- 23. Major features of the medical centre are that it provides the ADF with a unique aviation medicine service, has air transportable medical equipment, and its staff are trained (and exercised) to deploy and operate anywhere in Australia or overseas as a complete air transportable hospital. The staff (and allocated Reservists) receive specialised medical training as well as the normal range of military training to allow them to provide health services in the field under operational conditions. In addition, the RAAF has a high emphasis on health promotion rather than solely providing treatment services, and the medical centre is structured for this role. Civilian hospitals are not structured to fulfil specific military roles and commitments.
- 24. Most daily activities and procedures performed in RAAF medical facilities are comparable to those performed in any health facility. This enables uniformed medical personnel to maintain their basic and advanced skills in the provision of health care. These skills are then assimilated into the aviation and military operational environments. Maintenance of health support services is enhanced by a uniformed presence to maintain professional continuity with an appreciation of the many facets of the military environment.
- 25. With respect to medical treatment only, the differences between the functions of a military health centre and a civilian hospital or medical centre are less distinct. To ascertain cost differentials, Defence completed a cost benefit analysis to compare the cost of providing medical services using military and civilian hospitals. Based on statistics for RAAF Base Richmond's medical centre, using military facilities is cost effective.
- 26. Thus, the medical centre at RAAF Base Richmond, whilst providing the ADF with a needed medical operational capability, also provides a

comprehensive and cost effective medical care service to home based Defence personnel.

- 27. At the public hearing the Committee sought advice from Defence regarding what appeared to be a high usage rate of medical facilities at RAAF Richmond. Defence advised that the usage rate resulted from a combination of factors which stemmed from the fact that essentially military activities or significantly different from civilian life. Service personnel are required to present early with their conditions so that their fitness for operational service can be maintained. Defence does a lot of preventive and pre-emptive treatment which is quite a different philosophy from the general community. Because of the fundamental requirement that Service personnel become physically fit a great deal of the outpatient usage results from sporting injuries. Also as a significant number of single people live on base in barrack accommodation there is a high incidence of common colds and upper respiratory tract infections.
- 28. The outpatients statistics include immunisations for which there is a high demand at RAAF Richmond as it is the third busiest airport in Australia for international movements. Service in Cambodia for example required some 12 immunisations not all of which could be given together. In addition aircrew require hypnotic medication to allow them to sleep in adverse circumstances.

#### Committee's Conclusion

29. There is a need for a medical centre at RAAF Base Richmond to provide a high standard of medical treatment for Australian Defence Force personnel and also to support operations in contingency situations.

#### Existing Facilities

30. The medical centre currently occupies a conglomerate of interlinked buildings in the centre of the Base. The main building is of brick construction dating from the mid 1930s and houses an operating theatre, administrative areas and several wards. Ancillary buildings are of timber framed asbestos clad construction with galvanised iron roofs dating from the early 1940s, and are used for wards and ancillary medical functions. The buildings themselves are highly inefficient from the aspect of energy use. The external passageways linking the buildings are exposed to the elements and add to the dysfunction of most activities. Their condition can generally be described as being decrepit an incompatible with the performance of contemporary medical procedures. They present a high maintenance commitment, present a fire safety problem and, despite the best endeavours of the Base medical staff, compliance with statutory requirements for Occupational Health and Safety (OH&S) is questionable.

- 31. In the 1980s the RAAF embarked on a program to rehabilitate and educate members who abused alcohol and, to that end, established an alcohol rehabilitation and education clinic at Richmond. This was housed at a separate location to the medical centre, in defunct wartime huts previously used for officers' accommodation. The program featured members' dependents residing with the member undergoing treatment and providing support.
- 32. These facilities were sub standard and when land east of Percival Street (see location map at Appendix C) was acquired in the 1980s an old, but substantial, farm cottage on the site was converted and supplemented with transportable buildings. These facilities, although not entirely of a permanent nature, are deemed to be adequate for their purpose and replacement is not contemplated. There are advantages in having the alcohol rehabilitation education activities performed away from the medical centre itself, but sufficiently proximate to facilitate management of its activities.
- 33. The dental section was previously housed in a wartime timber hut next to the present medical centre. It too was inappropriate for its function and of insufficient size to house the required number of surgeries. In 1989 a new facility was constructed for about \$1.5m on a site on the newly acquired land east of Percival Street, and in a location reserved for the development of new medical facilities.
- 34. The option of retaining the main brick structure as a core for the medical centre complex, rather than constructing a replacement facility, was discounted for the following reasons:
  - the building would have to be gutted and thus unlikely to result in any savings in building costs
  - operational difficulties would occur in having construction work take place around a functioning medical centre
  - . an optimum design solution could not be achieved
  - . the bulk of the medical centre is in an area of the Base subject to undesirable levels of aircraft noise.
- 35. Defence is therefore proposing the construction of a replacement medical centre on a new site with demolition of the existing complex.

