

REPORT

relating to the proposed construction of a

NEW TERMINAL COMPLEX

at

Coolangatta Aerodrome

Queensland

(SIXTH REPORT OF 1979)

1979

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

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Australian Government Publishing Service Camberra 1979

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MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

(Twenty-fifth Committee)

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EXTRACT FROM THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES NO. 106 DATED 31 MAY 1979

15 PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - NEW TERMINAL COMPLEX, COOLANGATTA AERODROME, QLD: Mr. Groom (Minister for Housing and Construction); pursuant to notice, moved - That, in accordance with the provisions of the Public Works Committee Act 1969, the following proposed work be referred to the Parliamentary Standing Committee on Public Works for investigation and report: Construction of a new terminal complex at Coolangatta Aerodrome, Qld.

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

Question - put and passed.

WITNESSES

Anderson, D.R.M., Eeq., Airlines Services Manager, Esst-West Airlines, 323 Castlereagh Street, Sydney, New South Wales
Angove, A.V., Esq., Town Clerk, Gold Coast City Council, P.O. Box 42, Southport, Queensland
Arnold, J.N., Esq., Associate Director, Projects, Department of Housing and Construction, Australia House, 145 Eagle Street, Brisbane, Queensland
Bool, Major P.L., Manager, Southern Queensland Army Holiday Resort, Bilinga, Gold Coast, Queensland
Cole, A.G., Eq., Watkins Limited, 288 Edward Street, Briebane, Queensland
Curtin, P.N., Esq., Hon. Federary Secretary, Commonwealth Police Officers' Association, 2/24 Station Street, Kogerah, New South Wales
Diamond, Alderman E.M., Coolangatta Chamber of Commerce, P.O. Box 16, Coolangatta, Queensland
Eaton, O.R., Eaq., Project Manager, Civil, Department of Housin and Construction, Australia House, 145 Eagle Street, Brisbane, Queeneland
Forster, K.J., Chief Health and Building Surveyor, Tweed Shire Council, P.O. 8ox 816, Murwillumbah, New South Wales
Harper, J.H., Eqq., D.F.C., First Assistant Secretary (Ground Facilities), Department of Transport, P.O. Box 1839Q, Melbourne, Victoria
Lakeland, E.H., Esq., Controller of Buildings, Department of Transport, P.G. Box 1839Q, Melbourne, Victoria
Laver, J.P., Esq., Chief Engineer (Airport Planning and Development), Department of Transport, P.O. Box 18390 Melbourne, Victoria
O'Brian, D.M., Esq., Organiser, Federated Clerks Union of Australia, Central and Southern Queenaland Branch, 29 Amelia Street, Fortitude Valley, Queenaland

Ranger, G.W., Esq., Chief Architect, Transport, Department of Housing and Construction, 17 Yarra Street, Hawthorn,

Spence, R.D., Shire Clerk, Tweed Shire Council, P.O. 80x 816, Murwillumbeh, New South Wales

Truskin, G., Eaq., Project Development Superintendent, Property and Facilities Department, Trans-Australia Airlines, 50 Franklin Street, Melbourne, Victoria

Victoria

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

NEW TERMINAL COMPLEX AT COOLANGATTA AERODROME, QUEENSLAND

REPORT

By resolution on 31 May 1979, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for investigation and report to the Parliament the proposal for the construction of a new terminal complex at Ocolangatta Aerodrome, Queensland.

The Committee has the honour to report as follows:

THE REFERENCE

- 1. The proposal referred to the Committee comprises:
 - a terminal building accommodating public passenger,
 airline and concession areas:
 - aircraft movement areas comprising an apron and connecting taxiways:
 - roads, car park, drainage and associated engineering asrvices.
- The ravised estimated cost of the proposed work is \$4.465 million at May 1979 prices.

THE COMMITTEE'S INVESTIGATION

3. The Committee received written submissions and drawings from the ...
Department of Transport and the Department of Housing and Construction and took evidence from their representatives at a public hearing at the Gold Const

- City Council on 3, 4 and 5 July 1979. The Committee also received written submissions and took evidence from representatives of the Tweed Shire Council, Commonwealth Police Officore' Association, Gold Cosst City Council, Coolengatta Chamber of Commerce, Trans-Australia Airlines, East-West Airlines, the federated Clerke' Union, Southern Queensland Army Holiday Resort and Watkins Limited. The Australian Federation of Air Pilots and a Consulting Surveyors Group provided written submissions and the Gold Coast Visitors Bureau provided information on tourism.
- 4. Prior to the hearing, the Committee inspected the existing facilities at the Coolangatta Aerodrome and the site for the new terminal complex.
- The Committee's proceedings will be printed as Minutes of Evidence.

