

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

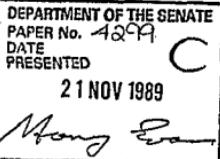
REPORT

relating to the

REDEVELOPMENT OF TERMINAL FACILITIES  
AT ALICE SPRINGS AIRPORT



(Nineteenth Report of 1989)



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

REPORT

relating to the

REDEVELOPMENT OF TERMINAL FACILITIES  
AT ALICE SPRINGS AIRPORT



(Nineteenth Report of 1989)

© Commonwealth of Australia 1989

TABLE OF CONTENTS

	Page
Members of the Parliamentary Standing Committee on Public Works	iv
Members of Sectional Committee on the redevelopment of terminal facilities at Alice Springs Airport	v
Extract from the Votes and Proceedings of the House of Representatives	vi
	Paragraph
The Reference	1
The Committee's Investigation	4
Background	9
The Need	12
. Background	12
. Aviation Traffic	13
. The Inadequacy of Existing Facilities	17
. Forecast Growth	23
. Committee's Conclusion	27

<b>The Proposal</b>	28
. Scope of Works	28
. Alternative Locations	29
. Committee's Conclusion	32
. Common or Separate Facilities	33
. Architectural and Internal Design of the Terminal	35
. Apron	41
. Baggage Handling	48
. Concessions	50
. Access	54
. General	54
. Terminal	55
. Operations and Aero Club	58
. Oil Companies Compounds	59
. Freight and Flight Catering	60
. Santa Teresa Road	61
. Parking	62
. Buses	63
. Taxis	64
. Hire Cars	65
. Rental Cars	66
. Private Cars	67
. Staff	68
. Landscaping	69
. Committee's Recommendation	73
. Long Term Development Plan	74
. Committee's Recommendation	77
<b>Construction</b>	78
. Building Structure	78
. Services	81

<b>Environment</b>	<b>85</b>
<b>Consultation</b>	<b>87</b>
<b>Construction Program</b>	<b>89</b>
<b>Financing the Proposal</b>	<b>90</b>
<b>Cost Estimate</b>	<b>93</b>
. Committee's Recommendation	94
<b>Conclusions and Recommendations</b>	<b>95</b>

	<b>Page</b>
<b>Appendices</b>	
. Appendix A - List of Witnesses	<b>A1</b>
. Appendix B - Project Drawings	<b>B1</b>

MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE  
ON PUBLIC WORKS

(Twenty-ninth Committee)

Mr Colin Hollis MP (Chairman)

Mr Percival Clarence Millar MP (Vice-Chairman)

Senate

House of Representatives

Senator Bryant Robert Burns

Mr George Gear MP

Senator John Robert Devereux

Mr Robert George Halverson OBE MP

Senator Dr Glenister Sheil

Mr John Graham Mountford MP

Mr William Leonard Taylor MP \*

\* Appointed on 29.9.88 following resignation of  
Mr Maxwell Arthur Burr MP

Secretary: Mr Peter Roberts

**SECTIONAL COMMITTEE ON REDEVELOPMENT OF TERMINAL FACILITIES ALICE  
SPRINGS AIRPORT**

Mr Colin Hollis MP (Chairman)

Mr Robert George Halverson OBE MP (Vice-Chairman)

Mr William Leonard Taylor MP

Inquiry Staff:                   Mr Peter Roberts - Secretary  
                                         Mrs Denise Denahy - Assistant Secretary  
                                         Mrs Helen Hutchins - Secretarial Support

EXTRACT FROM VOTES AND PROCEEDINGS OF  
THE HOUSE OF REPRESENTATIVES

NO. 137 DATED WEDNESDAY 5 SEPTEMBER 1989

8 PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - REDEVELOPMENT OF  
TERMINAL FACILITIES AT ALICE SPRINGS AIRPORT: Mr West  
(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:  
Redevelopment of terminal facilities at Alice Springs  
Airport.

Mr West presented plans in connection with the proposed work.

Debate ensued.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REDEVELOPMENT OF TERMINAL FACILITIES  
AT ALICE SPRINGS AIRPORT

By resolution on 5 September 1989 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the proposal for the redevelopment of terminal facilities at Alice Springs Airport.

THE REFERENCE

1. This proposal for the redevelopment of terminal facilities at Alice Springs Airport, Northern Territory, comprises the construction of a new terminal of approximately 9 200m<sup>2</sup>, a new access road system, associated landscaping, vehicle parking areas and the upgrading of engineering services.
2. The conceptual design as proposed by the Federal Airports Corporation takes (FAC) into account the forecast passenger and aircraft movements and the space requirements requested by both Ansett Airlines of Australia and Australian Airlines, together with forecast aircraft parking requirements in the mid to late 1990s.
3. The indicative cost of the proposal is \$20M at July 1989 prices.

COMMITTEE'S INVESTIGATION

4. The Committee received a written submission from the FAC and took evidence from its representatives at a public hearing in Alice Springs on 26 September 1989.

5. The Committee also took evidence from:

- Alice Springs Town Council
- Ansett Airlines of Australia
- Australian Airlines
- Bush Airport Committee
- Institute for Aboriginal Development
- Master Builders Association of the Northern Territory
- Royal Flying Doctor Service
- The Hon. Roger Vale, MLA
- The Northern Territory Government.

