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*Parliamentary Standing Committee on Public Works*

**REPORT**

relating to the

**CONSTRUCTION OF PERTH OFFICE  
AND WAREHOUSE COMPLEX  
FOR THE CIVIL AVIATION AUTHORITY**

**(Seventh Report of 1990)**

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA  
Parliamentary Standing Committee on Public Works



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FOR THE CIVIL AVIATION AUTHORITY

(Seventh Report of 1990)

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MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE  
ON PUBLIC WORKS

(Thirtieth Committee)

Mr Colin Hollis MP (Chairman)  
Mr William Leonard Taylor MP (Vice-Chairman)

Senate

Senator Bryant Robert Burns  
Senator Paul Henry Calvert\*  
Senator John Robert Devereux

House of Representatives

Mr Ewen Colin Cameron MP  
Mr Lloyd Reginald O'Neil MP  
Mr Russell Neville Gorman MP  
Mr Bruce Craig Scott MP

\* Appointed on 24.8.90 following the retirement of  
Senator Dr Glenister Sheil

Inquiry Staff:

Mr Peter Roberts (Secretary)  
Mr Patrick Regan  
Mrs Jackie McConnell

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

**NO. 9 DATED FRIDAY, 1 JUNE 1990**

**6 PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - OFFICE AND  
WAREHOUSE COMPLEX FOR THE CIVIL AVIATION AUTHORITY, PERTH  
- CONSTRUCTION: Mr Beddall (Minister representing the  
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:  
Construction of Perth office and warehouse complex for  
the Civil Aviation Authority.**

Mr Beddall presented plans in connection with the proposed work.

Debate ensued.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

CONSTRUCTION OF PERTH OFFICE AND WAREHOUSE COMPLEX  
FOR THE CIVIL AVIATION AUTHORITY

By resolution on 1 June 1990, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the proposal to build an office and warehouse complex for the Civil Aviation Authority's WA Field Office at Perth Airport.

THE REFERENCE

1. The Civil Aviation Authority (CAA) proposes to build an office and warehouse complex on a 1.92 hectare site it owns at Perth Airport. The office accommodation will total 5,508m<sup>2</sup> on two levels and the warehouse will total 1,120m<sup>2</sup>. Car parking, systems furniture installation, landscaping and security services are included in the proposal.
2. It is intended to complete the proposed work by October 1991 to allow the WA Field Office to move from leased accommodation in the Perth central business district. The project will be partially funded by selling the present CAA warehouse at Mt Claremont in Perth during 1991.
3. The estimated project out-turn cost at completion is \$13.926m at October 1989 prices. This figure excludes revenue gained from the sale of the warehouse.

THE COMMITTEE'S INVESTIGATION

4. The Committee received a written submission from the CAA and its consultant, Davenport Campbell, and took evidence from these organisations and union representatives at a public hearing in Perth on 2 August 1990. Prior to the public hearing, the Committee inspected the CAA workshop at

Mt Lawley, the warehouse at Mt Claremont and the site for the proposed work, including the adjacent Air Traffic Services building.

5. A list of the witnesses who appeared at the public hearing is at Appendix A. The Committee's proceedings will be printed as Minutes of Evidence.

#### THE NEED

#### BACKGROUND

6. When the CAA was established in 1988, its office accommodation was arranged by the Department of Administrative Services. In Perth, as elsewhere in Australia, this was in the central business district where rents are high.

7. The CAA re-evaluated all of its lease arrangements:

- to reduce operating costs
- to provide a good standard of accommodation for its staff
- to relocate Field Office staff near major customers at capital city airports.

8. All CAA's Field Offices are investigating their long-term accommodation needs, taking into account:

- economic factors
- staffing needs
- options on land available near airports
- existing leasing arrangements.