EXISTING FACILITIES

- 6. The 1966 Inquiry On 11 October 1966, the Public Works
 Committee recommended the further development of sirfield pavements at
 Coolengatta Airport at an estimated cost of \$1.3 million. In the Committee's
 Report it was stated that "the site of the airport at Coolengatta was selected
 in 1936 and its development, as an alternate to Brisbane for use when the
 latter was closed due to bad weather, was completed in 1939. ... In
 addition to a small terminal building, the other facilities at the airport
 included a control tower and a fire station ... "
- 7. In its 1956 Report, the Committee also stated: "The use of Coolangatta as an alternate to Brisbane has now decreased greatly with the improvement of navigational aids at Brisbane and the installation of an instrument landing system".
- 8. <u>Existing Terminal</u> The existing terminal building consists of a weatherboard structure of 530 square metres in area, occupied by Ansett Airlines of Australia and an adjoining concrete block mesonry structure of 460 square metres, occupied by Trans Australia Airlines.
- 9. The weatherboard structure was erected in 1951/52 and was built to accommodate passengers from the 26-seat Douglas DC3, the main passenger siroraft at that time. Annual passenger movements at Coolangatta were then approaching 12 000.

- 10. The block masonry structure was added to the existing weatherboard building in 1970/71, making the total area of the terminal 990 square metres. At that time, the main passenger aircraft operating into Coolangatta were the 100-seat Douglas DC9 and the 90-seat Lockheed Electra L-189.
- 11. Since 1971, there have been minor modifications and extensions by Ansett and TAA for offices and baggage handling. At the time of the Committee's inspection, further extensions were being carried out at each and of the existing terminal, as well as sewerage works nearby, in order to improve facilities for passenger traffic.
- 12. Aircraft Movement Areas The Committee's Report of 1966 described the original pavements for DC3 aircraft as consisting of 4 inches unsealed gravel on 4 inches sand clay over the sand sub-grade which was later bitumen sealed. The terminal apron, extended in 1958 and 1962, comprised 6 inches of cement stabilised gravel sealed with bitumen. With the introduction of heavier aircraft, the terminal apron was further strengthened by cement stabilising the existing pavement material with an overlay of one inch of bituminous concrete.
- 13. The Committee's 1956 Report recommended further atrengthening of the apron, taxiway and runway pavements, an extension of the runway to 6700 feet, widening of an existing texiway and a new loop texiway. The Committee at that time also recommended that the adequacy of aircraft parking featilities be kept under review to ensure reasonable operational requirements are met.
- 14. Roads and Car Park

 Between 1953 and 1958, when other minor

 works were being undertaken, the access road to the terminal and the car park

 were upgraded and sealed. They are now inadequate for the vehicular traffic

 associated with current passencer levels.

THE NEED

- 15. The front-line domestic airline aircraft is currently the 154-seat 8727-200. These aircraft are moving passangers through Coolangatta at an annual rate exceeding 400 000.
- 16. The terminal complex is only able to process this traffic at severely degraded standards of service to passengers. Overcrowding occurs in the building to such an extent that it is usual for many passengers and

friends to have to wait outside - whatever the weather and the resultant interruption to vehicular traffic. The pessenger queues at beggage check-in counters regularly extend across the full depth of the terminal impeding the accounter of people in the terminal. The building is totally unsuitable for the introduction of any requirement for passenger and personal baggage security clearing.

- 17. The aircraft parking epron adjacent to the terminal is similarly inadequate for current eircraft traffic. It is large enough to hold up to four 8727-200 aircraft which approximates the average daily pask. This is only possible by the Department of Transport permitting some relexation to the normal aircraft ground movement eafety standards relating to the clearance of sircraft from public areas. However, aircraft can only operate on three of these four positions on a first-in, last-out basis and there is no refuelling facility at one of the positions.
- 18. The holiday peak periods generally exceed the apron capacity which means that aircraft have to park on the existing loop taxiway. The congestion makes it virtually impossible to segregate incoming passengers from the security screening of departing passengers. The overall result is to delay sircraft, lessen safety standards and complicate aircraft ground handling. This situation is worsened by the lack of alternative parking space for heavy itinerent aircraft, including those on VIP, RAAF and executive jet flights.
- 19. Operations by the 8727-200 eigereft now constitute the bulk of the daily services and are carried out on a concession basis allowing some controlled infringement of normal pavement load limits. The apron, taxiway and runway pavements have already shown signs of strain under the loads involved, necessitating significant repair, which must be expected to continue.
- 20. In a similar way, the car park and associated roadway are inadequate for the vehicular traffic associated with current passenger.

 levels. This has resulted in traffic blockages around the building and an increase in the probability of accident to padestrians from a mix of people and care that often verses on the chaotic.
- 21. <u>Committee's Conclusion</u> The existing terminal complex at Coolangatta Aerodrome is inadequate for the current volume of passanger traffic.