6. A written submission was also received from Capitol Airlines of Australia and this is incorporated in the transcript of evidence.

7. A list of witnesses who appeared at the public hearing is at Appendix A. The Committees proceedings will be printed as Minutes of Evidence.

8. Prior to the public hearing the Committee inspected the existing facilities at Alice Springs Airport and the site proposed for the redevelopment.

#### BACKGROUND

9. The FAC is a Government Business Enterprise established by and incorporated under the Federal Airports Corporation Act 1986. The Act was passed by the Commonwealth Parliament on 14 February 1986 and proclaimed on 13 June 1986.

10. The FAC is required to be a financially viable organisation. Its revenues come mainly from aircraft landing fees, commercial services and rentals. Capital expenditure funds are obtained from commercial borrowings, independent from the

Federal Budget and the debts are serviced from its operating revenues.

11. On 1 January 1988 the FAC assumed responsibility for ownership, management and development of seventeen airports. On 1 April 1988, the FAC assumed responsibility for a further six airports, one of which was Alice Springs. In its negotiations with the Commonwealth for the acquisition of Alice Springs Airport, the Corporation agreed that it would undertake the development of terminal facilities at an estimated cost of up to \$20M.

#### THE NEED

##### Background

12. Development of facilities in the existing terminal area at Alice Springs commenced in the early 1960s following construction of the current main runway. The initial terminal development consisted of approximately 646m<sup>2</sup>. This terminal was expanded in 1973 to 1 136m<sup>2</sup> and included the addition of an unenclosed baggage collection area of 208m<sup>2</sup>. In 1985 a bar, snack bar and souvenir shop were added by the concessionnaire which expanded the total area of the terminal to 1 460m<sup>2</sup> of which 440m<sup>2</sup> is unenclosed. In early 1988 with the introduction of 100% security screening of passengers travelling on domestic jet aircraft to international airports, it was necessary to install transportable buildings to act as secure departure lounges.

##### Aviation Traffic

13. Passenger traffic through Alice Springs has grown quickly over the years, generally at a higher rate than national average growth rates. Table 1 lists the historical activity from 1960 and provides forecasts to the year 2000.

TABLE 1 - AIRLINE PASSENGER & AIRCRAFT MOVEMENTS

	Passengers	Aircraft
	Originators/Terminators /Transfers	
1960	16 000	N/A
1970	55 000	3 422
1980	216 000	5 623
1988	503 000	9 343
1990	575 000	10 500
2000	1 084 000	15 000

14. The FAC advised the Committee that passenger traffic is forecast to grow at an average of 6.5% per annum for at least the next ten years.

15. In recent years Alice Springs has developed as a hub airport with the regular scheduling of services from Yulara, Perth, Cairns and Sydney to supplement the long established Adelaide/Darwin route. Furthermore there are infrequent services from Broome, Melbourne and Brisbane.

16. Generally these services are scheduled to arrive and depart at similar times to enable the transfer of passengers between the various services. This timetabling of flights has resulted in approximately 45% of passengers being transit or transfers. The volume of transit/transfer passengers and the numbers of aircraft involved in the hubbing operation makes Alice Springs Airport unique in Australia.

#### The Inadequacy of Existing Facilities

17. The existing facilities at Alice Springs are located almost entirely within an area to the north of the main runway. The

single facility with the greatest need for redevelopment is the terminal building. The floor area of the existing building is 460m<sup>2</sup>, of which 440m<sup>2</sup> consists of unenclosed baggage collection area and verandahs. The terminal has to cater currently for about 400 000 originating and terminating passenger movements per annum plus a further 326 000 transit and transfer passenger movements.

18. By comparison the domestic terminal at Townsville has an area of 9 100m<sup>2</sup> with a similar annual domestic passenger activity in terms of originating and terminating but a lesser number of transit and transfer passengers than Alice Springs. Similarly the proposed new terminal at Darwin has a domestic area of 9 400m<sup>2</sup> with a lesser number of peak hour passengers than Alice Springs.

19. From these comparisons, it is apparent that the existing terminal building is seriously undersized and this is borne out by the gross overcrowding that currently takes place on a regular twice-daily basis.

20. Parking of the largest domestic aircraft on the apron currently infringes on the height limitations for runway operations. This factor dictates the need for the building line to be at least 346 metres from the runway centre line to allow future parking of aircraft to comply with obstacle clearance regulations.

21. The location of the new terminal dictates the need for the reconstruction of the airport road system and car-parking layout, together with the provision of new services and the relocation of the existing fuel depot and other minor facilities.

22. There is increasing pressure to provide facilities to handle international air services. Currently the requirement is to be able to handle occasional international charters. This need is considered in the proposed development.

### Forecast Growth

23. As stated earlier, Alice Springs traffic has grown quickly over the years, generally at a rate higher than the national average. Throughout the last decade, average annual growth of originating, terminating and transfer passengers was just under 12%. Strong growth is expected to continue through the next decade, albeit at a lower rate. The FAC after consultations with the airlines and the Bureau of Transport and Communications Economics, has projected a 6.5% growth rate per annum which would result in the total number of passengers being doubled by 1990.