#### Benefits and Savings

36. When not deployed, the medical centre staff would continue to provide

- medical support to ADF personnel, thus ensuring maximum continuation training and maintenance of clinical and other skills that are required in the area of operations.
- 37. All of these functions will be able to be performed in a quieter, more modern medical environment and with greater efficiency than can be achieved in the present decrepit premises. Moreover, there are consequential benefits to patients through improved amenities and a quieter environment. The new facilities will be more conducive to the provision of a higher standard of medical care.
- 38. Because of increased operational and administrative efficiency, and more appropriate storage facilities, there will be savings from: increased efficiency and effectiveness in the work environment that will enhance the provision of medical services and standards of medical care; the preservation of equipment due to better storage facilities, especially for field medical equipment such as shelters and associated equipment; more efficient and secure storage of medical stores with better access to those stores; and, an anticipated increase in morale of staff, patients and students consistent with increased amenity, improved working conditions, and improved training environment.
- 39. Defence indicated that savings of between \$50 000 and \$60 000 per year will be achieved because the new operating theatre will be able to accommodate a greater range of relatively common orthopaedic surgery. Defence believes that by having the facilities to perform a wide range of common day surgery procedures there is a saving of well over \$1m compared with these procedures being performed in civilian facilities.

#### Committee's Conclusion

40. There is a need to replace the existing medical centre and associated medical facilities at RAAF Base Richmond which are incompatible with contemporary medical standards, require a high level of maintenance and present a fire safety problem.

#### THE PROPOSAL

#### Site Layout Considerations

41. A major function of the medical centre is to provide a medical service to personnel working and living on the Base. Consequently, an off-base location for the new medical centre was not considered and no advantage is seen by Defence in locating it anywhere but on the Base.

- 42. The Committee was advised that available land at the Base for the development of new facilities is at a premium. In the 1980s the RAAF acquired some high ground east of Percival Street to provide for expansion as well as for rationalisation of facilities when redevelopment took place. While the Base is above the flood plain of the Nepean/Hawkesbury River system the land around the Base occasionally becomes inundated. The usable land acquired east of Percival Street is above the flood level and it is that portion that provides for Base expansion. Some of the land acquired is in the flood plain and that area can be used for recreation purposes. Its acquisition was unavoidable because parcels of land had to be acquired as an entity.
- 43. Master planning which took place at the time envisaged replacement medical facilities being located to the east of Percival Street in perhaps the quietest zone available (noise level below 25 Australian Noise Exposure Forecast see location map at Appendix C). The site is close to living-in accommodation and will allow personnel to walk to the facilities for sick parades. The site also has good road access and there is room for car parking adjacent to any medical facilities that might be built. Already the dental flight has its facilities in the master planned site.
- 44. The medical centre has the responsibility to prepare and deploy as a complete air transportable hospital, requiring certain medical related activities associated with operational health support, deployment training, flight preparation and equipment storage, to have a close relationship with flying operations. This requires access to aircraft pavement areas to enable ease of air transportation. It is proposed that some facilities of the operational health support section be located on a site proximate to the aircraft parking area. At the public hearing the Committee was advised that the proposed facility will now be located on the site of the disused former gunnery target building which is approximately 150m to the west of the previous location.

#### Scope of Required Facility

- 45. To provide for the required medical functions, the following facilities components are required within the new medical centre complex and the outstationed operational health support and training facility:
  - . administration flight facilities (incorporating office areas for administrative and command functions)
  - . consulting suites
  - . treatment suite

- . health promotion program facilities
- medical supply flight facilities (incorporating pharmacy and medical supply, storage and handling)
- . physiotherapy department suite
- . pathology department laboratories
- . radiography department suite
- . environmental health section facilities
- . aeromedical evacuation store
- inpatient wards
- . operating theatre suite
- . aviation medicine training facility
- operational health support facility
- . operational health support and training facility
- . staff amenities
- exercise area for siting deployed equipment (including tented wards).
- 46. The medical centre complex and the operational health support and training facility are to contain all necessary engineering services and associated plant rooms. The facilities are required to be appropriately landscaped and provided with all necessary external engineering services including road access and car parking.
- 47. Construction details are at Appendix B.

