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Parliamentary Standing Committee on Public Works

REPORT

relating to the proposed development of

R.A.A.F. BASE Laverton, Victoria

(TWELFTH REPORT OF 1971)

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

DEVELOPMENT OF R.A.A.F. BASE
LAVERTON, VICTORIA

R E P O R T

On 10 June 1971, His Excellency the Governor-General in Council referred to the Parliamentary Standing Committee on Public Works for investigation and report to the Parliament, the proposal for the development of R.A.A.F. Base, Laverton, Victoria.

The Committee have the honour to report as follows:

THE REFERENCE

1. The proposal referred to the Committee is for the construction of

- an apprentices' sleeping block and recreation centre;
- an airmen's mess;
- a police services building;
- a fuel quality control building;
- a W.R.A.A.F. senior N.C.O.s' sleeping block;
- a school of radio; and
- a swimming pool.

In addition, an existing building will be remodelled to house the Telecommunications Installation and Maintenance Squadron and the Ground Telecommunications Equipment Workshop.

2. The work is estimated to cost \$6.2 million.

THE COMMITTEE'S INVESTIGATION

3. The Committee received written submissions and drawings from the Departments of Air and Works and took evidence from their representatives and the Shire Engineer of the Shire of Werribee at a public hearing at R.A.A.F. Base, Laverton. We inspected the existing facilities at the base and the sites for the proposed work.

R.A.A.F. BASE, LAVERTON

4. History In 1913, Central Flying School, Laverton was established on the site of what is now R.A.A.F. Base, Point Cook. This arrangement continued until 1926 when No. 1 Aircraft Depot was established nearby on the site now known as Laverton, about 14 miles south-west of Melbourne. The old and new establishments were designated Point Cook and Laverton respectively.

5. In the early 1920s, aircraft accommodated at Point Cook were housed in canvas hangars and the machines were deteriorating rapidly. It was then realised that the expansion of the Air Force was largely dependent on the provision and distribution of equipment for which more space and facilities were needed. It was in an attempt to meet these requirements that in 1921, 160 acres on the present Laverton site were purchased. This land, which is the nucleus of the present station was well located, being close to the railway and convenient to Point Cook and to Melbourne.

6. Following consideration in 1924 by the Public Works Committee of works proposals for the establishment at Laverton of No. 1 Aircraft and Store Depot, that unit was moved from Central Flying School, Point Cook. No. 1 R.A.A.F. Squadron was then formed at Laverton in 1928, followed later

by No. 2 and No. 21 Squadrons. No. 7 Squadron, No. 37 Squadron, a paratroop training unit, an Equipment Training School and a radio direction finding unit were among the groups located there during World War II.

7. Early post-war, saw the Aircraft Research and Development Unit and No. 6 R.A.A.F. Hospital moved to Laverton, followed during the 1960s by the R.A.A.F. School of Radio and R.A.A.F. Printing and Publications Unit.

FUNCTIONS OF R.A.A.F. BASE, LAVERTON

8. R.A.A.F. Base, Laverton is now a substantial permanent establishment with an area of 1,105 acres. It has two sealed runways of 5,050 and 5,000 ft, but aircraft movements are now limited being mainly those of the Aircraft Research and Development Unit, light aircraft from the Flying Training School at Point Cook and R.A.A.F. transport aircraft for which it is the Melbourne terminal.

9. The base's primary role is to provide a number of important facilities for elements of the support component and the following units are currently located there.

Headquarters R.A.A.F. Laverton;
 Base Squadron Laverton;
 R.A.A.F. School of Radio;
 No. 1 Aircraft Depot;
 Aircraft Research and Development Unit;
 R.A.A.F. Central Band;
 No. 6 R.A.A.F. Hospital;
 Central Photographic Establishment;
 R.A.A.F. Printing and Publications Unit; and
 No. 21 (City of Melbourne) (Auxiliary) Squadron.