9. The WA Field Office was the first such office to complete its long-term evaluation of its accommodation needs.

## WA ACCOMMODATION STUDY

10. Because the lease on existing accommodation expires in October 1991, a consultant was engaged to study three options:

- continue leasing arrangements
- buy land and build a facility at Perth Airport
- lease space from the Federal Airports Corporation (FAC) at Perth Airport.

11. This study concluded that the CAA in Perth should move from leased accommodation to Perth Airport, because:

- leasing costs in the central business district were high at over \$1m per year
- the CAA's customers are at the Airport
- there would be staff savings if office and Field staff were located near each other
- the warehouse and workshop could be sold and the receipts offset against possible construction costs at the Airport.

12. The CAA's consultant undertook an extensive financial analysis, comparing the cost of constructing a purpose-built complex with the cost of continuing to lease accommodation. The results of this study were that over 25 years an internal rate of return of 14.9% could be expected from:

- moving from leased accommodation
- selling the warehouse at Mt Claremont
- building office and warehouse accommodation.

13. The CAA owns the present warehouse site at Mt Claremont and the workshop site at Mt Lawley. The roof of the former building is lined with asbestos sheeting. The CAA advised that this has been tested by Australian Construction Services (ACS) who said the material is safe provided it is left undisturbed. The CAA expects that the purchaser of the Mt Claremont site would continue to use the existing warehouse. However, the Committee notes that, should the purchaser decide to demolish the warehouse, the asbestos would need to be removed in accordance with the relevant WA Code of Practice.

14. The CAA decided not to proceed with the sale and relocation of the workshop because of a National Trust classification on the building, some uncertainty about the future of CAA workshops and because likely construction of a new facility would exceed the sale price expected for the present site.

15. In 1988, the CAA bought a 1.92 hectare site at Perth Airport at a cost of \$545,000.

16. The CAA believes its current leased accommodation is expensive and that it can better meet the needs of its clients by relocating its warehouse and the WA Field Office to a site it owns at Perth Airport. The lease on current Field Office accommodation expires in October 1991. The move will reduce its operating costs and enable CAA to provide a good standard of accommodation for its staff.

#### **COMMITTEE'S CONCLUSION**

17. The Committee agrees that a need exists for the CAA to relocate its WA Field Office and warehouse to the site at Perth Airport.

## **THE PROPOSAL**

### **OFFICE BUILDING**

18. Office accommodation for approximately 240 staff is to be provided on two levels totalling 5,508m<sup>2</sup>. This area will allow space for Field Office activities, including conferences, training and examinations, as well as equipment and amenities. The latter will include a canteen, gymnasium and library. The building can be extended, if necessary, to the south-east.

19. The building includes provision for a canteen and the CAA has provided the means to produce both takeaway food and hot meals. Discussions are being held with the Civil Aviation Institute (CAI) to employ staff to provide meals and ensure profits go back to this staff social club. Unions had some concerns about the distance to other food concessions at the Airport and the price of their food.

20. The CAA has also included a gymnasium of about 100m<sup>2</sup> in the building and is seeking sponsorship for the necessary equipment. Staff have been concerned about the reduction of banking facilities after the move from current accommodation and investigations into a sole agent/sponsorship arrangement at the Airport are continuing.

21. While the library's primary function will be technical, some more general material will also be stocked.

22. Considerable attention has been devoted to provision of ergonomic furniture and a suitable colour scheme in the proposed works. A polished granite surface has been chosen for the building foyer to avoid accidents which might result from wet and slippery tiles.

#### THE WAREHOUSE

23. Provision is made for storage of bulk and general items, together with loading and despatch facilities. Office space, toilets and a lunch facility are also included.

#### THE SITE

24. The 1.92 hectare site the CAA owns has frontages to Bungana, Henderson and Fauntleroy Avenues at Perth Airport. The principal access to the warehouse would be off Bungana Avenue, on the north western side of the block.