#### Design Philosophy

- 48. The philosophy adopted in the design of the proposed building incorporates the following:
  - . the provision of quality accommodation without pretentiousness,

including the provision of pleasant and non-intimidating interiors with an avoidance of an institutional character common with many hospitals

- the promotion of efficient movement of patients, staff and visitors, medical supplies and service vehicles
- . the provision of an efficient design compatible with the general environment, including its siting on an active airfield, and suitable for the rigours of the climate
- . utilisation of materials with minimum maintenance requirements and longevity
- . site and visual integration with the dental facility
- . capability for extension.
- 49. The buildings will be designed in accordance with Australian Standard 1170 part 4 which has been upgraded as a consequence of the Newcastle earthquake. The buildings are classed as essential services buildings and will be designed to withstand a certain degree of shaking and flexibility in movement without failing or endangering the occupants in any way.

#### Master Planning

50. The proposed siting of the medical centre accords with the overall zoning plan developed for RAAF Base Richmond (see Appendix C) Subject to approval being granted for the project to proceed, the Master Plan will be amended to incorporate the proposed facilities.

#### **Energy Efficiency**

- 51. Energy efficiency measures have generally been incorporated in the design of the buildings and in the particular in the mechanical and electrical services. The medical centre building has been orientated in an east-west axis to control the amount of sunlight, heat loss and heat gain. Building materials with high thermal resistance have been chosen while insulation will be incorporated into the walls and the roof.
- 52. The airconditioning is zoned in discrete packages which will allow the system to be turned off in areas not being used. Lighting will be controlled by photo electric switches in conjunction with time-switch schedules. This is to include provision of personnel sensor controlled lighting to amenities and other

intermittently occupied areas. Lamps are to be high efficiency fluorescent compact fluorescent or discharge type.

#### Security

53. The medical centre will contain an electronic intruder detection security system which will be linked to the base security indicator panel in the guard house and also to the fire watch tower. The security system will comply with Australian Standards and Defence security requirements.

#### Manpower Implications

- 54. Under present manpower establishment tables, the medical centre provides medical and dental care to about 3200 permanent ADF personnel in its medical catchment area. In addition, fluctuating numbers of Reserve and visiting personnel are provided with a medical service when they are on military duty or are required to be supported by Richmond. These numbers vary widely depending on the nature of operational activities and could amount to several thousand additional personnel.
- 55. The establishment table for the medical centre in its mature situation is tabulated below:

Category	Numbers
Officers	42
Other ranks	76
Civilians (directly employed)	13
Total	131

- 56. In addition, 24 Reservists perform military duties at the medical centre. Their numbers fluctuate with the nature of activities.
- 57. The provision of the proposed new facilities has no implications with respect to ADF personnel numbers at RAAF Base Richmond.

#### Construction Work Force

58. Over the envisaged construction period of about 15 months, an average of approximately 90 personnel would be directly employed on construction activities. In addition, it is anticipated that construction would generate a further 35 job opportunities off-site from the manufacture and distribution of building materials.

#### **ENVIRONMENTAL AND HERITAGE CONSIDERATIONS**

- 59. The proposed works have been assessed by Defence as not causing any adverse environmental effects and an Environmental Certificate of Compliance has been issued. The NSW Environment Protection Authority has been consulted by Defence and relevant standards will be followed during the construction phase. Measures will be taken to reduce noise impacts on the occupants of the medical centre.
- 60. In relation to heritage aspects there is no place entered in the Register of the National Estate affected by this project. However because of the long history of flying activities at Richmond the Australian Heritage Commission in a written submission to the Committee recommended that Defence undertake a heritage survey of the Base to assist in future planning. Defence has accepted this recommendation and a heritage survey will be included in conjunction with the update of the Base master plan.

#### Committee's Recommendation

61. The Department of Defence undertake a heritage survey of RAAF Base Richmond in conjunction with the updating of the Base master plan.

#### Disposal of Contaminated Materials

- 62. Disposal of toxic materials removed during construction and medical wastes arising from the operation of the medical centre are discussed below:
  - . an Australia wide survey of Defence buildings constructed of materials containing asbestos identified where such materials occur in the existing medical centre facilities. Contractors equipped and versed with the demolition of structures containing such materials, and licensed to dispose of the contaminated materials will be engaged for the necessary demolition activities. In its present form the asbestos cannot be inhaled and does not present a health hazard.

a contract exists for collection and safe disposal of medical waste from the existing medical centre. A similar arrangement will prevail with the replacement medical centre.

#### ECONOMIC AND SOCIAL EFFECTS

- 63. The proposed medical facilities are to be sited completely within the RAAF Base Richmond Commonwealth property boundary. Land use would remain unchanged from its current military use zoning. Defence believes there will be no measurable negative community social impact from the medical centre's activities. During the construction period, opportunities would exist for local sub-contractors and suppliers to benefit from the construction activities.
- 64. Although the medical centre site would be accessed from Percival Street, pedestrian access is also proposed through a controlled access gate from the Base. The extra traffic along Percival Street is considered to have little impact in the area.

