



DEPARTMENT OF THE SENATE  
PAPER No. 8671  
DATE PRESENTED

16 DEC 1992

THE SENATE

16

TACED  
PAPER

*Parliamentary Standing Committee on Public Works*

## REPORT

relating to the

# BADGERYS CREEK AIRPORT DEVELOPMENT STAGE 1

(Eighteenth Report of 1992)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA  
1992

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

**Report Relating**

**to the**

# **Badgerys Creek Airport Development Stage 1**

**(Eighteenth Report of 1992)**

## TABLE OF CONTENTS

	Page
Members of the 30th Parliamentary Standing Committee on Public Works	v
Extract from the Votes and Proceedings of the House of Representatives of 3 June 1992	vi
THE REFERENCE	1
THE COMMITTEE'S INVESTIGATION	1
BACKGROUND	2
THE NEED	3
Selection of a Second Airport Site	3
The Committee's Conclusion	4
THE FAC PROPOSAL	5
Background	5
Role of a Second Airport at Badgerys Creek as seen by the FAC	5
Federal Airports Corporation Traffic Scenarios	8
Committee's View	9
The Long-term Development Plan	9
Airport Planning and Design	11
The Committee's Conclusion	11
Stage 1 Development	11
Implications of Staged Development	12
Committee's Conclusion	13
AIRPORT SITE ACQUISITION	13
Acquisition of Noise-affected Properties	14
Committee's Recommendation	15

ALTERNATIVES TO FAC PROPOSAL	15	
Demand for Aviation Services at BCA	16	
The WSROC Proposal	19	
The Committee's View	21	
FAC Response to Alternative Proposals	21	
Capacity at KSA	21	
Scope of Stage 1 Development	22	
Cost Differences Between the WSROC and FAC Proposals	23	
FAC Estimate of WSROC proposal	23	
Badgerys Creek Airport Management Committee	24	
THE COMMITTEE'S VIEW	25	
Committee's Conclusions	26	
Committee's Recommendations	27	
ENVIRONMENT	27	
CONSULTATION	28	
The South Creek Valley Regional Environmental Study (RES)	28	
State Government Delegated Legislation	29	
Local Authority Policy Initiatives	29	
Other Consultations	30	
Relocation of Power Line	30	
GOVERNMENT/FAC DEVELOPMENT AGREEMENT	30	
Airport Site Lease	31	
FINANCIAL AND PROGRAMMING ASPECTS	31	
Committee's Recommendations	32	
CONCLUSIONS AND RECOMMENDATIONS	33	
Appendix A	-- List of Witness	A1-A2
Appendix B	-- Description of Works	B1-B4
Appendix C	-- Project Drawings	C1-C3

**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

Committee Secretary: Peter Roberts

Inquiry Secretary: Denise Denahy

Secretarial Support: Sophia Konti  
Sue Whalan

Advisers: Allen Arkey  
David Woolcombe

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

No. 133 dated Wednesday, 3 June 1992

- 12 PUBLIC WORKS - PARLIAMENTARY STANDING  
COMMITTEE - REFERENCE OF WORK - BADGERYS  
CREEK AIRPORT DEVELOPMENT, STAGE 1:** Mr Snowdon  
(Parliamentary Secretary to the Minister for Employment,  
Education and Training), for 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: Badgerys Creek Airport  
Development, Stage 1.

Mr Snowdon presented plans in connection with the proposed work.  
Question - put and passed.

## **PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS**

### **BADGERYS CREEK AIRPORT DEVELOPMENT STAGE 1**

By resolution on 3 June 1992 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the proposed construction of Badgerys Creek Airport Development Stage 1.

#### **THE REFERENCE**

1. The proposal referred to the Committee is for the staged development of a second major Sydney airport at Badgerys Creek. Stage 1 of the development will provide a general aviation airport which will be designed to be easily expanded into a Stage 2 development to include both domestic and international facilities.
2. The facilities to be provided in Stage 1 will include a sealed 1800 m runway, parallel taxiway, aircraft parking, runway and taxiway lighting, an access road and parking, together with a terminal building of approximately 100 m<sup>2</sup>. Also included will be earthworks and site services, including water supply, drainage and sewerage (including on-site sewage treatment).
3. The scope of the work has been estimated at an indicative cost not to exceed \$56.1m at December 1990 prices.