- 22. <u>Future Traffic Loads</u> In considering the most appropriate way to solve current overcrowding at Coolengatta Aerodrome, the Department of Transport examined the likely future traffic loads.
- 23. Coolangatta Aerodrome services the Gold Cost tourist resort region extending from Southport in queensiend to Kingschiff in New South Weles.

 Over the last decade, the growth in the Gold Coast tourist industry has been the major factor in the growth of serodrome passenger traffic and some 75% of current traffic is estimated to be leisure based. The annual passenger throughput at Coolangatta Aerodrome has grown at a rate averaging over 16% per ennum since 1968. While growth has fluctuated around that average, it represents a long term increas over the decade unmatched by any other aerodrome in Australia.
- 24. In 1978, Coolangatta was the seventh busiest aerodrome in Australia handling 429 917 passengers, after Camberra (961 963) and Hobart (447 790) but ahead of Launceston (367 451) and Townsyille (355 124).
- 25. Figures for passenger and directly movements covering the period 1960 to 1978 were provided to the Committee and confirmed the increase which is essentially based on the growth of the Gold Coast tourist industry. The relatively high proportion of retired people in the area is a stabilising factor as it tends to insulate the community from down-turns in the economy. In the longer term, however, some lessening of growth must be expected as the capacity of the area to absorb more tourists tapers off. Accordingly, the Department of Transport, in assessing the traffic to be accommodated at the aerodrome, forecast that the annual passenger movements would continue to increase, but at lessening rates of growth, namely 10% per annum to 1995 and 6% per annum thereafter.
- 26. On this basis the passenger traffic is expected to increase as follows:

	Passanger	Movements	Per	Annum
1985		830 000	,	
1990		400 000		
1995	2.	300 000	1	
2000	 3	100 000		
2005	 4	100 000		
1 6 15	 4.0	1.7	٠.	

- 27. With this expected increase in traffic to be handled, will come changes in the type of mirroraft carrying the traffic. The minimum have moved passengers through Coolengatta using their front-line trunk-route mirroraft operating at times outside the peak hour demand for intercapital business passengers. This method of operation has been possible, and successful, because the bulk of the passengers using Coolengatta merodrome are tourists not necessarily requiring to fly at the passenger peak times. The arrangement provides advantage in many areas: the passengers fly in front-line aircraft and the airlines gain necessary utilisation for these aircraft at high load factors. Better utilisation is also achieved for the air traffic control network and the facilities at the origin and destination aerodromes.
- 28. The growth in passenger traffic is thus expected to be accommodated partly by more services, and partly by larger siroraft, as follows:

	Airce	aft		Aircraft ments	Peal	Appor	n-Load	
1985	B727-	200		900	6	aircr	aft	
1990	8757	type	10	800	6	**		
1995	"	ii	. 13	000	8	11		•
2000	0010	type	15	000	. 8	18		
∡2005	Ħ	• #	18	700	8		•	

- 29. Accordingly, the proposed terminal complex would accommodate initially peak hour loads associated with six 8727-200 sircraft, and have the capability of being simply expanded to cater for eight DC10 type aircraft in the beak hour.
- 30. <u>Committee's Conclusion</u> There is every indication that the increase in annual passenger throughput at Coolangatta will continue.

THE PROPOSAL

- 31. The proposal seeks to overcome the savers passanger, siroraft and vehicular congestion problems in the terminal building, apron and car park at Coolangatts Asrodrome.
- 32. The proposal is for the construction of a new terminal complex, primarily serving the passengers, visitors, baggage, freight, aircraft and vehicles associated with the air services provided by the two domestic trunk route operators, Ansett Airlines of Australia and Trans Australia Airlines.