10. The establishment at Laverton in June 1971 was 167 officers, 1,240 other ranks and 39 civilians, a total of 1,446 positions and there were about 550 trainees. Between 1964 and 1968, the establishment grew from 1,326 to 1,525 but since then it has been reducing and by 1973 it is expected to fall to about 1,300. This is due mainly to the proposed move to other locations of part of the Central Photographic Establishment, No. 6 R.A.A.F. Hospital and the Printing Flight of the Printing and Publications Unit. The relocation of these units does not affect the scope of work now proposed and the permanent buildings they vacate will be used for other purposes.

11. Apart from Headquarters and Base Squadron, the function of the remaining units at Laverton is now briefly described. Their responsibilities, the Committee were told, ensure that R.A.A.F. Base, Laverton, as a permanent base, will have a continuing and important future role.

12. R.A.A.F. School of Radio The R.A.A.F. School of Radio is responsible for the technical training of all R.A.A.F. radio and communications tradesmen and operators, and for providing general service training for R.A.A.F. radio apprentices who undertake courses at the Royal Melbourne Institute of Technology (R.M.I.T.).

13. The radio apprentice, who is 15 or 16 years of age on entry, trains for the skilled trades of radio technician (air) or radio technician (ground), and commences with an initial five weeks equipping and introductory service training. He then undertakes a two year radio technician course at R.M.I.T. leading to the Radio Technician Certificate. The final 28 weeks of training is conducted at the R.A.A.F. School of Radio in airborne or ground radio communications and radar equipment. During the whole period of training, the apprentice is accommodated at Laverton.

14. The adult training scheme is the main source of trained technical airmen for radio musterings. It produces radio technicians (air or ground), telecommunications technicians, telegraphists and teleprinter operators (W.R.A.A.F.). After 10 weeks basic recruit training at Edinburgh, South Australia, adult radio recruits and telegraphist trainees undertake a course at the School of Radio which, depending on their mustering, ranges from 15 to 29 weeks.

15. No. 1 Aircraft Depot The main responsibilities of this unit are to maintain mechanical transport and ground support equipment, manufacture special components and to instal and maintain ground radio equipment throughout the R.A.A.F. Although much of this work is contracted to industry, repair and overhaul of radio equipment and installations of a security or urgent operational nature are performed by the depot's Telecommunications Installation and Maintenance Squadron.

16. Aircraft Research and Development Unit This unit carries out research, experimental and developmental work to meet specific R.A.A.F. operational needs.

17. R.A.A.F. Central Band The Central Band provides music for Air Force ceremonial occasions and trains its musicians.

18. No. 21 (City of Melbourne) (Auxiliary) Squadron No. 21 Squadron provides a percentage of the important reserves required for full time ground duties with the R.A.A.F. in the event of war or a defence emergency.

EXISTING FACILITIES

19. The existing buildings on the base vary from permanent brick buildings of pre-war and post-war construction to pre-war timber framed weatherboard buildings, some of two storeys, which have become uneconomic to maintain.

They also include a large number of temporary hutments mainly built during the war of either corrugated iron/timber or fibro/timber construction and which are now generally substandard. The Committee were told that some 80% of the existing buildings, excluding married quarters, are of temporary construction.

20. Recently, a senior N.C.O.s' sleeping block, a communications trainer building, a barracks section and a ration store and butcher's shop have been erected in permanent construction. It was clear from the Committee's inspection, however, that further works are required to bring facilities to a standard which will ensure that the base's commitments can continue to be met.

THE NEED

21. The administrative and training functions of the School of Radio now occupy 79 temporary wartime huts plus part of a hangar. As the buildings are dispersed over a wide area trainees waste time moving between classrooms and efficient training arrangements and administrative control are difficult to manage. Furthermore, the huts are obsolete, have become uneconomic to maintain and are clearly unsuitable for present needs. To ensure an adequate standard of radio and electronics trade training and to facilitate administrative control, the Committee believe that it is essential that the School of Radio be housed in a single properly designed and equipped building complex.