#### CONSULTATION

- 65. The following authorities were consulted and/or advised by Defence during the planning stage:
  - . NSW Health Department
  - . NSW Fire Brigade
  - . NSW Environment Protection Authority
  - . Prospect Electricity
  - . ACROD

#### **FUTURE WORKS**

- 66. Defence advised the Committee that there are no major works proposals for implementation at RAAF Base Richmond in the immediate future.
- 67. Medium new works presently proposed include the following:
  - . 707 and C130 simulator facility 1995/96 \$3.0m

. base education facility

1996/97 \$2.5m

. aircraft engine run-up facility

1996/97 \$4.0m

#### CONSTRUCTION PROGRAM

- 68. Subject to Parliamentary approval, construction of the proposed facilities is planned to begin in July or August 1995, and be completed in about 15 months. The existing medical centre facilities would continue to be used in the intervening period, and would be demolished after occupation of the new facility. Defence advised the Committee that quality assurance is one of the key factors that is considered by the tender evaluation board both for contractors and also consultants.
- 69. In relation to the protection of subcontractors Defence indicated that it always insists that the contractor provides a statutory declaration that a subcontractor has been paid before the next payment is made.

#### Committee's Recommendation

70. The Committee recommends that the Department of Defence continues to include in its contract documents a clause stating that subcontractors must be paid before progress payments are made to contractors.

#### COST ESTIMATE

71. The estimated cost of the project is \$11.4m at July 1993 prices with an outturn cost of \$12.292m. The estimate includes the cost of relocation of existing equipment.

#### Committee's Recommendation

72. The Committee recommends the construction of a replacement medical centre at RAAF Base Richmond at an estimated cost of \$11.4m at July 1993 prices.

#### CONCLUSIONS AND RECOMMENDATIONS

73. The conclusions and recommendations of the Committee and the paragraphs in the report to which they refer are set out below:

		Paragraph
1.	The Committee is satisfied that on the evidence presented by the Department of Defence that RAAF Base Richmond will continue to be occupied by the RAAF until at least the year 2015.	15
2.	There is a need for a medical centre at RAAF Base Richmond to provide a high standard of medical treatment for Australian Defence Force personnel and also to support operations in contingency situations.	29
3.	There is a need to replace the existing medical centre and associated medical facilities at RAAF Base Richmond which are incompatible with contemporary medical standards, require a high level of maintenance and present a fire safety problem.	40
4.	The Department of Defence undertake a heritage survey of RAAF Base Richmond in conjunction with the updating of the Base master plan.	61
5.	The Committee recommends that the Department of Defence continues to include in its contract documents a clause stating that subcontractors must be paid before progress payments are made to contractors.	70
6.	The Committee recommends the construction of a replacement medical centre at RAAF Base Richmond at an estimated cost of \$11.4m at July 1993 prices.	72

Chair

8 June 1995

#### APPENDIX A

#### LIST OF WITNESSES

**DEAHM**, Ms Maggie, MP, Member for Macquarie, 186 Macquarie Road, Springwood, New South Wales

KALAMAE, Mr Sulev, Project Architect, State Projects, Level 18, McKell Building, 2-24 Rawson Place, Sydney, New South Wales

**KENNEDY**, Air Commodore James Frederick George, Director General Facilities-Air Force, Department of Defence, Campbell Park Offices, Canberra, Australian Capital Territory

PEEL, Group Captain Graeme Robert, Senior Health Officer, Air Headquarters, RAAF Base Glenbrook, Glenbrook, New South Wales

SHEPPARD, Mr Robert Sherman, Project Director, Department of Defence, Campbell Park Offices, Canberra, Australian Capital Territory

SMITH, Group Captain Graeme John Montgomery, Officer Commanding 303 Air Base Wing, RAAF Base Richmond, Richmond, New South Wales

#### CONSTRUCTION DETAILS

#### Administrative Accommodation

- 1. Accommodation of about 320m<sup>2</sup> is required, to provide for the following:
  - . waiting area
  - . medical orderly room
  - . administrative orderly room
  - . archive file room
  - . offices for the commanding officer, senior medical officer, nurse administrative officer, administration officers and medical clerks
  - . ablutions.
- 2. The Commanding Officer plus the administration flight of 14 personnel provides the administrative services associated with outpatients, inpatients and medical centre staff.
- 3. The major functions performed include:
  - . command functions
  - . receiving patients
  - . recording patients' particulars
  - . arranging appointments
  - . maintaining medical records
  - . arranging admissions and discharges
  - maintaining policy and statistical data
  - undertaking medical administrative procedures
  - . undertaking administrative procedures

- . maintaining administration and financial records
- . managing staff records
- . clerical support including receiving and distributing mail
- . executive staff support.
- 4. In addition to the routine workload of administering the medical centre, some workload statistics associated with patient processing, include the following:
  - . maintaining medical records for about 3500 personnel
  - . processing about 100 outpatient attendances per day.