24. The number of transit passengers through Alice Springs, has also grown rapidly with the increasing use of the airport as a hub for trans-continental services. Airline information indicates that the number of transit and transfer passengers is currently approximately 40 to 50% of all passengers using Alice Springs. This characteristic nature of the passenger traffic at Alice Springs is expected by the airlines to continue.

25. Like other transport facilities, the size of an airport terminal is determined by its peak loading. While occasional overloading is acceptable, if the building is to avoid criticism (and ultimately consumer resistance) it must be capable of handling the normal scheduled peaks at an acceptable standard of service.

26. The use of Alice Springs as a hub airport ensures that the peak loading is of greater significance for the design than annual passenger movements. Currently up to seven jet aircraft occupy the apron at one time and the airlines have indicated that this may increase to eleven aircraft by 1998. The airlines have provided forecasts of their peak hour passenger movements for 1995 and these indicate a need to accommodate:

- 511 arrivals (excluding transits and transfers)
- 513 transits and transfers
- 445 departures (excluding transits and transfers).

#### Committee's Conclusion

27. The existing terminal building at Alice Springs Airport is seriously inadequate and there is a need for the redevelopment of terminal facilities to cater for existing and projected aviation traffic.

#### THE PROPOSAL

##### Scope of Works

28. The works proposed to be undertaken comprise:

- a new single level terminal building with a gross area of 9 200m<sup>2</sup>
- covered walkways to connect the new terminal building to the existing apron
- ground equipment parking areas
- relocation of the existing fuel depot
- aircraft waste disposal facility
- airfreight and catering facilities
- a new public car-park
- parking areas for buses, taxis, hire cars
- relocation of the existing Santa Teresa Road
- a new circulatory road system to access the terminal building and car-park and access roads to the facilities to be relocated
- upgrading of power and water services to the site
- a terminal area sewerage system and effluent treatment pond
- drainage works
- street lighting

- landscaping of the car-park, other landside areas, and the area immediately airside of the terminal building.

#### **Alternative Locations**

29. The FAC considered three alternatives for the location of the new terminal building and these are outlined below:

- alternative 1 involved the development of a new terminal to the east of the existing terminal and set back a minimum of 346 metres from the runway.
- alternative 2 involved the expansion of the existing terminal on the same building alignment.
- alternative 3 involved the development of a new terminal to the east of the existing building area. Alternative 3 would enable construction on a greenfield site but would require a new apron and taxiway and the estimated cost of \$6M ruled this option out.

30. The FAC advise that alternative 1 has the following advantages over alternative 2:

- minimal disruption to airline operations and passengers during construction of the new work
- is simpler to expand when the need arises
- a future apron would not infringe the obstacle clearance regulations
- it is estimated to cost \$1.2M less.

31. For these reasons, alternative 1 is the option preferred by the FAC.

#### Committee's Conclusion

32. The location chosen by the Federal Airports Corporation is the most suitable for the redevelopment of terminal facilities at Alice Springs Airport.

#### Common or Separate Facilities

33. Two further options which investigated the provision of common or separate facilities were examined for the terminal building.

- option 1 provides for separate check-in, administration, baggage collection and makeup/breakdown, arrivals, departures/gate lounges, club lounges for the two major airlines and common concourse area.
- option 2 is a more integrated facility with separate check-in, administration and departure area for each airline, but a common area for baggage handling, makeup and breakdown and baggage collection.

34. Option 1 is the preferred scheme as it is easier to expand and also provides separate facilities desired by the airlines. Departure lounges may not be dedicated to particular airlines in order to allow flexibility in their use. The FAC advise that in both options additional airline operators could be accommodated if the need arises. However, no new entrant airlines have expressed interest in operating to Alice Springs. The FAC recognises that this may change in the future. Space has been allowed in the check-in area for any new entrants to provide

their own check-in desks so that they can exhibit their corporate identity. In relation to baggage handling, the FAC believes that the existing airlines can provide a more than adequate service on a commercial arrangement for any new entrants. The FAC also pointed out that the departure lounge is a common use area.

#### **Architectural and Internal Design of the Terminal**

35. The design relies on a strong local theme in terms of its form and materials which, together with a sympathetic landscape, will provide a unique gateway to the outback capturing the spirit of Central Australia. The graceful roof forms met internal space requirements and the need for a readily extendable roof which relate to regional influences and also provide a notion of flight. In formulating the design, the FAC has consulted with the Bush Airport Committee a local group which encouraged it to develop a "bush airport" concept. At the public hearing the Institute for Aboriginal Development Inc. proposed that a mural be included in the proposal. It believes that the mural should be constructed using the expertise of local craft people and the talents of Aboriginal artists. The FAC indicated that it is receptive to this suggestion.

36. It is proposed that the external walls will feature local stone with glazing to the majority of the upper part of the walls to light the ceiling and ensure the space is brightly lit. Full height glazing has been used to emphasize the entry to the main concourse and the view through the centre of the building towards the apron and beyond. The high level and full height glazing will also provide views of the dramatic local skyscapes. External glazing also provides views and glazed doors, provide access from the lounges, baggage collection areas and check-in areas. The design will include sufficient roof overhang to exclude the summer sun during the middle of the day. The space provisions incorporated in the design are based on requirements set out by the airlines.