#### CAR PARKING AND PUBLIC TRANSPORT

25. A total of 177 staff, fleet and visitor car parking bays will be provided. To provide shade in the car park, additional trees will be planted as soon as possible; it is also intended to keep as many of the existing trees on the site as practicable.

26. The number of spaces to be provided allows for about 66% of staff to park their cars near the buildings. Land adjacent to the site could be leased from the FAC to provide additional car parking, if the need arises.

27. Public transport services from the centre of Perth to the Airport are not adequate. A significant number of staff have indicated an interest in car pooling and in using public transport to/from the Airport. The CAA will be approaching TransPerth in an attempt to improve services to the Airport.

#### SERVICES

28. The FAC advised that the capacity of surrounding services and roads is adequate to support the proposed works. The plans and documentation submitted to the Corporation

indicated the building would comply with its standards for works at airports.

#### CHILD CARE

29. As part of the design of the building, the CAA circulated a questionnaire to staff seeking information on the facilities which should be included in a new building at the Airport. It was on the basis of the priority given in the responses to the questionnaire that certain facilities were included in the buildings. Perhaps because older males are over-represented in the CAA's workforce, a child care facility was one of the least desired; it was therefore not included. Evidence was given that the FAC is working towards providing such a facility for all employees at Perth Airport.

#### DISABLED ACCESS

30. The buildings comply in every respect with the Australian Standard on wheelchair access and access by the disabled.

#### USE OF ENERGY

31. During preparation of the design brief, consultants were specifically asked to address the question of efficient use of energy. To this end, the building has been designed for zonal control so that energy use can be controlled in areas not in use full time. This particularly relates to lighting. The warehouse will have a normal environment, only the office and the small computer backup areas will be environmentally controlled.

32. The use of solar energy for the water heating needs of the proposed buildings was investigated but was not considered by the CAA to be commercially practical.

33. The CAA advised that the capital cost was estimated to be \$160,000 with interest on the capital investment of 18% totalling \$28,800, for an energy saving of \$10,000.

34. Building services have been designed to be energy efficient using conventional technologies and, in the consultant's opinion, an appropriate balance has been provided between capital recurrent energy consumption and maintenance costs.

#### LANDSCAPING

35. An amount of \$25,000 has been included in costings to provide additional trees and undulating grass areas on the block. The Committee notes that as many existing trees as possible will be retained.

#### COMMITTEE'S CONCLUSION

36. The site chosen for the CAA's proposed office and warehouse complex at Perth Airport is suitable and the Committee supports the CAA's move to centralize its operations close to its clients.

#### CAA'S PERTH WORKSHOP

37. The National Trust has classified the main building of the CAA's workshop at Mt Lawley. This, together with building restrictions on the block, affected the likely price the site would have attracted. Thus, inclusion of the workshop in the proposal at the Airport would have reduced the commercial viability of the project. Finally, there is some doubt about the future of all five CAA workshops.

38. Land is available at Perth Airport should the CAA decide to move the workshop there. While not making a recommendation on this matter, the Committee believes the principle of bringing all relevant CAA operations to Perth Airport is valid.

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

39. The proposed work was not referred to the Department of the Arts, Sport, the Environment, Tourism and Territories for assessment under the provisions of the *Environment Protection (Impact of Proposals) Act 1974* because there are no environmental issues connected with the proposal. No Aboriginal sacred sites are affected by this proposal. The National Trust of Australia (Western Australia) did not wish to submit evidence on the proposal.

#### **CONSULTATION**

40. In addition to direct consultation with staff by means of survey/questionnaire, there has been consultation with staff associations during all stages of this proposal. These associations were:

- Association of Professional Engineers of Australia
- Professional Radio and Electronics Institute
- Federal Firefighters Union
- Civil Air Operations Officers Association (Civil Air)
- Australian Federation of Air Pilots
- Public Sector Union (PSU)
- Professional Officers Association
- Association of Draughting, Supervisory and Technical Employees (ADSTE).