22. The facilities of Telecommunications Installation and Maintenance Squadron of No. 1 Aircraft Depot are also dispersed among temporary buildings which cannot economically provide the necessary accommodation and environmental conditions. The need thus exists for a building which can provide under the one roof the appropriate layout and environmental conditions for the squadron's work.

23. The Ground Telecommunications Equipment Workshop provides second line maintenance to base navigational aids and air traffic control communications equipment. At present, this workshop is housed in a pre-war weatherboard building which is too small for the installation of the proper equipment. Suitable space in a building of proper design and layout is clearly needed.

24. Aviation fuel tankers must now be parked on an open concrete area and arrangements do not provide proper physical or fire security. Fuel quality control laboratory and fuel filter servicing facilities are housed in a nearby building inadequate for such use and in which sound fire protection measures are difficult to provide. A need therefore exists for a properly designed tanker compound and associated fuel quality control laboratory.

25. Apprentices' sleeping accommodation comprises 13 corrugated iron wartime huts which are obsolete and no longer economic to maintain. The apprentices spend over the first 2½ years of their Service careers living in these substandard conditions which are not conducive to study, good morale or a good Service attitude. It is quite clear that accommodation of an approved standard is necessary.

26. Apprentices between the ages of 15 and 19 years are not permitted to use the airmen's recreation centre except for the purchase of dry goods. Makeshift facilities for their recreation and hobbies activities are provided in five substandard wartime huts. Replacement of these inadequate facilities with a permanent building is clearly justified.

27. Female senior N.C.O.s are accommodated in a substandard timber framed weatherboard building remotely located from the sergeants' mess. It is in need of replacement by permanent accommodation adjoining the mess.

28. The airmen's mess, a timber framed building, was constructed in 1937 and has been modified from time to time to cope with increasing numbers. The building is beyond further rehabilitation and extension and is now no longer economical to maintain.

29. The guard room is a corrugated iron building of temporary wartime construction and its facilities which are below standard and do not meet present needs, require replacement.

30. Swimming is one of the physical activities encouraged by the R.A.A.F. to aid relaxation and improve physical fitness. No swimming facilities exist at Laverton and as a 50 metre pool is an entitlement under the Services Scales and Standards, its construction is now proposed.

31. The proposals submitted to the Committee on this occasion are the more immediate facilities required over a three to four year period by way of replacement of existing inadequate and unsatisfactory buildings and services. We noted that additional works may be necessary later and that the reference of these proposals to the Committee, if required, will occur when the need arises.

32. Committee's Conclusion The Committee concluded that there is a need for the work in this reference.

THE BUILDING PROPOSALS

33. The Committee noted that "Scales and Standards of Accommodation for the Services" have been adhered to where applicable. An outline of the building proposals is given below.

34. Apprentices' Sleeping Block and Recreation Centre The apprentices' sleeping block is to be a three-storey building housing 144 apprentices and

three corporals. Laundry and drying facilities will be confined to the ground floor whilst toilets and ablution areas will be located on each floor.

35. The recreation centre is to be a single-storey wing linked to the sleeping block. It will include a recreation, games and hobby area, a canteen, a T.V. lounge and a library.

36. Airmen's Mess This rectangular single-storey building will be equipped with a kitchen and associated facilities to serve up to 1,250 and a mess designed to seat 1,170. Food preparation and storage areas and staff toilets and change rooms are proposed.

37. Police Services Building Provided in this two-storey building will be quarters for eight guards, a kitchen, toilets, provost offices and a cell block enclosing an exercise yard.

38. Fuel Quality Control Building This building will have a fuel quality testing laboratory, a workshop for servicing fuel filters and tanker equipment, and staff facilities. It will be located adjacent to the recently constructed aviation fuel tank farm.