4

37. The roof will be pre-finished corrugated iron to relate to the architecture of the region. The steel framed structure will be painted where exposed within the central spine. It is intended to create an impression of trees which, together with the stone walls and the admission of light, will integrate the building with the outside landscape.

38. The floors will be terrazzo or similar except in designated areas where they will be left as concrete for finishing by the airlines and concessions. The strong theme of the building will provide consistency yet there will still be adequate opportunity for the airlines to establish their corporate identities.

39. The central location of the bar/restaurant with its associated areas, with outlook towards the apron through a landscaped forecourt to the south of the building, will provide an important focus.

40. The need for disembarking passengers to circumvent the baggage makeup/breakdown area via an isolated corridor is essential for security reasons and to facilitate later expansion of the building. The layout of the building will allow the temporary use of departure lounges and baggage collection areas for the handling of international charter flights.

#### Apron

41. The terminal is set back from the existing apron edge by approximately 95 metres to allow for the future construction of apron to accommodate aircraft parked in a nose-in configuration. This parking arrangement will be necessary to accommodate the peak hour numbers of aircraft which the airlines forecast will be required by the early 1990s. The FAC is proposing as an interim measure, covered walkways between the terminal and the apron edge.

42. A number of submissions draw attention to what was regarded as excessive walking distances for passengers and the need to include the proposed future apron as part of this project. The Northern Territory Government, for example, estimated that passengers on the largest capacity aircraft would have to negotiate 260 metres of uncovered distance before reaching the covered walkway.

43. It was also concerned about safety issues with passenger movement on the apron.

44. The FAC advised the Committee that it will revise aircraft parking to minimise walking distances for the majority of passengers. However, the FAC believes that the cost of developing the future apron (estimated to be in excess of \$6M) as part of this project cannot be justified, unless the airlines are prepared to implement nose-in parking as there would be no increase in the numbers of parked aircraft with the continuation of drive-in/drive-out parking.

45. The FAC also advised that it was considering the extension of the covered walkway along the apron edge and this, in association with fences, will control the movement of passengers and minimise conflict with ground vehicle movements on the apron.

46. In its submission, the Royal Flying Doctor Service (RFDS) indicated its concern at the limited apron parking adjacent to its facility. It pointed out that on occasions its aircraft had takeoffs delayed because of apron congestion. It suggested that the apron area be extended to provide additional parking. It also suggested that a full length taxiway, parallel to the main runway, should be provided to prevent delays caused by backtracking aircraft.

47. In response to the points raised by the RFDS, the FAC indicated that it did not believe that the apron area adjacent to the RFDS facility is properly utilised at this stage and additional parking will be provided when justified. The FAC considers that the cost of current delays associated with backtracking aircraft are minimal compared with the cost of providing a full length taxiway. However, the FAC will keep the need for a taxiway under review as traffic increases.

#### **Baggage Handling**

48. A convenient baggage handling system has been developed for the terminal with particular emphasis on group travel requirements. From the check-in counters embarking passengers, baggage will travel via a baggage conveyor over the top of the baggage collection area to the baggage makeup/breakdown area where it will be loaded for transfer to the aircraft. Group travel check-in will be located each side of the general check-in areas immediately adjacent to the bus parking areas. This arrangement will not only be convenient for group tours but will keep the general check-in areas free of large amounts of baggage.

49. Incoming baggage will be taken to the baggage makeup/breakdown areas and will be placed directly on a conveyor and taken into the collection area. The collection areas are located as near as practical to the pick-up and car-park areas to minimise walking distances. Group tours will be able to board coaches virtually at the exit from the baggage collection area.

#### **Concessions**

50. The commercial success of the redeveloped Alice Springs Airport terminal will be enhanced by the mix and size of concessions within the terminal building.

51. A study of commercial area requirements, recommended that a total area of 800m<sup>2</sup> be allowed for this purpose and suggested that the area should be allocated as follows:

- 600m<sup>2</sup> combined bar/bistro/food concession
- 100m<sup>2</sup> newsagency/sundries and budget souvenirs
- 60m<sup>2</sup> special souvenirs
- 40m<sup>2</sup> softgoods, souvenirs and products.

52. The bar/bistro is considered the "anchor" trader at most airports. It has been made the centrepiece of the terminal plan for Alice Springs by being placed in a location of convenience, given high exposure and provided with an outlook across an attractively landscaped zone to the aircraft movement areas of the airport. In response to local requests an outdoor "beer garden" has been included adjacent to this area.

53. In order to create an atmosphere that will induce tourists to avail themselves of the offerings of the retail outlets, it is proposed that the terminal building, its surroundings and in particular the concessions area, incorporate a strong and interesting "outback" theme that is identifiable with Alice Springs and Central Australia.

#### Access

##### General

54. The existing airport/Santa Teresa access road from the Stuart Highway to the turnoff to the existing terminal shall be retained but will require a northerly relocation east of this point to allow development of the new terminal. The intersection at the entrance to the existing terminal area will be replaced with a large roundabout. This arrangement will separate traffic to the new terminal from traffic to the operations and aero club area.