#### **THE COMMITTEE'S INVESTIGATION**

4. The Committee received written submissions from the Federal Airports Corporation (FAC) and the Commonwealth Department of Transport and Communications (DTC) and evidence was taken from both organisations during public hearings held at St Marys from 21-23 September 1992.
5. Evidence was also taken from the following organisations:
  - New South Wales Government
  - Australian Mayoral Aviation Council (AMAC)

- . Western Sydney Regional Organisation of Councils (WSROC)
- . Greater Western Sydney Regional Chamber of Commerce and Industry (GWSRCC)
- . Liverpool City Council
- . St Marys Chamber of Commerce and Industry
- . Aircraft Owners and Pilots Association (AOPA)
- . Citizens Revolt Against Sound Harassment
- . Penrith City Council
- . Mr K Bendall.

6. A number of other written submissions relating to the project were also received and these are incorporated in the Minutes of Evidence. Prior to the public hearing on 21 September the Committee inspected the site for the proposed airport. This project has been an unusually difficult one and combined with the Committee's heavy workload the time from referral to the tabling of the report is somewhat longer than normal. However it is important to note that the tabling date is within the FAC's time frame for this project.

7. A list of the witnesses who gave evidence at the public hearings is at Appendix A. The Committee's proceedings will be printed as Minutes of Evidence.

## **BACKGROUND**

8. The FAC is a Government Business Enterprise established by, and incorporated under, the *Federal Airports Corporation Act 1986*.

9. The FAC is required to be a financially sound organisation. Its revenues come mainly from aircraft landing fees, commercial services and rentals. Capital expenditure funds are obtained from internally generated funds and from commercial borrowing, and the debts are serviced from its operating revenues.



10. On 1 January 1988, the FAC assumed responsibility for ownership, management and development of 17 Federal airports. On 1 April 1989, the FAC assumed responsibility for a further six airports.

11. In December 1991 the Government announced the development of a general aviation airport at Badgerys Creek, which would be the first stage of developing the site as Sydney's second major airport. The Government also announced that the site would be declared a Federal airport development site and the Government would negotiate a development agreement with the FAC. In negotiations with the FAC, agreement was reached on leasing and funding requirements which would enable the FAC to develop and operate the airport. These arrangements were necessary because development at Badgerys Creek could not be commercially justified at this time.

## **THE NEED**

### **Selection of a Second Airport Site**

12. The search for a suitable site for Sydney's second major airport was carried out over a period of more than 20 years. In the course of these studies over 106 sites were investigated with the majority within the Cumberland Plain and other areas to the north and south of Sydney and at Goulburn.

13. Reserving a second airport site for Sydney was considered necessary because:

- a second airport would be required eventually to meet the growing aviation needs in the Sydney Basin
- the opportunity to reserve a second airport site within reasonable distance of Sydney would have been lost due to the city's rapid expansion.

14. Given the predicted certainty that Sydney would continue to attract a growing air transport market, and that growth would outstrip the capacity of Sydney Airport with or without an additional runway, there has always been widespread support for the need to select a second airport site.

15. The final search for a site commenced in 1984 with a study that looked at a wide variety of possible locations for the second airport. Ten of those locations were selected for further consideration; eight were eventually eliminated.

16. The two remaining sites, Badgerys Creek and Wilton, were the subject of a detailed environmental evaluation that included an impact assessment for an airport meeting a capacity requirement of 13 million annual passenger movements. Preliminary Master Plans for both sites incorporated provision for a widely spaced parallel runway layout without a cross-wind runway, catering for all types of aircraft ranging from general aviation aircraft to future generation wide-bodied jet aircraft. It was also assumed that the airport would operate without a night curfew because planning controls would limit the type of development surrounding the airport to that compatible with a non-curfew facility. Following the completion of an environmental impact statement (EIS) assessment process, the Commonwealth Government announced in February 1986 that Badgerys Creek had been selected as the location for a second Sydney airport. The main reasons for the decision were:

- . proximity to the markets it is intended to serve
- . lower development costs
- . less impact on the natural environment.

The location of Badgerys Creek is shown at Appendix C-1.

17. The acquisition of the properties comprising the site has been completed although compensation payments (by the Commonwealth) on a number of properties are yet to be finalised. The acquisition of the Northern Road has been deferred until the land is required for airport purposes.