41. None of these organisations had significant problems with the proposal and three (Civil Air, PSU and ADSTE) gave evidence at the public hearing on 2 August 1990.

42. The following bodies were also consulted:

- Federal Airports Corporation
- State Energy Commission of WA
- Water Authority of WA
- City of Belmont

43. When approached by the Committee, none of these organisations wanted to give evidence about the proposal.

#### **CONSTRUCTION DETAILS**

44. Construction details and project drawings are at Appendix B.

#### **PROGRAMMING AND FINANCE**

45. The CAA's lease on its current office accommodation at 256 Adelaide Terrace, Perth, expires in October 1991. Completion of the proposed work by then will allow the move to the Airport to be made with an estimated saving to the CAA of approximately \$100,000 per month in leasing charges.

46. The estimated out-turn cost of the project is \$13.926m in October 1989 prices, made up as follows:

	\$m
Office Building	7.685
Warehouse	0.743
Siteworks	0.585
Furniture & Fitting	1.482
PABX	0.200
Escalation	1.421
Consultants' Fees	1.210
Contingency	0.600
Total Out-turn cost	13.926

#### COMMITTEE'S RECOMMENDATION

47. The Committee recommends the construction of the proposed office and warehouse complex for the CAA at Perth Airport at an estimated out-turn cost of \$13.926m at October 1989 prices.

## **CONCLUSIONS AND RECOMMENDATION**

48. The conclusions and recommendation of the Committee and the paragraph in this report to which each refers are set out below:

	Paragraph
1. The Committee agrees that a need exists for the CAA to relocate its WA Field Office and warehouse to the site at Perth Airport.	17
2. The site chosen for the CAA's proposed office and warehouse complex at Perth Airport is suitable and the Committee supports the CAA's move to centralize its operations close to its clients.	36
3. The Committee recommends the construction of the proposed office and warehouse complex for the CAA at Perth Airport at an estimated out-turn cost of \$13.926m at October 1989 prices.	47



Colin Hollis  
Chairman

4 September 1990

APPENDIX A

LIST OF WITNESSES

ABBERTON, Mr Peter Vernon, Project Manager, Civil Aviation Authority, GPO Box X2212, Perth, WA, 6001

BROWN, Mr Donald Graeme, Assistant General Manager, Air Traffic Services, Civil Aviation Authority, GPO Box X2212, Perth, WA, 6001

COX, Mr Peter Arthur, State Secretary, Association of Draughting, Supervisory and Technical Employees, 110 Charles Street, West Perth, WA, 6005

EDWARDS, Mr Richard John, Property Manager, Civil Aviation Authority, GPO Box X2212, Perth, WA, 6001

KAPLAN, Mr Paul Moris, Acting Joint Branch Secretary, Western Australian Branch, Public Sector Union, Labor Centre, 82 Beaufort Street, Perth, WA, 6000

LAWRENCE, Mr Garry Marshall, Director, Davenport Campbell, Level 25, St Martins Tower, 44 St Georges Terrace, Perth, WA, 6000

MacLEAN, Mr David Alistair, Western Australian Divisional Councillor, Civil Air, 202 Berkeley Street, Carlton, VIC, 3053

**CONSTRUCTION DETAILS AND PROJECT DRAWINGS**

**BUILDING CONSTRUCTION**

The plan for the office building is for a well-balanced structure with a tri-partite plan form. The exterior lines are strong through the use of colonnades and this is reinforced by the choice of a square, aluminium panel cladding system. A low profile image across the site is maintained by the use of strong horizontal lines in both buildings.

The warehouse has moulded pre-cast concrete wall panels, reflecting the aluminium cladding pattern of the office building. Colonnades are also used in this building to soften its visual impact.

Internal and external finishes appropriate to both buildings have been selected.