#### Terminal

55. Incoming traffic from Alice Springs destined to the new terminal will leave the roundabout on the north eastern leg, travel around the northern side of the new car-park, turn south and then approach the terminal from the eastern side.

56. Departing traffic will travel west from the terminal to the roundabout, while cars leaving the car-park can either pass the terminal or return by the two way northern road to the roundabout.

57. The road in front of the terminal building shall be three lanes wide to allow parking and manoeuvering of drop-off/pick-up vehicles to occur without totally obstructing the flow of through traffic.

#### Operations and Aero Club

58. Traffic from these areas will leave the roundabout on the south east side and travel along the existing roadway which will be maintained in a two way operation.

#### Oil Companies Compounds

59. Access to the oil companies compounds will be along the north eastern road from the roundabout and part of the road to Santa Teresa. Returning trucks will use the same route to the roundabout thus avoiding the terminal area. An airside road will connect the oil companies compound area to the existing apron for aircraft refuelling purposes.

#### **Freight and Flight Catering**

60. These facilities will be located south and south east of the oil companies compounds and will be served by the same access road. A separate access road will be provided from the flight catering and freight area to the eastern side of the existing apron.

#### **Santa Teresa Road**

61. The existing road to Santa Teresa mission will be diverted to connect to the road servicing the oil companies compounds. This will separate Santa Teresa traffic from the terminal area. The Northern Territory Government indicated to the Committee that the FAC's proposed arrangement for the diversion of the Santa Teresa Road was not acceptable to it because of traffic management considerations. The FAC informed the Committee that it will negotiate with the Northern Territory Department of Transport and Works to achieve an acceptable design.

#### **Parking**

62. Existing car-parks will remain and can be used for staff and users of the old terminal building.

#### **Buses**

63. Buses serve a large proportion of the arriving and departing passengers at Alice Springs. Kerbside parking will be provided for the shuttle bus operation, and a double decked bus parking area will be provided adjacent to the arrival/departure areas at each side of the terminal. Remote parking will be provided for long term and backup storage of buses.

#### Taxis

64. A taxi parking area will be provided in the taxi rank immediately across the landscaped road in front of the terminal building. Taxis will generally drop off passengers at the terminal kerbside and then travel to the taxi rank for pick-up of passengers.

#### Hire Cars

65. A dedicated bay will be used by hire cars. Pick-up and drop-off will generally be made at the kerbside, but may occur in the parking bay if convenient to the user.

#### Rental Cars

66. Parking for 32 rental cars will be provided in dedicated bays near the centre of the public car-park. The area allocated is capable of convenient future expansion. Access to these bays will be through the normal car-parking entrances and exits.

#### Private Cars

67. Private car-parking spaces for 137 vehicles will be provided adjacent to the hire car bays and will be connected to the terminal entrances/exits by pedestrian walkways and crossings. Expansion of the car-park can take place in three directions without disrupting the proposed access road. A large landscaped area will be located in the centre of the car-park to improve its appearance.

#### Staff

68. Parking spaces for staff will be made available in the present car-park near the existing terminal buildings. A footpath linking this area to the new terminal will be provided.

Should this area be required for other purposes in the future, additional parking will need to be provided for staff in the general area near the operations building.

#### **Landscape**

69. The overall character of the landscape design will build upon the indigenous characteristics of the region to provide a distinctive introduction to the outback, to minimise maintenance requirements, and to provide a pleasing and more comfortable environment.

70. The design includes the development of a simulated dry land creek bed leading to a water hole adjacent to the outdoor food/drinks court. The water hole will create a focus and this landscape will enable use of a diverse range of plants from desert to waterside species and the opportunity to provide shade and a sense of coolness.

71. Of greatest importance in the car-park and peripheral areas is the provision of shade. Accordingly, these areas will be developed with woodland planting using shade trees from the region and shrubs massed together as under storey planting beds. Within the larger garden area, an opportunity exists to create an area which is semi-secluded from the main activity of the airport, where patrons will have an opportunity to "escape" and wait within a simulated indigenous landscape. In areas for future development, fast growing acacia species predominantly will be used. These small trees and shrubs will form an appropriately short term cover.

72. Both Ansett and Australian expressed concern at the landscaping cost of \$510 000 which was seen to be in excess of functional requirements. It was suggested that both the Northern Territory Government and Alice Springs Town Council should be

asked to contribute to the cost if the landscaping is to be used to emphasize the indigenous characteristics of the region.

#### Committee's Recommendation

73. The Federal Airports Corporation should discuss with the Northern Territory Government and the Alice Springs Town Council the question of a financial contribution towards the landscaping of the terminal environs.

#### Long Term Development Plan

74. The need to expand the terminal building progressively to cater for the increase in air traffic is of paramount importance in the design and led to the form of the building and roof design.

75. Arranging the various functions within the terminal along the central concourse, with each area having exposure to the east and west sides, facilitates the extension of each area to the east or west without interruption to the operation of the terminal. It also ensures that there will be minimum rework of the areas within the initial development to subsequently provide additional accommodation. As a result of placing the proposed new terminal to the north of the existing apron, it will be possible to extend the apron north between the existing terminal to the west and existing hangers to the east. This will permit, in the future, a greatly increased parking capacity as well as nose-in parking of A300 size aircraft and parallel parking of B 747 aircraft without infringing the obstacle clearance regulations. The number of existing aircraft parking positions is adequate for current needs. The reserve for the new apron will provide additional aircraft parking positions only if push-back parking is adopted. The airlines have stated they do not intend to change to this arrangement within the next ten years.