#### **The Committee's Conclusion**

18. **The Committee agrees that there is a need for a second major airport in the Sydney Basin. The Committee further agrees the Badgerys Creek site is the most suitable location for the development of a second major airport in the Sydney Basin. However for reasons stated in the report the Committee believes that the Federal Airports Corporation proposal places**

too much emphasis on passenger demand and does not take account of the potential growth of freight services to the Asia/Pacific region or the scope for industrial growth in the Western Region of Sydney.

## **THE FAC PROPOSAL**

### **Background**

19. In March 1989 the Government decided, in conjunction with the construction of a third runway at Sydney Airport, to commence the staged development of a second airport at Badgerys Creek. The Government announced that the first stage would be a general aviation aerodrome with construction to commence as soon as possible. However, if the EIS on the proposed third runway at Sydney Airport were to indicate that the third runway should not proceed on environmental grounds, the Government would be prepared to proceed with a major facility at Badgerys Creek to cater for domestic and some international services.

20. To facilitate airport development at Badgerys Creek the Government decided to accelerate the acquisition of the site and commence design work on initial development options.

21. The Government also indicated a requirement that the FAC be involved in the planning and design of the proposed airport in view of the Government's intention that the responsibility for the development and operation of the airport would eventually rest with the FAC.

### **Role of a Second Airport at Badgerys Creek as seen by the FAC**

22. Second airports are generally developed to fulfil one of two broad roles: to supplement the operation of the older existing airport or, as in the case of Tullamarine Airport, Melbourne, to supplant the older existing airport as the airport of central significance in the region.

23. A second Sydney airport was planned and selected to supplement the operation of Sydney Airport, which would remain of central importance in the airport system in the Sydney Basin.

24. To fulfil its planned role over time, a second Sydney airport had to be capable of adopting a variety of development roles – from initially catering

to general aviation demands to ultimately accommodating a significant component of the Sydney Basin's large transport aircraft demand.

25. Various studies that have examined multi-airport systems around the world show that:

- traffic in a multi-airport system inevitably centres on a primary airport, so that even when a second airport becomes established it still does not attract a major share of the total traffic

- a second airport in a multi-airport system tends not to develop sufficient traffic to justify its investment until the level of originating passengers in the region exceeds a threshold of around 10 million per annum.

26. It is envisaged by the FAC that Sydney Airport will always be the dominant airport in the Sydney Basin because of its close proximity to the city centre and convenience of transit/transfer arrangements. It is difficult to forecast passenger levels at the second airport with any certainty as it is almost impossible to predict the responses of airlines and passengers to severe congestion at Sydney Airport and the alternative of using a second Sydney airport at Badgerys Creek. Nevertheless, the FAC believes that a second Sydney airport could attract a relatively small proportion of the regional passenger traffic prior to the market levels referred to here being achieved.

27. The Committee was advised by the FAC that the Stage 1 development of an airport at Badgerys Creek can be expected to fulfil a useful role in providing for a range of aviation needs within the Sydney Basin. The potential exists for rationalisation of general aviation at Sydney Airport and relocation of some growth to Badgerys Creek. The FAC believes current curfew-restricted operators at Sydney Airport may find the non-curfew availability at Badgerys Creek Airport (BCA) attractive.

28. Other opportunities available at Badgerys Creek include specialised services such as charter, air cargo and courier express as well as the possibility of transfers from existing general aviation airports in the region such as Bankstown.

29. Opportunities are also available for introducing specialised flight training facilities, such as an instrument landing system, and aviation industry development on unconfined 'greenfield' lease sites.

30. The FAC believes the decision to develop Badgerys Creek meets the following broad range of potential needs:

- . first among these is the need to establish an initial development at Badgerys Creek sufficient to enable the possible but unknown initial demand for a second airport to manifest itself, but not so large as to constitute an over-allocation of valuable resources
- . this initial demand might constitute:
  - the need to establish the land use of the site as an airport
  - the potential need to provide an alternative to Sydney Airport as a base from which to develop overnight freight
  - the need to provide a location for charter services as an alternative to the airline services operating at Sydney Airport
  - the need to provide an alternative training facility for instrument operations for advanced pilots.

31. The second need is to provide a basis for growth in the airline passenger market. The analysis of the issues relating to the development of second airports in response to this demand is outlined in the EIS for the Proposed Third Runway Sydney (Kingsford Smith) Airport (KSA). This analysis reflects the world experience that, for a variety of reasons, second airports have little history of success in attracting the airline passenger market unless two primary conditions apply:

- . that the total airline passenger market is sufficient to support the operation of two major airports serving this market
- . that the existing or primary airport has reached or is nearing capacity.