- 33. The complex is to comprise a terminal building, sircraft parking apron and taxiways, access roads and car park and associated services such as water, fuel and severage.
- 34. Initial investigations were centred on expanding the existing terminal complex to accommodate expected traffic increases. However, that solution had a number of drawbacks. These included:
 - siting the existing terminal area close to the aerodrome boundary would prevent expansion of the existing boundaries and car park to satisfy current and future demands:
 - closeness of terminal buildings and apron to the Pacific Highway precluded introduction of effective security measures.
- 35. A solution to extend the existing apron and provide a new terminal building adjacent to the existing terminal was rejected because:
 - it would involve unacceptably long distances for passengers walking to and from aircraft.
 - result in a complex limited in apron expansion for expected requirements of the 1990s;
 - writing off the existing terminal building and thus require the early construction of new apron and terminal facilities for commuter and regional airlines, and heavy itinerent aircraft.
- 36. The colution recommended by the Department of Transport is to provide a separate new terminal complex to accommodate the expected traffic. The advantages are:
 - it permits straightforward expansion to accommodate expected traffic through to 2005;
 - construction will take place with minimal interference to aircraft and passenger operations;
 - the existing terminal complex with an easet value of \$0.6 million and the replecement value of approximately
 \$2 million is retained to accommodate commuter and regional airline services and heavy itinerant aircraft;

- it would provide a safer aircraft operating environment.
 by secerating heavy airlines aircraft from other traffic.
- 37. The Apron and Taxiwaya The new epron will be sited parallel to, and at an appropriate distance from the main runway to enable future expansion. To cater for increased numbers of aircraft, provision has been made for the future construction of a parallel taxiway and for longitudinal expansion of the apron. Similar provision has been made for expected increases in aircraft weight and payement loading.
- 38. The epron would be sized initially to accommodate six 8727-200 aircraft menocuring under their own power. The number of parking positions has been arrived at by considering the current and expected peak traffic periods. A peak apron demand of four B727-200 aircraft is frequently experienced and this is expected to increase to six by 1981/82. During recent holiday periods, actual peaks have been as high as aix and eight aircraft.
- 39. A new loop taxiway system will facilitate the movement of sircraft. Provision has been made for the connection of both apron and taxiways to future planned taxiways.
- 40. The Terminal Building The proposed terminal will comprise a single-level linear structure along the apron edge. This building concept has been chosen because it provides the most economical way of servicing the expected number of aircraft and minimises passenger walking distances.
- 41. Ansett Airlines of Australia and Trans Australia Airlines will be located at either end of the building adjacent to the associated aircraft parking positions. The space between these two areas will be occupied by shops, restaurant, bar and allied concession facilities.
- 42. The building has been laid out to allow simple, straightforward expansion to accommodate expected increases in passenger and baggage loads up to the year 2005.
- 43. Initial construction will be at ground level, with covered walkways to and from aircraft. Provision has been made for subsequent installation
 of aerobridges, connecting directly with aircraft, from the first floor level
 of a two-storey section between the terminal building and the apron.
 Aircraft will be parked nose—in to the terminal and pushed out by tuge.

- 44. Each sirline area will comprise three gate lounges, each sized for a B727-200 passenger load and readily extendable to accommodate wide-bodied jet loadings, an airline office area, check-in counter, baggage handling, security facilities and bus docks. The fitting out and furnishing of the airline areas, and of the concession areas, will be carried out by the respective lessess at their own expense.
- 45. Cere has been taken in the layout to achieve maximum separation of arriving and departing passengers, and of passenger processing and waiting ereas. Allowance has been made for queues to form without significantly restricting the movement of people.
- 46. Normal facilities will be provided including toilets, babies' care rooms, cooled drinking water fountains, public viewing areas and pram ramps. Provision has also been made for physically handicapped people.
- 47. A public address system will be installed to broadcast aircraft departures, information on baggage availability or emergency instructions atc.
- 48. Provision will be made to sir condition the passenger gate lounges, the concession areas and the airline areas. Because of the sub-tropical climate of Coolangatta, no provision has been made for general heating of the building, nor for air conditioning of the departure concourses and the arrivals and inwards baggage areas. The building will be fully insulated where necessary.
- 49. The terminal and epron will primarily accommodate traffic carried by the two national trunk airlines and are suitable to handle international aircraft but no provision has been made for services such as customs and immigration.
- 50. The Department of Transport gave an assurance that regional and commuter airlines will continue to be satisfactorily housed in the existing terminal area. It will be also possible for such operators to work from the new terminal on an agency basis with the main operators.
- 51. In meeting the above requirements, the terminal has had to be located in a relatively low-lying area. Safety from flooding will be provided by constructing the floor of the terminal above the expected level of once-in-a-hundred-year frequency floods. Provision has been made for the relocation of Coolengatta Creek, as part of a separate drainage project being carried out by the Gold Coast City Council.