76. A large area has been reserved north of the proposed terminal to allow for the expansion of the car-park as required. In the longer term, the existing hangers to the east could be demolished to allow apron expansion in that direction. The FAC informed the Committee that its conceptual planning to date related to the actual terminal area but that since taking over the airport it had not had time to prepare a master plan for the whole airport.

#### **Committee's Recommendation**

77. The Committee recommends that the FAC should prepare a master plan for Alice Springs Airport as soon as possible.

#### **CONSTRUCTION**

##### **Building Structure**

78. The building structure comprises steel trusses on steel columns with the roof supported on column formed steel sections. Spans have been generally limited to approximately 15 metres to 20 metres except for the baggage areas in order to contain the cost of the superstructure.

79. Footings are a combination of reinforced concrete pads and strips and use will be made of footings in combination with the steel superstructure to resist horizontal wind forces.

80. Air handling plant rooms will be generally above the ceiling over the airline administration and baggage handlers area and will be supported on steel pan reinforced concrete floors on steel beams. The main thermal plant will be housed in a separate facility to the east of the terminal. Internal walls will be supported by steel columns spanning the floor and the superstructure.

## Services

81. The proposed terminal building has an occupancy and usage pattern which is quite different from any other terminal or office buildings. Because the building has only three or four hours per day of high occupancy and a majority of people in the terminal are either passengers or staff, careful consideration of the types of services needed is required together with the ability to shut down services in areas not in use so as to minimise operating costs.

82. The requirements of a long term owner mean that capital costs, operating costs and maintenance must be carefully balanced to ensure the objectives are achieved over the life of the facility. Because of the relatively remote location of the site, reliability of operation and the facility of servicing plant and equipment will be carefully considered. All primary site reticulation systems will be designed with sufficient spare capacity and facility for alteration and additions for a 50% increase in demand.

83. All services will be designed and installed with a sufficient spare or standby capacity to ensure that the failure of any one component does not render the terminal building inoperative. Wherever possible, lighting shall be switched in small areas to allow maximum flexibility with varying occupancy levels and to make full use of daylight. All lighting in public areas shall be selected for long lamp life and located for ease of lamp replacement.

84. Areas served by air-conditioning will be aligned wherever possible to operational areas so that they can be shut down when the areas are not in use. Base air-conditioning and electrical services shall be installed to single designated locations to all concessions and airline operators areas ready for their own fitout. Additional or supplementary cooling or electrical loads

for local areas with high demands will be the responsibility of the concessionnaire or the airline respectively.

#### ENVIRONMENT

85. The proposed works involve redevelopment of a significant area of the existing terminal area and new developments affecting approximately twelve hectares of adjacent land. The FAC referred the proposed works to the Northern Territory Conservation Commission which advised that the works will have no significant impact and it is satisfied that the environmental issues are being addressed. The Australian Heritage Commission and the Aboriginal Sacred Sites Authority were also consulted and raised no objections.

86. On the basis of this information the FAC concluded that there will be no significant environmental effects and therefore did not submit a Notice of Intention to the Department of Arts, Sport, Environment, Tourism and Territories under the Environmental Protection (Impact of Proposals) Act 1974.

#### CONSULTATION

87. The FAC consulted with the following bodies during the early phase of the project:

- Aboriginal Sacred Sites Authority
- Alice Springs Regional Tourist Association
- Alice Springs Town Council
- Ansett Airlines
- Australian Airlines
- Bush Airports Committee.
- Confederation of Industry and Commerce
- Northern Territory Department of Transport & Works
- Northern Territory Conservation Commission
- Northern Territory Power and Water Authority

- Northern Territory Department of Lands and Housing
- Northern Territory Tourist Commission
- Oil Companies
- Various concessionnaires

88. A meeting of airport tenants and other users was held to brief them on the progress of terminal planning and to seek comment.

#### **CONSTRUCTION PROGRAM**

89. Following earlier discussions with the Committee, approval was given to the FAC for the implementation of essential works in advance of this proposal which were required to provide a clear site for development. These works include the deviation of the Santa Teresa Road and the servicing of a site for the replacement of the fuel storage compound. The Committee also gave the FAC approval for the calling of tenders for the design of the terminal concurrently with its examination of the project. The FAC anticipates that the redevelopment of terminal facilities could be completed by mid 1991.

#### **FINANCING THE PROPOSAL**

90. It is anticipated that the development and related expenditure will be spread over three years in line with the recommended pattern of development:

- Year One - \$ 3.5M
- Year Two - \$14.0M
- Year Three - \$ 2.5M.

91. The FAC advised the Committee that because of other contractually committed development and expansion works there could be insufficient internally generated funds available for this project and thus external funding may be required. The FAC

Board is highly desirous of keeping its funding options open in order to maximise its return on the project and to minimise any debt servicing and funding obligations. Debt servicing costs are planned to be substantially met from incremental revenues. These revenues will result from increased passenger activity and spending rates, increased commercial floor area, and the improved exposure of commercial areas. Critical to the funding of the project is its completion within budget both in terms of costs and time.