39. W.R.A.A.F. Senior N.C.O.s' Sleeping Block Nine W.R.A.A.F. senior N.C.O.s will be accommodated in this single-storey building. A lounge, laundry and drying facilities and a toilet and ablution area will also be included. It will be connected to the sergeants' mess by a covered way.

40. School of Radio This building will comprise a three-storey classroom wing for the radio training and maintenance sections, a telecommunications wing partly three-storey and partly single-storey, and a three-storey connecting link, between the two wings, mainly for instructors' offices on the upper floors. Single storey appendages to the connecting link will accommodate the administrative section at its western end and administrative

aids, a library, thestrette, training aids and associated facilities at the eastern extremity. Plant rooms will be located in the basement of the main classroom wing and on the upper floors of the connecting link.

41. Classrooms will vary according to their purpose. Fitted classrooms will be 40 ft by 30 ft and equipped with special desks for practical training combined with class instruction. Theory classrooms will be 32 ft by 24 ft and equipped with desks, blackboards and other teaching aids. The equipment classrooms will be of varying sizes to suit particular requirements relating to instruction in the use of Air Force equipment and apparatus.

42. Ground Telecommunications Installation and Maintenance Squadron
This squadron will be housed in part of an existing building re-designed and fitted to include a workshop area, offices, a training room, a screened room and associated facilities.

43. Ground Telecommunications Equipment Workshop Another part of the same building will be refurbished to provide appropriate accommodation for electronic equipment and associated offices, stores, locker rooms and staff amenities.

CONSTRUCTION OF THE PROPOSED BUILDINGS

44. Siting and Design A master plan for the development of the base has been agreed jointly by the Departments of Air and Works. The Committee noted that the sitings of the individual buildings in this reference accord with the agreed master plan and are not likely to prejudice future development proposals. We noted further that their location and design are such that aircraft noise will not reach dangerous levels.

45. The sites adjoin buildings with similar functions and are convenient to working and recreation areas. The Committee consider that the sites selected for the individual buildings are suitable.

46. The buildings closely associated with the School of Radio will be grouped to form a landscaped complex and treated architecturally in keeping with their educational role.

47. Structure Single storey buildings and the three-storey sleeping block will be constructed with load bearing brickwork. Steel frames will be used for large spans and floors will be concrete.

48. The School of Radio will have a reinforced concrete frame and concrete floors. External walls, spandrels and corridors will be brick and internal partitions will be masonry or demountable as required. Classrooms will be fitted to suit their purpose and under-floor ducts will carry electricity and communication cables.

49. Internal Finishes Finishes will be selected according to their function. Generally, in the School of Radio, floors will be finished with vinyl, granolithic, ceramic or concrete tiles but carpet will be used in some lobby areas and the library. Walls will be mainly face brick, painted masonry or painted concrete block. Offices will have demountable partitions and the theatre acoustic panels. Ceiling finishes will be mainly acoustic tiles but there will be some use of fibrous plaster and painted off-form concrete.

50. In other buildings, floors will be mainly vinyl or granolithic tiles. However, the apprentices' library and the lounge and corridor of the W.R.A.A.F.s' sleeping block will be carpeted. Toilet and kitchen areas will be ceramic tiled. Walls will generally be either face brick or painted plaster, and ceilings will be painted concrete or fibrous plaster, or acoustic tiles.

51. Mechanical Services The crypto section of the School of Radio telecommunications wing and the Ground Telecommunications Equipment Workshop and associated areas will be air conditioned by conventional low velocity plant. Other areas of the School of Radio, the airmen's mess and workshops will be heated and mechanically ventilated. Kitchen, laundry and toilet areas are also to be mechanically ventilated. Offices, the apprentices' sleeping block and recreation centre, and the police services building will be heated by hot water radiators. The W.R.A.A.F. senior N.C.O.s' sleeping block will be electrically heated. Other mechanical items include kitchen equipment and cool room plant, compressed air reticulation, a monorail hoist, refrigerated drinking water fountains and washing machines.