#### Consulting Suite

- 5. Accommodation of about 120m<sup>2</sup> is required, to provide for a suite of six consulting rooms, each with an attached examination room.
- 6. The consulting suite is required to provide accommodation for three general practitioners and up to three visiting specialists each day to enable them to carry out medical and clinical assessments of patients. (Twenty visiting specialists are associated with the medical centre).
- 7. The functions performed include:
  - . routine patient examination and diagnosis
  - . referral to specialist services
  - . prescription of medications
  - patient counselling
  - . specialist consulting services.
- 8. Specialist consulting services include:
  - . general surgery
  - . orthopaedics

- . gynaecology
- . clinical psychology
- . urology
- . ear nose and throat
- . psychiatry
- . general medicine.
- 9. The average throughput is expected to be about 1200 patients per month. Visiting specialists are not in constant attendance.
- 10. The general waiting area included in the administration accommodation (see paragraph 1) also serves the consulting suite.

#### Treatment Suite

4 1 4

- 11. Accommodation of about 210m<sup>2</sup> is required, to provide for:
  - . a general patient treatment room and associated toilet
  - a secluded treatment room
  - . a pan room
  - . a minor operations room
  - . a casualty section
  - . an associated office and toilet
  - . an ambulance bay
- 12. The treatment suite is required to provide clinical assessment and treatment areas to be used by medical and nursing staff. The treatment suite is also to be used for emergency care and resuscitation of casualties, as well as for minor operative procedures. It also acts as an overflow area for the consulting suite.

- 13. Functions required to be performed within the treatment suite include:
  - . patient treatment consisting of routine patient examination and treatment, sick parade treatment, inoculation, and dressing and bandaging
  - casualty clearing including triage, patient stabilisation and emergency treatment and resuscitation
  - minor operative procedures where general anaesthetics or full operating procedures are not required.
- 14. The treatment suite is to be staffed by four personnel. The average throughput is expected to be about 950 patients per month, of which about 800 are expected to undergo general treatment.

#### Health Promotion Program Facilities

- 15. Accommodation of about 70m² is required, to provide for:
  - health assessment room
  - . private health assessment room
  - . witness testing room
  - . counselling office
  - . ablutions
- 16. Department of Defence policy requires that all service personnel maintain a level of fitness for active duty. The health promotion program provides a service of preventive medicine and takes the form of evaluation and assessment of physical fitness.
- 17. Functions required to be performed include:
  - . health assessment where physical characteristics are measured and lung and electrocardiography (ECG) testing takes place
  - witness testing where exercise equipment is used to evaluate and record aerobic fitness counselling of personnel associated with their review of fitness

- 18. Two health assessment rooms are needed. The first, in which up to four patients can be simultaneously assessed, and the second, a private room for one patient, in which assessment can be made on personnel requiring special degrees of privacy, eg, female members undergoing ECG assessment.
- 19. The health promotion program suite is to be staffed by three personnel. The average throughput is expected to be about 700 personnel per month.

#### Pharmacy and Medical Supply, Storage and Handling Facilities

- 20. Accommodation of about 360m<sup>2</sup> is required, to provide for:
  - . pharmacy (including pharmaceutical storage, preparation and dispensing)
  - . loading bay
  - . receipt and dispatch
  - . bulk store
  - . dirty linen store
  - clean linen store
  - . administrative offices
  - . flammable goods store (external to main building)
  - . cylinder store (external to main building)
  - . waste compound (external to main building)
- 21. The medical supply flight serves as the receipt, storage and dispatch centre for all medical supplies, medical gases, pharmaceutical supplies, and equipment used throughout the medical centre. The pharmacy provides a direct pharmaceutical service to outpatients and to the medical centre at large. The functions required to be performed include the handling of medical supplies and hospital linen, and the controlled storage, preparation, and dispensing of pharmaceutical.
- 22. The facility is to be staffed by six personnel including two pharmacists. The average number of patients served by the pharmacy is about 3000 per month, with the majority of dispensing occurring at early morning sick parades.