- 52. Emphasis has been placed on the building being a minimum maintenance, energy afficient, no-frills structure and on minimising the possible effect of corrosion due to the warm, moist structure.
- 53. The building will be provided with an overall colour scheme, and associated decor designed to reflect the tropical, holiday, tourist atmosphere of the surrounding community and aconomy. This theme would also be carried through in the landscaping.
- 54. Road Access and Car Parking Efficient vehicular traffic flow will be encouraged by a one-way road system running from the existing serodrome entrance, past the new terminal and car park, and looping back past the existing building area to the existing exit. The proposal also involves the upgrading of Longa Avenus and negotiations are in progress with the Gold Coset Lity Council.
- 55. The car park will be initially constructed for 350 vehicles including space for taxis, hire cars, VIP cars and rental cars. The public car park will be operated by a concessionairs.
- 56. <u>Services and Security</u> The proposed terminal complex will be provided with the normal services including:
 - electrical power, brought underground from the serodrome boundary;
 - water for both domestic and fire fighting purposes, from the local water supply system;
 - sewerage via a connection to the local municipal sewerage disposal system;
 - exterior lighting to access road and car park.
- 57. Underground hydrant fuelling to each aircraft parking position will be provided by the oil companies at their expense.
- 58. The complex will be built as a secure area by the provision of gate lounges for screening both passengers and hand baggage within the terminal building and externally by the use of vandal-proof grills. A combination of steel mesh security fembing, lockable doors and gates will provide security for the terminal area.
- 59. Fire accurity for the complex will be provided by an automatic sprinkler system, supplemented by smoke detectors in certain areas in the building, and by a ring main hydrant system elsewhere.

60. <u>Committee's Conclusion</u> The proposed new terminal building, aircraft parking apron, taxiways and car park separate from the existing terminal are a satisfactory solution to the present congestion at Coolangatta Aerodrome.

CONSTRUCTION

- 61. The Site The new terminal complex has been sited approximately 200 metres south of the existing terminal and will be about 500 metres from the coast.
- 62. The site is flat grassland with a shallow lagoon at the south end. Investigations have shown the subsoil material to be predominately eand to a depth of about 5 metres but some areas of unsuitable material exist and will require replacement.
- 63. Coolengatta Creek flows through the lower portion of the site and cerries considerable storm water during the wat season. The creek rises to the north of the airport, flows through the airport lend and discharges through Gold Coast City Council land to the sea. The catchment area of the creek is in the Gold Coast City Council area, the Albert Shire and the airport itself.
- The drainage scheme is needed to reduce flood levels within the airport boundaries, se well as outside, and thus will provide a significant benefit to the Commonwealth. A flood mitigation scheme is being carried out by the Gold Coast City Council and requires Coolangatta Creek to be relocated, widened and despened within the aerodrome to improve its carrying capacity in conjunction with major works by the Council.
- 55. The drainage/flood mitigation scheme will be on a cost sharing basis. The Committee considers that this is a reasonable approach. The work within the aerodrame will be carried out by the Commonwealth and is estimated to cost \$430.000. It has been funded as a separate project in the 1979/80 major new works program. The new terminal development will require the diversion of the initially planned alignment of the creek around the new apron at an estimated cost of \$85,000. This amount was included in the cost of the proposed new terminal complex but is to be transferred to the 1979/80 works program, thus reducing the cost of the proposed new terminal complex by that amount.

- 66. The apron and building area will be filled so that the finished levels of the terminal building floor and the aircraft pavements will be above the expected flood levels resulting from storms of 1-in-a-100 year frequency. The sand for filling will be obtained from the Coolengatta Craek drainage works on the aerodrams.
- 67. <u>Committee's Conclusion</u> The site for the proposed terminal complex is suitable.
- 68. The Terminal Building
 resulted in the design of a single-level building with a floor area of 9591
 square metres, capable of being readily expanded and changed to meet
 differing requirements. It is besically a large framed space within which
 the varying functional requirements can be accommodated, both initially
 and in the future.
- 69. Due to the expected changes in passenger handling procedures, there is a need for building flexibility to allow for internal re-arrangements. This will be provided for by reducing the number of fixed internal elements and employing simple construction techniques and finishes.
- 70. The type of pessenger and baggage handling techniques envisaged are in direct response to the forecast hourly passenger and sircraft demands, and significant increases in these will most likely require a more complex handling technique.
- 71. A high proportion of holiday traffic and the more casual character of the Gold Coast relative to the capital cities have been factors influencing the design.
- 72. Structure The primary structural system for the building consists of steel columns supporting concealed universal steel roof beams, based on a three-dimensional planning grid of 6150 mm.
- 73. The structure will be supported on reinforced concrete pad factings and will be independent of the concrete floor slab.
- 74. Materials and Finishes The building will be clad with P.V.C. protected steel sheet roofing and with prefinished metal external wall panels between exposed columns. Structural steelwork will be hot dipped galvanised with a paint finish.
- 75. Windows and doors will be framed in natural anodised aluminium and security shutter grilles will also be aluminium. Glazed screen walls in