52. Hot water boilers for heating and for domestic supply will be L.P. gas fired and will be suitable for future conversion to natural gas. Electric hot water supply units will be provided where demand is small.

53. Electrical Services Electricity will be reticulated in concealed ducts from distribution boards in individual buildings. The School of Radio will be supplied by a 500 kVA substation located in the basement of the main classroom wing. Direct and alternating current of various voltages and frequencies will be supplied to meet the R.A.A.F.'s equipment requirements and will be reticulated to trainees' desks as required. Part of the communications security area will be specially wired to prevent interference and transmission of unwanted signals.

54. Lighting will be generally fluorescent and road and area security illumination will be provided. A small electric goods hoist will also be installed in the School of Radio.

55. Water and Sewerage Water and sewerage reticulation will be extended as required and connected to existing systems.

56. Roads, Car Parks and Stormwater Drainage New roads and car parks will be constructed as required and some existing roads will be widened. They will be bituminous surfaced and have concrete kerbs and gutters.

57. Fire Protection The system of fire hydrants is to be extended to cover all new buildings, and internally fire extinguishers and small bore hose reels will be located at appropriate points. Thermal detector systems will be installed and early warning detectors will protect unattended telecommunications equipment.

58. Fire isolated stairs will be provided and long corridors are to have smoke doors.

59. Landscaping The main landscaping feature will be a wide pedestrian walk linking Aviation Road and the School of Radio. The area between the apprentices' sleeping block and the School of Radio will also be paved and landscaped. Courts and access paths will be landscaped, built up gardens will be provided and where possible native trees and other flora planted.

60. Committee's Conclusion Subject to the recommendations at paragraphs 64 and 66 the Committee recommend the construction of the work in this reference.

ESTIMATE OF COST

61. The estimated cost of the work when referred to the Committee was \$6.2 million made up as follows:

	\$
Building work	3,135,000
Mechanical services	1,025,000
Electrical services	695,000
Hydraulic services	300,000
Civil works	960,000
Landscaping	<u>85,000</u>
	<u>6,200,000</u>

PROGRAMME

62. After an approval to proceed is given, construction of the work is to be programmed progressively commencing in 1972. The preparation of final drawings and tender documents for the major building, the School of Radio, will take 12 months and construction time is estimated at 18 months after a contract has been let. The whole of the work is planned to be completed by 1975.

OTHER OBSERVATIONS

63. Floor Coverings In two previous reports to the Parliament on projects which have included sleeping blocks for the Services, the Committee have raised the question of floor coverings in corridors and sleeping areas. Briefly, the conclusion reached by the Committee was that "... if it is economically feasible, carpet should be used as a floor covering ..." in sleeping blocks for senior sailors at H.M.A.S. Cerberus (report presented 25 September 1970) and in sleeping blocks at H.M.A.S. Albatross (report presented 7 September 1971). This conclusion followed consideration of evidence that there was little difference between the capital and maintenance cost of vinyl flooring on the one hand and carpet.

64. We believe that in respect of the sleeping blocks in this reference the same principles apply, and that providing it is relatively economical, carpet should be used as a floor covering in all sleeping blocks.

65. Airmen's Mess In examining the design of the airmen's mess building, we found that whilst toilets were provided for staff working in the building, there were no such amenities for those eating in it. It was pointed out to the Committee that airmen dining in the building generally occupy it for a short period only and that in any event, sleeping blocks

which have toilet facilities are only a short distance away. Furthermore, Services Scales and Standards do not provide for toilets to be constructed in dining halls other than for the staff.

66. On closer examination we concluded that toilets should be provided in the airmen's mess besides those for the staff. In this instance, the Department of Works reviewed the design of the proposed building and advised the Committee that for an additional cost of between \$5,400 and \$7,400 minimum toilet facilities could be readily provided without detriment to the design.