32. The EIS develops the case to conclude that the first condition will not be met until the Sydney airline passenger market reaches roughly 25 million passengers annually, by which time an established position will have been reached in which the Badgerys Creek airline passenger market will be growing from a base of 2 million passengers annually. The EIS analysis recognises that such a future traffic distribution would not occur overnight and anticipates that before this position is reached BCA will have progressed through a staged development process. The Government's decision reflects this second broad need that is, apart from any other needs, the early development and promotion of a second major airport is a necessary prerequisite for the development of an airline passenger traffic distribution which is likely to have evolved when total regional traffic levels have reached 25 million annual passenger movements.

33. In an uncertain environment these are matters of judgment, and the FAC advised the Committee that the Government has made the judgment that BCA should be developed now as a general aviation airport, to accommodate a variety of unknown demands, as well as providing a basis on which a future distribution of airline passenger traffic might develop.

#### **Federal Airports Corporation Traffic Scenarios**

34. The FAC believes that it is not possible to make confident predictions on traffic which might be attracted by a new and uncongested facility at Badgerys Creek, or which might relocate there on being denied access to, or being excluded from, an existing airport.

35. The FAC advised the Committee that traffic management measures designed to accommodate the demands of airline operations at Sydney Airport will defer the transfer of services to BCA. Overseas experience suggests that there would continue to be a concentration of services at Sydney Airport and a reluctance for airline operators to relocate to Badgerys Creek. Under non-interventionary scenarios it is unlikely that there would be significant levels of airline traffic at Badgerys Creek until around 2005 when, on current forecasts, the level of originating passengers from the region is expected to reach at least 10 million per annum. This is equivalent to a total annual passenger demand of about 25 million passengers.

36. There are other traffic demands which also cannot be forecast with any certainty, either because they do not exist in current traffic mixes or because they occur in general rather than specific market forecasts.

37. This is particularly true of specialised small package and overnight freight operations which are included in general aviation forecasts.

38. Another category is the potential growth in airfreight that might accompany the development of curfew-free operations at Badgerys Creek. This would create the potential for curfew-free freight operations along the east coast (Melbourne, Sydney and Brisbane) and to Perth.

39. This freight would be carried by dedicated freighter aircraft, and in assessing the potential it must be recognised that economics currently dictate that the majority of airfreight, both domestic and international, is carried in the holds of passenger aircraft.

40. Growth in these specialised areas is little more than a possibility. However, some provision is proposed to accommodate these markets should they emerge.

#### **Committee's View**

41. The Committee believes that both the Government and the FAC in the assessment of the role of BCA as a second airport and the potential for traffic growth have relied too much on overseas experience particularly in the emphasis on passenger demand and have adopted an extremely negative approach to the potential demand for BCA. The Committee believes that the role of BCA should be focused on the development of freight services to the Asia/Pacific region which BCA, because of its location in the Western Region of Sydney with its expanding industrial base, is ideally placed to serve. The FAC by proposing a Stage 1 facility which can only be used by aircraft up to F28/BAe 146 size has effectively prevented BCA from attracting freight traffic particularly for the rapidly expanding economies of Asia.

#### **The Long-term Development Plan**

42. The Preliminary Master Plan published in the Draft Environmental Impact Statement in 1985 was reviewed in 1991, and a formal Master Plan report was prepared. The plan provides for all the facilities normally

expected on a major airport. The proposed siting of a number of facilities was changed from the Preliminary Master Plan but the key planning parameters remained unaltered.

43. The Master Plan for Badgerys Creek airport is shown at Appendix C-2. The Plan is based on two widely spaced parallel runways, 4000 m and 2500 m long. The runways are designated 05R/23L and 05L/23R.

44. The runway and taxiway layout for the 05L/23R runway system (2500 m) is suitable for aircraft with wingspans up to 65 m while the 05R/23L runway system (4000 m) is capable of accommodating aircraft with wingspans up to 95 m.

45. An area available for terminal development would easily accommodate the expected long term annual passenger loading of 13 million. A range of terminal configurations is available within the terminal development area.