**HYDRAULIC SERVICES**

**Property Sewers**

A 150mm diameter UPVC sewer extension from the Fauntleroy Avenue main is required to service the site. A sewer junction would normally be provided at the site boundary in a reticulated area. Gravity UPVC sewers will reticulate throughout the site, connecting ablution areas and other items discharging contaminated water.

**Domestic Cold and Hot Water Services**

A 100mm diameter water main extension from the Fauntleroy Avenue main is required to service the site. From the boundary connection, a combination of UPVC and copper will be used to reticulate throughout the site connecting ablutions etc and other items requiring water for their operation.

Landscape irrigation may be serviced from the cold water system. Test bores will determine the adequacy of ground water for this purpose.

Localised hot water units will be provided at the source of requirement. These heaters will be:

- Electric storage - for warehouse ablution
- Gas storage - for gymnasium ablutions and kitchen.

Hot water will be connected to basins, sinks, showers and dishwashers.

#### **Fire Hydrant and Hose Reel Service**

A 150mm diameter fire main extension from the Fauntleroy Avenue main is required to service the site.

From the boundary connection a combination of UPVC and copper will be used to reticulate throughout the site to connect hose reels and hydrants.

A Fire Brigade booster connection will be provided adjacent to the office block.

#### **Natural Gas**

The State Energy Commission will be required to extend their main along Fauntleroy Avenue to the site connection. A master boundary meter will be required.

From the master meter, a combination of UPVC and copper gas main will connect kitchen cooking appliances, gas hot water heaters and the warehouse space heating system.

#### **Rainwater Pipes**

Connected to the box gutter outlet, UPVC rainwater pipes will discharge to a below-ground piping system which will flow into sumps. Overflow provisions will be made at ground level. Box gutter overflows will pop through the roof fascia and verandah soffit linings.

### **MECHANICAL SERVICES**

Office areas will be air conditioned by a medium pressure variable air volume system. Four air handling units will be mounted in a plantroom located at roof level, above the service core, with each unit serving approximately half the office space on one level.

Supply air will be distributed through insulated sheetmetal ductwork located in the ceiling space on each level and air/light troffer diffusers. Return air will be drawn back to the air handling units via the ceiling space on the ground level and insulated ductwork in the ceiling space on level 1.

Each of the office units will incorporate an economy cycle facility to utilise outside air for free cooling when ambient conditions are suitable.

The canteen and gymnasium areas will each be served by a constant volume air handling unit mounted on the roof above the services areas, with supply and return air ducted to and from the areas served.

Cooling energy will be provided by two packaged air cooled chiller sets located in the carpark at the rear of the building. Chilled water will be piped to the various air handling units in the building. Heating energy will be provided by electric heater banks mounted in the air handling units and perimeter zone VAV terminal units.

Mechanical ventilation systems will be provided to toilets, changerooms and kitchen.

#### **ELECTRICAL SERVICES**

The following electrical services will be provided:

- Transformer sub-station
- Switchboards
- Sub-mains
- Complete lighting installation, including the supply of luminaires
- Power installation, including connections to air conditioning units, fans, lift, kitchen equipment, general purpose outlets, conditioned data power outlets
- Battery operated safety lighting
- Skirting ducting
- Access control system and intrusion detection
- Telecom backbone cabling
- PABX.

Space provisions only allow for a future essential services generator and computer power UPS unit.

#### **LIFT SERVICES**

A single hydraulic 13 passenger lift will be provided in the office building.