#### Physiotherapy Suite

- 23. Accommodation of about 200m<sup>2</sup> is required, to provide for:
  - . physiotherapy treatment area
  - . rehabilitation gymnasium
  - . laster room
  - . counselling and administrative office
  - . ablutions
  - . store for associated specialist equipment and materials
- 24. The physiotherapy department promotes the early recovery of both outpatients and inpatients. The functions performed within the facility include:
  - . biomechanical assessment
  - . neurological assessment
  - . musculoskeletal treatment
  - . splinting and plastering.
- 25. Musculoskeletal treatment includes the use of ultrasound, interferential, electric nerve stimulation, therapeutic laser, and biofeedback apparatuses, and stretching gymnastics and rehabilitation exercises.
- 26. The suite is to be staffed by three full-time and one part-time physiotherapist. The expected throughput is about 800 patients per month, with the proportion of outpatients to inpatients being about nine to one.

#### Pathology Department Laboratories

- 27. Accommodation of about 230m<sup>2</sup> is required, to provide for:
  - . waiting and reception (to be shared with the Radiography Department)
  - . bleeding room
  - . specimen collection room

- lahoratories
- . operational health support laboratory
- . cold room
- . flammable goods store
- . offices and computer room
- 28. The pathology department provides a routine detection and diagnostic testing service. Pathology services are required to be provided as an essential element for the medical centre to function as a whole. The service covers inpatients and outpatients and tests samples from RAAF facilities throughout Australia.
- 29. The functions include:
  - . clinical pathology (biochemistry, microbiology and haematology)
  - routine screening and testing (including blood sampling from the health promotion program, screening for AIDS, hepatitis etc, specialised specimen sampling and testing)
  - deployable pathology training
  - . blood banking
- 30. The area is to be staffed by seven personnel. An average of 2700 specimens are expected to be tested monthly.

#### Radiography Department Suite

- 31. Accommodation of about 150m<sup>2</sup> is required, to provide for:
  - . waiting and reception (to be shared with the pathology department)
  - . x-ray theatre
  - . administration preparation room
  - . sorting office
  - . change area and ablutions

- . medical preparation area
- . ultrasound room
- . dark room
- . mobile x-ray equipment storage
- . ante room (for x-ray processor discharge, and film storage).
- 32. The radiology department provides diagnostic radiographic and ultrasound capability to both outpatients and inpatients. Radiographic services are required as an essential element for the medical centre to function as a whole.
- 33. The functions to be performed include:
  - . X-Ray
  - . fluoroscopy
  - . tomography
  - . ultrasound
  - . image intensification
  - . mobile x-ray support (to operating theatres and wards)
  - . operational health support
- 34. The area is to be staffed by two full time radiographers and two visiting radiologists. An average of 160 patients are expected to be examined monthly.

#### **Environmental Health Section Facilities**

- 35. Accommodation of about 110m<sup>2</sup> is required, to provide for:
  - . general office
  - . administrative offices
  - . audiometric test area
  - . laboratory (for chemical and microbiological analysis) equipment store

- 36. In addition an environmental health store of about 200m<sup>2</sup> is required to be provided (collocated with the operational health support section's bulk store) adjacent to the airfield. This environmental health store is required for the storage of materials and equipment used by the Section.
- 37. The environmental health section provides a monitoring, assessment and advisory service for workplace (occupational health and safety) and public health issues.
- 38. The functions to be performed by the Section include:
  - . quarantine control
  - . audiometric testing
  - . workplace surveys and inspections
  - . environmental testing and reporting
  - . pest control
  - . personnel training
  - . operational health support
- 39. The area is to be staffed by four personnel. Activity indicators for the section include:

. quarantine control 25 aircraft per month

audiometric testing about 300 personnel per month

laboratory and field tests 20 tests per month

training 10 lectures per month

. workplace monitoring 20 inspections per month

. counter inquires 250 personnel per month.

#### Aeromedical Evacuation Store

40. Storage accommodation of about 45m<sup>2</sup> is required.

- 41. The aeromedical evacuation store provides an equipment storage and maintenance facility for emergency evacuation of defence, and in some instances, civilian personnel. Functions to be performed in the area include the storage, maintenance, packing and assembly of deployable medical kits and supplies.
- 42. Staff required to undertake any duties necessary with the maintenance and deployment of aeromedical evacuation equipment are drawn from other areas of the medical centre. The workload fluctuates but could amount to three evacuations per month, although during major exercises this could be exceeded greatly.