46. General aviation space allocation is available to service up to 200 000 annual aircraft movements. In addition 50 ha is allowed for air cargo and 40 ha for aircraft maintenance.

47. The Master Plan incorporates provision for two control towers, terminal area radar, secondary surveillance radar, surface movement radar, VHF omnidirectional range, distance measuring equipment, non-directional beacon, instrument landing system and microwave landing system. The Master Plan runways require the eventual relocation or realignment of The Northern Road, Badgerys Creek Road and the 330 kV transmission line that traverses the site.

48. The re-alignment of The Northern Road and Badgerys Creek Road are shown in the Master Plan. The relocation of the transmission line is being pursued in consultation with Pacific Power. (See also paragraphs 137-138).

49. Primary access to the airport is to be via Elizabeth Drive and then by a main access road to the central terminal area. A railway corridor on the south-eastern boundary is sited to link up with possible rail networks associated with the South Creek Valley development. Rail passengers would be transferred from an interchange to the terminal area.



50. Water management of the site requires the provision of five major wet detention basins to ensure maintenance of good water quality and minimisation of flood discharges to downstream watercourses.

### **Airport Planning and Design**

51. The DTC commissioned the FAC on a consulting basis to undertake survey, planning and conceptual design work for the initial stages of development of the new airport. In turn, the FAC commissioned a number of specialist sub-consultants to undertake specific aspects of the overall task.

52. Two conceptual airport designs and associated cost plans were produced one for an initial general aviation aerodrome similar to that announced by the Government (estimated total cost of \$53m), and the other for a major airport to cater for domestic and some international services (estimated total cost of \$460m).

53. It was expected that development of BCA beyond the general aviation aerodrome would proceed at a pace consistent with anticipated growth in aviation traffic demand for the Sydney region. However, in the event that the EIS on the third runway at KSA indicated that the runway should not proceed on environmental grounds, the completion of a conceptual design for a major airport at Badgerys Creek would enable the early commencement on a major facility, should the Government have decided to pursue that option.

54. The final project reports detailing the results of the conceptual design task were publicly released on 20 August 1991.

### **The Committee's Conclusion**

55. The Committee believes that the long term development of Badgerys Creek Airport as proposed in the Master Plan is appropriate. (See also paragraph 62).

### **Stage 1 Development**

56. The Stage 1 development at Badgerys Creek as proposed by the FAC comprises a 30 m wide sealed runway 1800 m in length, a 15 m wide parallel taxiway, 25 000 m<sup>2</sup> of apron and earthworks for additional apron and

associated general aviation support facilities. (See Appendix B for details of Stage 1 proposal).

57. Initial earthworks involve approximately 1.35 million cubic metres cut to fill. Aviation support facilities include a new 1.5 km two-lane sealed access road from Badgerys Creek Road, an airport administration and terminal building of 100 m<sup>2</sup>, airport maintenance facility, and fully serviced development sites adjacent to the apron area. Lights will be provided to enable night operations by aircraft and a non-directional beacon for air navigation purposes. Engineering services will generally be provided by an extension of the existing on-site facilities. Aircraft will be fuelled by tankers operating to and from an on-site fuel storage facility.

58. In addition to the provision of the new access road, a number of minor roads on the site will be rehabilitated. All stormwater from the site during and after construction will be directed through a wet retention basin prior to discharge into Badgerys Creek. Runoff from classified 'contaminated' water areas will be treated in gross pollutant traps prior to discharge to the wet basin.

#### **Implications of Staged Development**

59. The airport design work that has been undertaken by DTC and the FAC is consistent with the Government's announced strategy for the staged development of BCA. The airport has been master planned as a major domestic and international airport capable of accommodating the largest aircraft types envisaged by airport planners anywhere in the world. The airport has also been planned to be capable of staged development from an initial general aviation airport up to its ultimate planned capability.

60. The decision to proceed with staged development of BCA necessitated a strategy which ensured that all facilities were designed and located in a manner that would allow for cost-effective phased development from the initial general aviation facility through to the ultimate development as envisaged in the airport's Master Plan. The initial general aviation runway has therefore been planned to be constructed on a future parallel taxiway alignment to facilitate the subsequent construction of a major runway without costly disruptions to aircraft operations or construction activities at that time.