67. The lower cost figure related to facilities located towards the rear of the building and the higher figure to facilities near the front entrance. The Committee prefer the latter alternative because it is more convenient for users.

68. Services Scales and Standards of Accommodation The Committee's conclusion on floor coverings and toilet facilities in the mess buildings led it to an examination of other amenities referred to in Services Scales and Standards of Accommodation. We considered, for example, and favoured recommending that wash basins be provided in all sleeping accommodation where rooms have single occupancy. It seemed anomalous to the Committee that in the light of present day community standards, junior officers are entitled to a wash basin but senior N.C.O.s are not. In this same context it is relevant that apart from accommodation for the Services, single occupancy living accommodation examined by the Committee recently including that for nurses at Alice Springs Hospital and for public servants at Alice Springs Hostel, has included wash basins in all bedrooms.

69. In the light of the continually improving standard of accommodation which is widely available to the community and to those for whom the Commonwealth provides quarters, the Committee considered that rather than make further piecemeal recommendations for changes to Services Scales and Standards, it would be more appropriate for an overall review to be made of the scales and standards of living and recreational facilities being provided for the Services. We believe that while standards originally set may have been adequate and reasonable at that time, it does not necessarily follow that they are appropriate to present circumstances.

70. In making this recommendation, we believe that not only should the review be undertaken as a matter of some priority but should be undertaken critically and in depth commencing with a study of the accommodation needs of the Services in peacetime and that being provided elsewhere in the community. It should also embrace the suggestion made in the Committee's report on H.M.A.S. Albatross tabled on 7 September 1971 that variations of the conventional barrack type of living-in accommodation might offer a more satisfactory and equally acceptable standard of accommodation and at the same time prove to be at least equally economic.

71. Representations by Shire of Werribee The Committee's attention was drawn by the representative of the Shire of Werribee to the morning traffic congestion which occurs at the main entrance to the base as personnel arrive for work and are cleared for entry. Cars are often queued for several hundred feet on public roads outside the base and concern was expressed about the danger to, and inconvenience caused to other motorists. The possibility of a collision with a train on the nearby railway crossing was also mentioned.

72. This matter was raised with the departmental witnesses who advised that a study was in progress aimed at reducing the congestion.

A possible solution suggested would be to locate the main gate and checkpoint further inside the boundary of the base. A decision on the remedial measures to be taken is to be made on completion of the study. The Committee were satisfied that the nature of the problem was such that an appropriate solution could be readily found which would meet the Shire's objections to the present difficulties without the need for the Committee to make a recommendation in this report.

RECOMMENDATIONS AND CONCLUSIONS

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

		<u>Paragraph</u>
1.	THERE IS A NEED FOR THE WORK IN THIS REFERENCE.	32
2.	THE SITES SELECTED FOR THE INDIVIDUAL BUILDINGS ARE SUITABLE.	45
3.	SUBJECT TO THE RECOMMENDATIONS AT PARAGRAPHS 64 AND 66 THE COMMITTEE RECOMMEND THE CONSTRUCTION OF THE WORK IN THIS REFERENCE.	60
4.	THE ESTIMATED COST OF THE WORK WHEN REFERRED TO THE COMMITTEE WAS \$6.2 MILLION.	61
5.	PROVIDING IT IS RELATIVELY ECONOMICAL, CARPET SHOULD BE USED AS A FLOOR COVERING IN ALL SLEEPING BLOCKS.	64

Paragraph

6. TOILETS SHOULD BE PROVIDED IN THE AIRMEN'S
MESS BESIDES THOSE FOR THE STAFF. 66
7. AN OVERALL REVIEW SHOULD BE MADE OF THE
SCALES AND STANDARDS OF LIVING AND
RECREATIONAL FACILITIES BEING PROVIDED FOR
THE SERVICES. 69


(C.R. KELLY)
Chairman

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

9 September 1971.