#### Inpatient Wards

- 43. Accommodation of about 750m<sup>2</sup> is required, to provide for:
  - . two nurse stations
  - . preparation room
  - . two pan rooms
  - . equipment, clean and dirty linen stores
  - . food preparation room (including pantry)
  - wards and ablutions for 33 patients (in a variety of configurations ranging from single to four-bed wards)
  - . patient lounge
  - . staff toilets
  - . laundry
  - . inpatient treatment room
  - . cleaner's room
  - . driver's room
- 44. The medical centre is to provide medical and surgical ward accommodation for the medical care and treatment of inpatients and patients undergoing daycare. The major functions to be performed include treatment,

care, and the medical administration of inpatients. The wards are to be broken up into two functional entities, namely medical wards and surgical wards, with shared common facilities.

- 45. Food services to the wards would be provided from one of the main kitchens on the Base and delivered in pre-packed trays to the proposed food preparation room in the ward area, where it would be heated before distribution to patients. Also the food preparation room would be designed to provide drinks and snacks to patients, and to cater for the preparation of the occasional special light dietary meal.
- 46. The requirement for 33 ward beds has been determined on being able to satisfy the demand for ward beds on 95% of all occasions based on an average daily occupancy of 25 beds. Furthermore, the number of beds (located in variously configured wards) would provide flexibility on most occasions in being able to accommodate patients in wards segregated by sex, rank and ailment. without having to shuffle patients about to achieve the desired separation.

#### Theatre Suite

- 47. Accommodation of about 290m<sup>2</sup> is required, to provide for:
  - . reception area
  - anaesthetic room
  - . operating theatre
  - . recovery room
  - . scrub and setup rooms
  - . dirty room
  - . major and minor equipment rooms
  - . sterile stock room
  - . central sterile supply service/clean room
  - . administration and staff training room
  - . staff ablution and change room

- 48. The theatre suite will provide the sterile facilities for surgical operations being performed in the medical centre, including a central sterile supply service to the inpatient and outpatient departments. The operating theatre and its ancillary functions are vital to the operation of the medical centre as a whole.
- 49. The services to be provided at the operating theatre suite include:
  - anaesthetisation
  - surgery
  - . recovery
  - . central sterile supply
  - operational health support
  - . aeromedical evacuation support
- 50. The area is to be staffed by five full time personnel and up to three visiting specialists at any one time. The anticipated workload would be between 60 and 80 cases per month, equating to an average theatre time of three hours per day. In addition, the central sterile supply service component would operate two to three hours per day.

#### Aviation Medicine Training Facility

- 51. Accommodation of about  $330 m^2$  is required, to be collocated with the operational health support training section, and to provide for:
  - ante room (to be shared with operational health support training section)
  - . class room
  - . hypobaric chamber room, with attached plant room
  - . mask room
  - . audiovisual aids room
  - . administrative offices

- . ablutions (to be shared with operational health support training section)
- . oxygen cylinder store (external)
- 52. The aviation medicine training Department provides theoretical and practical training in aviation medicine to ADF aircrews to maintain currency to fly. The functions undertaken by the section include: lectures on aviation medicine practical training in masking drills and application of oxygen within the hypobaric chamber testing and research of aviation equipment to assess effects of pressurisation maintenance of the hypobaric chamber.
- 53. The area is to be staffed by three personnel. The anticipated workload would include about six courses per month, each course running one to two days, with about 25 participants.

#### Operational Health Support and Training Facility

- 54. Accommodation of about 400m<sup>2</sup> at the medical centre proper, to be collocated with the aviation medicine training section, and to provide for: general administration and other offices two class rooms and a practical training room a visual aids room. In addition a bulk store facility, office, and practical training room totalling about 650m<sup>2</sup>, with a vehicle hardstanding area and wash bay, are required, sited close to the airfield.
- 55. The operational health support and training flight is responsible for training ADF and Defence Cooperation (overseas) personnel in aeromedical evacuation and to providing field health support associated with defence force missions and disaster situations both within Australia and overseas. The training flight regularly supports Defence Cooperation Program students.
- 56. The operational health support function includes:
  - storage, checking, servicing and maintaining equipment and consumables used for deployment and disaster operations
  - packing and assembly of container 'schedules' and delivery to hardstand for loading onto aircraft
  - collection of 'schedules' on return from missions, unpacking, cleaning, servicing and returning items to storage
  - co-ordination of specialist support from other departments within the medical centre, eg, radiography, pharmacy, etc

- . testing and evaluating suitability of new equipment for use in aircraft
- 57. The training function performed by the Section includes:
  - . preparing course programs
  - . presenting lectures
  - conducting refresher courses in first aid and in-service training of medical staff
- 58. The section is to be staffed by nine personnel. The operational health support activities of the section vary with operational demand. The training activities include a minimum of twelve major courses per year, each ranging from 5 to 20 days duration, each attended by about 25 participants, as well as a varying number of short courses for medical staff on an as-required basis.