- in trafficable areas will be fitted with safety laminated glass. Internal partitions will generally be plasterboard fixed to steel stude, with a paint finish.
- 76. Within the main spaces, the ceiling will be part of an integral roof system and be of sound and heat absorbing building board. Suspended ceilings in other areas will be accounted tiles.
- 77. Floors generally will be finished in a low glaze ceramic tile with screeded concrete floors being provided to airlines and concessions areas for separate finishes.
- 78. Mechanical Comfort air conditioning will be provided to gate lounges, sirilne offices and concessions areas with localised air conditioning serving the airline passenger and baggage handling work stations in the departure concourse. Air conditioning will be packaged units located within the building with costs being borne by the airlines and concessionaires as appropriate.
- 79. Plant rooms, toilets and similar areas will be mechanically ventilated and refrigerated drinking units will be located within the terminal. Baggage handling equipment is to be provided by the airlines.
- 80. Electrical Power supply will be obtained from the local supply authority grid from a high tension line beside the Pacific Highway. From the aexodrome boundary the power supply will be underground to a substation located within the terminal. Although a standby alternator will not be provided, essential circuits will be included for future connection. The Committee notes that an emergency battery-operated lighting system to function within the terminal building will be provided and that further consideration is being given to the provision of an alternator.
- 81. Within the building, distribution will be made for demands by lighting, baggage handling aguipment, air conditioning and exhaust fans, and general purpose outlets.
- 82. Main spaces will be provided with high intensity discharge lamps, with recessed fluorescent fittings illuminating the lowered ceiling areas.
- 83. Provision has been made for a joint user public address system to be installed throughout the terminal, together with clocks in the public areas.

- 84. Street lighting to Longs Avenue and the main internal road will be installed to code requirements, together with car park lighting, and complete apron floodlighting to achieve required levels.
- 85. <u>Fire Protection</u> The building will be of fire resistant construction and will be protected by a sprinkler system, in conformity with the State Code. Smoke detectors will provide additional early warning protection. This system will be connected to both the airport fire station and the nearby Bilinga Fire Station on the Pacific Highway.
- 86. Other Services Direction and information signs, complying with the Airport Building Signing System, will be provided throughout the terminal.
- 87. The terminal building will be connected to existing water supply, sewerage, stormwater drainage and fire hydrant systems. Sewage will be discharged into the Gold Coast City Council system through the aerodrome pump well.
- 88. Provision for Future Expansion

 allowed for in the planning and siting of the terminal building and can be provided at ground level by an additional bay along the aircide of the terminal. In addition, it is envisaged that when wide-bodied aircraft are introduced, they could be catered for by developing a series of departure lounges at a first floor level, linking directly with aircraft by serobridges. This elevated passenger concourse would connect with an expanded arrivals/departure concourse at ground level, and permit aircraft servicing and baggage handling without passengers on the appen.
- 89. Aircraft Movement Area
 of 30 000 square metree and is sized to cater for six 8727-200 aircraft
 parked on the epron at one time under their own power. The apron will be
 connected to the runway and existing taxiway with taxiways of 23 metree width
 as shown on the site plan at the end of this report.
- 90. The aircraft pavements have been designed for the B727-200 eircraft and will be adequate in strength for the DCIO type aircraft expected in the 1990s. The aircraft pavement will consist of 50 mm of bituminous concrete on