92. Both Ansett and Australian raised a number of concerns regarding financial aspects of the proposal particularly those relating to cost recovery. The Committee believes that the FAC should consult with the airlines to resolve cost recovery issues.

#### **COST ESTIMATE**

93. The preliminary cost estimate in July 1989 prices is \$20M. It should be noted that the estimate does not provide for rise and fall or prolongation costs during construction.

#### **Committee's Recommendation**

94. The Committee recommends the redevelopment of terminal facilities at Alice Springs Airport at a preliminary cost estimate of \$20M in July 1989 prices.

## CONCLUSIONS AND RECOMMENDATION

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

	Paragraph
1. The existing terminal building at Alice Springs Airport is seriously inadequate and there is a need for the redevelopment of terminal facilities to cater for existing and projected aviation traffic.	27
2. The location chosen by the Federal Airports Corporation is the most suitable for the redevelopment of terminal facilities at Alice Springs Airport.	32
3. The Federal Airports Corporation should discuss with the Northern Territory Government and the Alice Springs Town Council the question of a financial contribution towards the landscaping of the terminal environs.	73
4. The Committee recommends that the Federal Airports Corporation should prepare a master plan for Alice Springs Airport as soon as possible.	77

5. The Committee recommends the redevelopment of terminal facilities at Alice Springs Airport at a preliminary cost estimate of \$20M in July 1989 prices.

94



Colin Hollis  
Chairman

21 November 1989

LIST OF WITNESSES

BARRY, Mr Eugene Herbert, Acting Town Engineer and Town Planner,  
Alice Springs Town Council, Civic Centre, Todd Street,  
Alice Springs, NT

BYRNES, Mr Stephen, Manager, Northern Territory Operations, Royal  
Flying Doctor Service, Stuart Terrace, Alice Springs, NT

CASH, Mr Phillip Laurence Ernest, Airport General Manager,  
Federal Airports Corporation, PO Box 796, Alice Springs, NT

CORBY, Mr Robert John, Manager, Australian Airlines, Todd Mall,  
Alice Springs, NT

FRASER, Mr Robert William, Manager, Ansett Airlines, Todd Mall,  
Alice Springs, NT

GARNETT, Mrs Alison, Convenor, Bush Airport Committee, 10 Raggatt  
Street, Alice Springs, NT

GORDON, Mr Ian Donald, Secretary, Department of Transport and  
Works, Box 2520, Darwin, NT

HAYMAN, Mr Donald Malcolm, Project Manager, Federal Airports  
Corporation, 77 Dunning Avenue, Rosebery, NSW

HILLAS, Mr Peter Alexander, Manager, Northern Territory, Ansett  
Airlines, PO Box 313, Darwin, NT

MITCHELL, Mr Eric Roy, Chief Executive and Town Clerk, Alice  
Springs Town Council, PO Box 1071, Alice Springs, NT

NUGENT, Ms Mary-Lou, Arts Development Officer, PO Box 2531, Alice  
Springs, NT

O'KEEFE, Mr Allan John, Chairman, Master Builders Association,  
Centralian Division, PO Box 1040, Alice Springs, NT

VALE, Mr Roger, MLA, Minister for Tourism, Northern Territory  
Government, Chan Building, Mitchell Street, Darwin, NT

VANDER WYST, Mr Theo John, Airport Manager, Australian Airlines,  
Todd Mall, Alice Springs, NT

**APPENDIX B**

**PROJECT DRAWINGS**

Figure 1 - Perspective  
Figure 2 - Facilities Plan  
Figure 3 - Airport Redevelopment