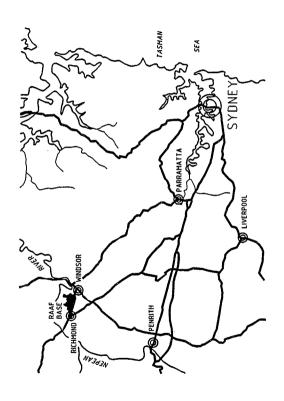
#### Staff Amenities

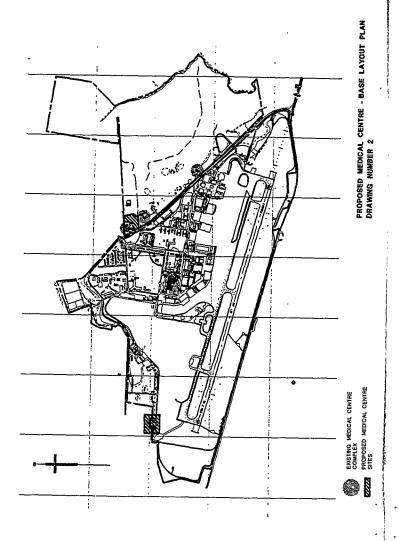
- 59. Accommodation of about 150m<sup>2</sup> is required to provide for designated common use areas, including:
  - . a medical library and quiet study area
  - . tea room
  - . change rooms and ablutions
  - . cleaner's room
- 60. Other staff ablutions are to be provided within sections/departments as specified earlier.
- 61. Staff amenities are to be provided to accord with Department of Defence policy and the Occupational Health, Safety and Welfare Act.

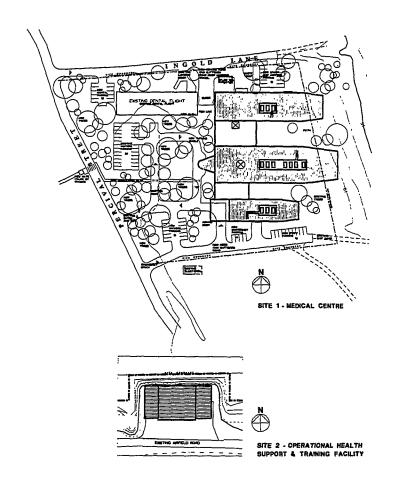
#### APPENDIX C

#### PROJECT DRAWINGS

	Page
Location Map	C-:
Base Layout Plan	C-:
Proposed Medical Centre - Site Plan	C-:
Proposed Medical Centre - Floor Plan	C
Proposed Operations Health Support and Training Facility - Floor Plan	C-
Master Zone Plan	C-

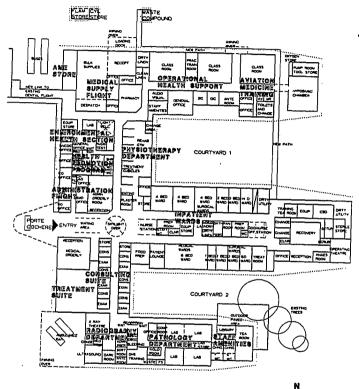






RAAF BASE RICHMOND

PROPOSED MEDICAL CENTRE - SITE PLAN DRAWING NUMBER 3



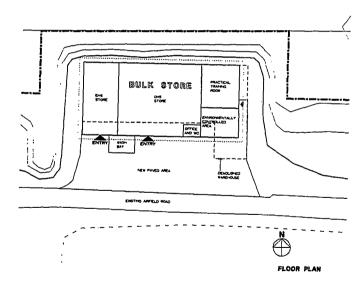


FLOOR PLAN

RAAF BASE RICHMOND PROPOSED MEDICAL CENTRE - FLOOR PLAN DRAWING NUMBER 4



FRONT ELEVATION



RAAF BASE RICHMOND

PROPOSED MEDICAL CENTRE
OPERATIONAL HEALTH SUPPORT &
TRAINING FACELITY
FLOOR PLAN & ELEVATION
DRAWING NUMBER S

PROPOSED MEDICAL CENTRE - ZONE PLAN

DRAWING NUMBER 6

SHCO'S ACCOMMODATION & ASTWOMENS ACCOMMODATION TECHNICAL SUPPORT

UTRITES

C-6

FUEL STORAGE & HAZARDOUS GOODS

ARMENS ACCOMMODATION MEDICAL FACKITIES COMMUNITY FACKITIES

RECREATION

SPORTS PLATFORM

S ANFIELD & ANCHAFT OPERATIONS I ANFIELD DEFENCE FACULTES AR MOVEMENTS & TRANSPORT