- 300 mm of fine crushed rock on a granular stabilising layer on the sand subgrade. Aircraft tug strength pavement comprising 50 mm of bituminous concrete on 200 mm of granular material will adjoin aircraft pavement on the terminal building side. All pavements will be provided with 3 metres wide bituminous surfaced shoulders.
- 91. A hydrant refuelling system is to be installed in the apron at a cost to the oil companies and the construction will be co-ordinated to facilitate this work.
- 92. Roads The main access to the terminal building from the Pacific Highway will be along Longa Avenue which will be paved to two lanes in width with a bituminous concrete surface. This work will be carried out in conjunction with the Gold Coast City Council.
- 93. A bituminous surfaced road is to be provided on the airside of the terminal for use by airline ground support facilities and a road connection will be provided on the airside between the new and existing arrons.
- 94. <u>Car Perks</u> The cer perk area shown on the site plan will provide initially for 350 vehicles. This allows for 50 taxis and hire cers to be located immediately opposite the terminal with the possibility of expanding this area to a total of 200 cers.
- 95. Beyond this erea, there is a public car park with an initial capacity of 300 vehicles which will be operated by a concessionnaire. This car park will have provision for further expansion, by increments, to a maximum capacity in excess of 1500 spaces.
- 96. <u>Security Fencing</u> A chain wire fence linking the new terminal area with the existing fenced area will be provided, with allowance for access to the apron by authorised vehicles through gates adjacent to each end of the building and to the eivside apron road.
- 97. Landscaping The general philosophy of the landscaping will be to reflect the sub-tropical and holiday character of the Gold Coast region. Such landscaping will be in pockets immediately adjacent to parts of the building, in concentrated areas within the car park vicinity, and in the building reserve between the terminal and apron.
- 98. <u>Environmental Considerations</u> Particular attention was given to the likely effect on the environment of the proposed works. The project was assessed as having no long-term adverse environmental consequences and

- care will be taken during construction to minimise unavoidable short-term effects. It will create no extra pollution of waterways as sewerage is piped away and will not contribute to additional noise or air pollution.
- 99. During construction there will be an unavoidable requirement for transporting building and construction materials, plant and staff. The existing public road system is considered to be well able to accommodate the extra vehicle movements involved. Areas of ground within the aerodrome used for temporary construction roads or building sites will be made good by landecaping on completion of the project.
- 100. The proposal was referred to the Department of Science and the Environment in accordance with the procedures of the Environmental Protection (Impact of Proposals) Act 1974. That Department advised that the preparation of an Environmental Impact Statement on the proposal was not required.
- 101. <u>Committee's Conclusion</u> The Committee recommends the construction of the work in this reference.

ESTIMATE OF COST

102. The estimated cost of the work when referred to the Committee was \$4.550 million as at May 1979. Since the public hearing, the cost of the diversion of the flood mitigation scheme around the proposed terminal building, estimated at \$85 000, is to be transferred to the 1979/80 works program, as mentioned in paragraph 65. The revised estimate of cost of \$4.465 million is made up as follows:

	\$
Building	2 350 000
Aircraft movement area	1 450 00
General engineering	665 000
	4 465 000

COST RECOVERY

103. The cost of the project will be recoverable from the aviation industry in accordance with Government cost recovery policy.

SECURITY

104. The Committee was informed that there are no Commonweelth Police currently based at Coolangatta Aerodrome nor are there any Departmental staff to undertake duties solely related to security functions.

- 105. Personnel are assigned for accurity purposes to serodromes assessed as security sensitive, firstly to assist in measures simed at preventing acts of unlawful interference with civil aviation operations and, secondly, to protect the property assets of the Commonwealth where there is a substantial investment. To date Coolangatte has not been classified as security sensitive. The Committee was informed that the matter is kept under regular review in the light of the level of risk. Future reviews of security staff will depend on the outcome of the review process from time to time.
- 106. The Committee noted that some airports with similar or less passenger movements than Coolengatts were provided with Commonwealth Police, e.g. Hobert, Townsville and Cairns. The Committee was impressed with evidence by the Commonwealth Police Officers' Association that Commonwealth Police at airports should be provided with accommodation clearly visible to the travelling public in the main terminal building.
- 107. <u>Committee's Conclusion</u> The Committee requests that the matter of security at Coolangatte Aerodrome be kept under regular review and that if Commonwealth Police and/or Departmental security staff are required, they should be located within the terminal building.

PROJECT MANAGEMENT

- 108. A representative of Watkine Limited, Mr. A.G. Cole, presented a submission and gave evidence that his company could achieve an estimated 15% savings in building costs and complete the project eight months sarlier than presently progremmed. However, Mr. Cole acknowledged that the present program of work was probably designed to spread expanditure over three financial years. This was later confirmed to the Committee to be the case.
- The Department of Housing and Construction stated that completion of the project earlier then currently programmed was possible and in less time than put forward by Watkins Limited. However, it would mean that other projects would be delayed as a consequence because of the funds allocation in the overall Commonwealth works program. In addition, the Department of Transport had requested the current completion date of August 1981.

- 110. Mr. Cole also suggested that time spent on design and documentation by the Department of Housing and Construction was not included in costs of individual jobs undertaken and could be between 10% and 30% of the overall estimate for the Coolangetta project. However, the Committee was informed that the cost of preparation of plans and designs by the Department of Housing and Construction's Queensland Regional Office, not included in the project cost, was \$38 000 and the Department's Central Office in-put was \$9000. These costs were much less than the minimum fee scale that a consultant would be entitled to charge.
- 111. The Committee noted that the question of project management was still under consideration by the House of Representatives' Expenditure Committee.