- B2  
- B3  
- B4

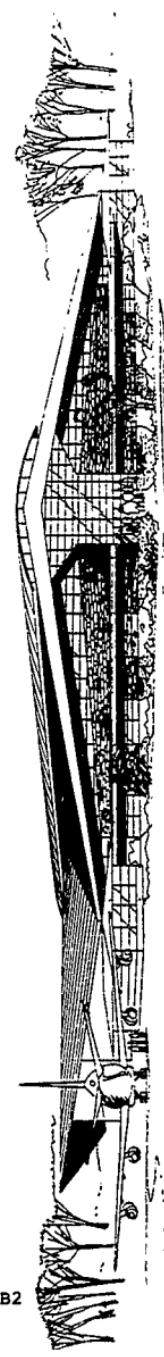


Figure 1 - Perspective

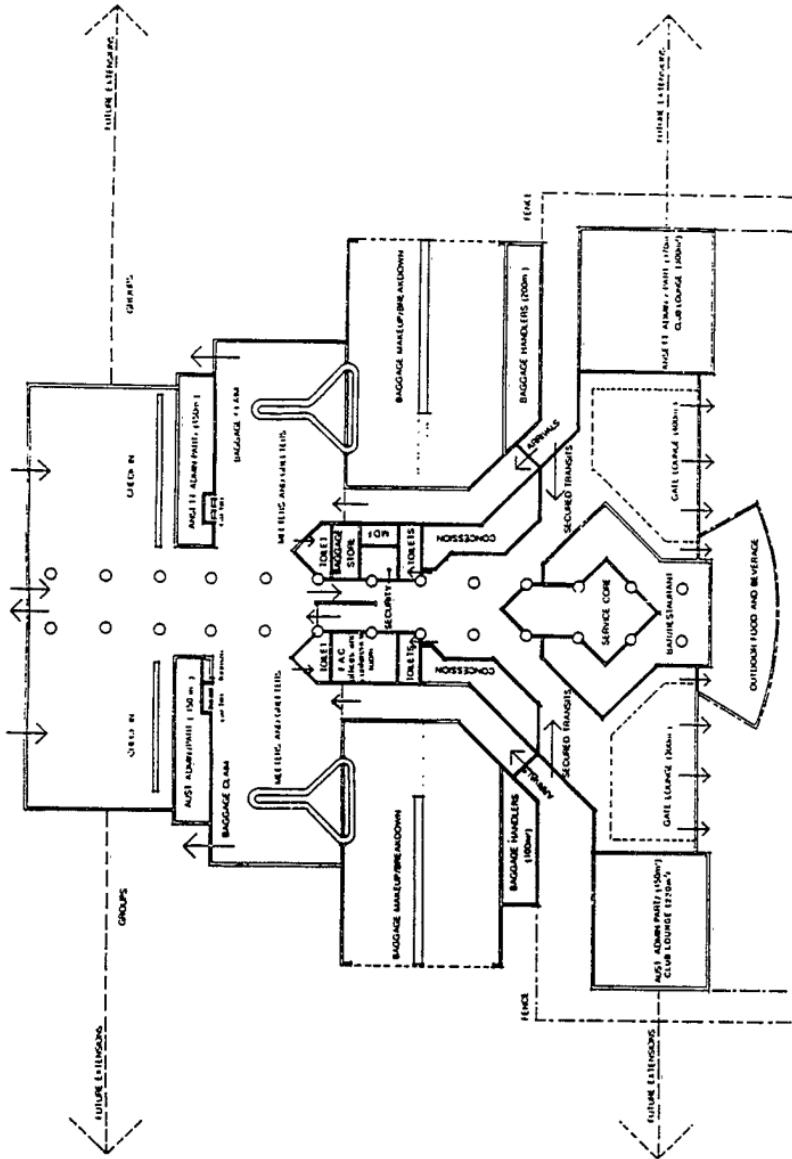


Figure 2 - Facilities Plan

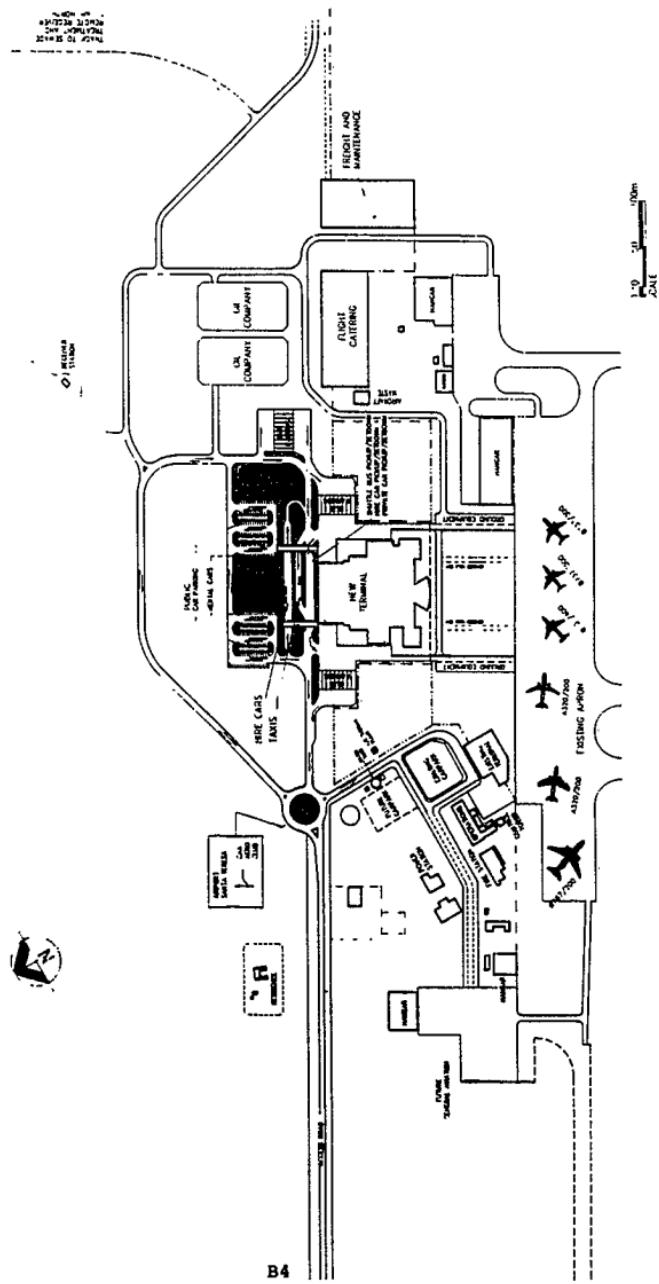


Figure 3 - Airport Development