# DAVENPORT CAMPBELL

Drawn by: SKAH Date No: 8/27/70 Project: CAA OFFICE & WAREHOUSE

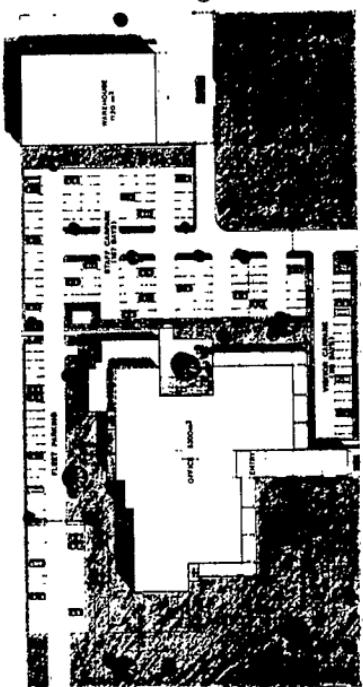
NORTH

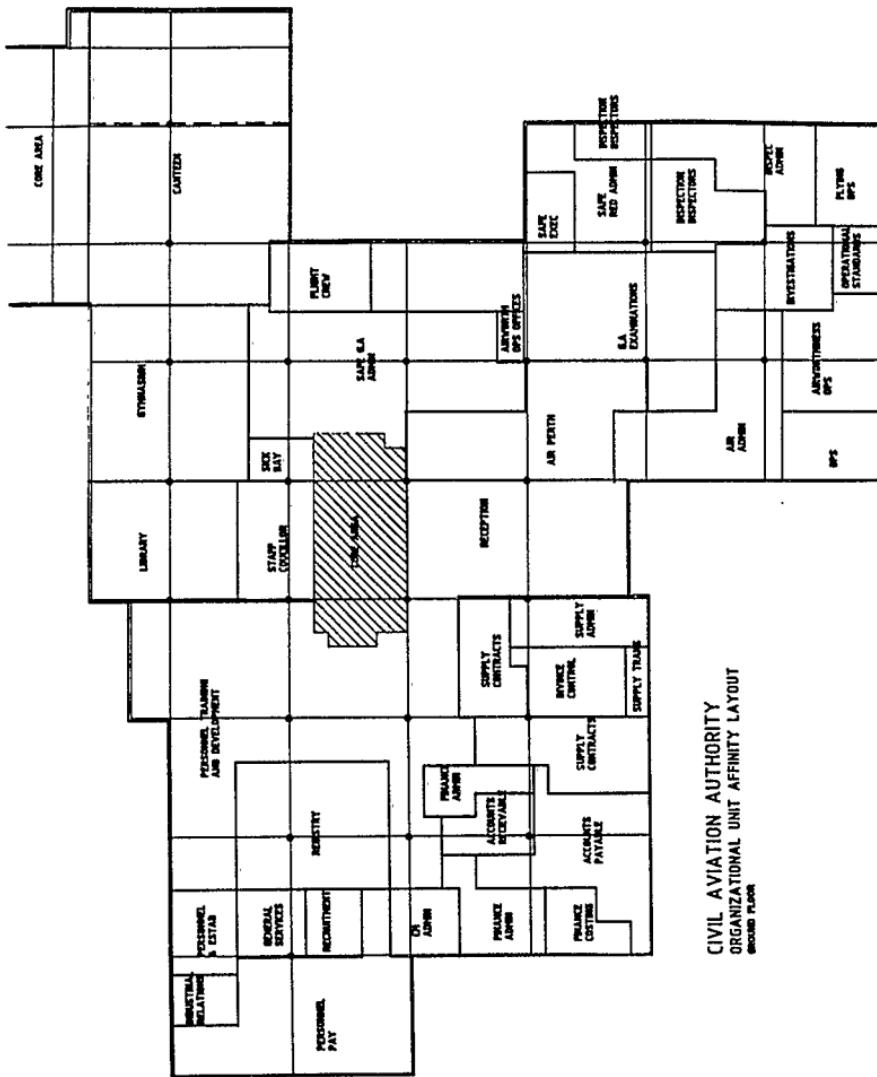
SITE PLAN

CIVIL AVIATION AUTHORITY  
OFFICE & WAREHOUSE

FAUNTLEROY AVENUE

HENDERSON AVENUE





CIVIL AVIATION AUTHORITY  
ORGANIZATIONAL UNIT AFFINITY LAYOUT  
2008 EDITION