PROGRAM

112. The target date for the commissioning of the new complex is 1 August 1981 and was selected following close consultation between the Department of Transport, the Department of Housing and Construction and the two national trunk operators. It is generally accepted as being reasonable in the context of the following timing:

> Commencement of calling of tenders

8 weeks after Parliamentary approval

Commencement of Construction 14 weeks after Parliamentary approval

Commissioning

1 August 1981.

RECOMMENDATIONS AND CONCLUSIONS

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

Paragraph

ı. THE EXISTING TERMINAL COMPLEX AT COOLANGATTA AERODROME IS INADEQUATE FOR THE CURRENT VOLUME OF PASSENGER TRAFFIC.

23

2. THERE IS EVERY INDICATION THAT THE INCREASE IN ANNUAL PASSENGER THROUGHPUT AT COOLANGATTA WILL CONTINUE.

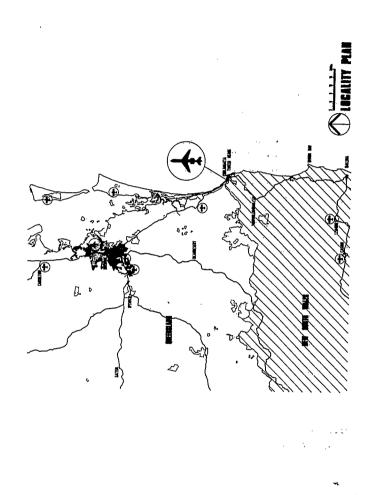
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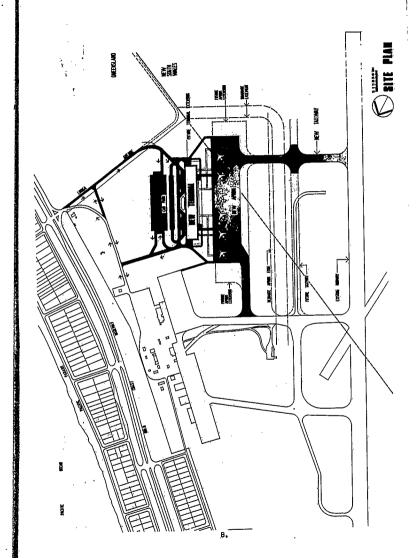
		<u>Paragraph</u>
3.	THE PROPOSED NEW TERMINAL BUILDING, AIRCRAFT PARKING APRON, TAXIWAYS AND CAR PARK, SEPARATE FROM THE EXISTING TERMINAL, ARE A SATISFACTORY SOLUTION TO THE PRESENT CONGESTION AT COOLANGATTA AERODROME.	60
4.	THE SITE FOR THE PROPOSED TERMINAL COMPLEX IS SUITABLE.	67
5.	THE COMMITTEE RECOMMENDS THE CONSTRUCTION OF THE WORK IN THIS REFERENCE.	101
б .	THE ESTIMATED COST OF THE WORK IS \$4.465 MILLION AT MAY 1979 PRICES.	102
7.	THE COMMITTEE REQUESTS THAT THE MATTER OF SECURITY AT COOLANGATTA AERODROME BE KEPT UNDER REGULAR REVIEW AND THAT IF COMMONWEALTH POLICE AND/OR DEPARTMENTAL SECURITY STAFF ARE REQUIRED THEY SHOULD BE LOCATED WITHIN THE TERMINAL BUILDING.	107

Keith Show (M.H. Bungey)
Viet Chairman

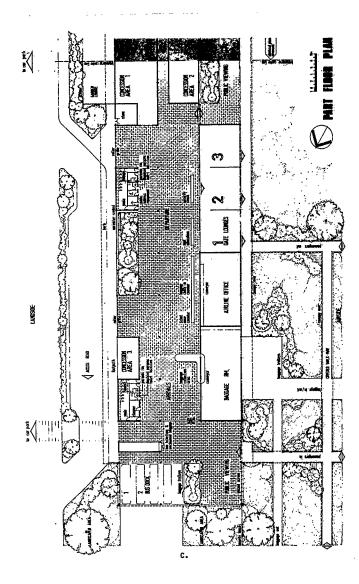
Parliamentary Standing Committee on Public Works, Parliament House, CANBERRA. A.C.T.

13 September 1979.





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