61. If constructed on the master planned main runway alignment, the proposed initial general aviation runway would require complete reconstruction when the need arose for it to be brought up to the much higher category required for substantially larger aircraft. There are many examples in Australia where it has been found that, where the opportunity existed, it was more economical to construct a new run-way for substantially larger aircraft than to upgrade an existing run-way and for example Coffs Harbour, Broken Hill, Wynyard, Port Hedland and Karratha.

#### Committee's Conclusion

62. The Committee believes that the staged development of Badgerys Creek Airport is appropriate but as indicated in the report the initial development should provide for a 2900 m runway and not a 1800 m runway as proposed by the Federal Airports Corporation.

#### AIRPORT SITE ACQUISITION

63. The proposed airport site at Badgerys Creek covers an area of approximately 1770 ha and is located within the Liverpool local government area. The site comprises 243 separate titles plus the internal local road system and a portion of The Northern Road belonging to the New South Wales State Government.

64. The acquisition by the Commonwealth of properties comprising the site commenced soon after the selection of the site was announced in early 1986. Initial acquisitions were all on a voluntary basis. Following the Federal Government's decision in March 1989 to commence airport development at Badgerys Creek, the acquisition process was accelerated by the application of the compulsory acquisition provisions of the *Lands Acquisition Act 1989*.

65. The portion of The Northern Road within the airport site will need to be reconstructed on a new alignment to facilitate the ultimate development of the proposed airport. It is preferred that responsibility for the realigned portion of the road should rest with the State Government which is responsible for the balance of the road, and that this would be achieved by an exchange arrangement on completion of the road realignment. For this reason, arrangements for the acquisition of the relevant portion of The Northern Road have been deferred.

66. The acquisition of the properties comprising the airport site has now been completed although compensation payments on 29 of the properties are still to be resolved. The responsibility for finalising compensation payments will remain with the Commonwealth.

67. The cost to date of acquiring the airport site properties is over \$100m. It is estimated that the total cost of acquiring the site will be about \$120m.

#### Acquisition of Noise-affected Properties

68. In September 1990 the Government responded to the recommendations of the report of the House of Representatives Select Committee on Aircraft Noise. The response included a decision to acquire dwellings within the 35 Australian Noise Exposure Forecast (ANEF) contour when the Government acquires land for new airports. This applies to the Badgerys Creek Airport site acquisition.

69. The Commonwealth has consequently offered to acquire, on a voluntary basis, an additional 16 properties in the vicinity of the proposed airport where dwellings on these properties lie within the 35 ANEF contour. The owners of nine of these properties have so far responded and accepted the Commonwealth's offer of acquisition.

70. The total cost of acquiring the 16 eligible noise-affected properties is estimated to be around \$10m.

71. However, during the public hearing a serious anomaly in relation to properties within the 35 ANEF contour surrounding BCA was brought to the attention of the Committee. While properties with existing dwellings were acquired those not containing a dwelling were not acquired.

72. The dilemma for these property owners is that local government planning regulations will not permit construction of new buildings on land situated in greater than the 25 ANEF zone.

73. The Committee regards this as a completely anomalous situation and one that should be rectified. The Committee is aware that the Minister for Shipping and Aviation Support has written to the Minister for Finance seeking an extension of the Government's acquisition policy to include properties without dwellings in the 35 ANEF zone. The Committee completely agrees with this approach.

## **Committee's Recommendation**

74. The Committee recommends that the Commonwealth include in its acquisition program at the Badgerys Creek Airport site those properties without dwellings which are within the 35 ANEF zone.

## **ALTERNATIVES TO FAC PROPOSAL**

75. A number of organisations appearing before the Committee including AMAC and those representing the western suburbs of Sydney – including the WSROC and GWSRCC who rejected the FAC proposal and proposed:

- extension of the FAC proposal by the construction of a principal runway of approximately 3000 m in length (4000 m in the case put by GWSRCC). This would enable the utilisation of BCA by both freight and charter aircraft, in addition to general aviation, on the basis of market choice

- local authorities and business organisations within the Western Sydney Region of Councils to form the Badgerys Creek Airport Management Committee to own and operate BCA upon completion of construction by the FAC.

76. These organisations are of the view that BCA will ultimately be used for the following purposes:

- charter and freight-only aircraft displaced from KSA as that facility becomes increasingly handicapped by the forecast growth of aircraft/airport movements of all categories

- the expansion and displacement of general aviation from the four existing general aviation airports in the Sydney Basin – Bankstown, Hoxton Park, Camden and Schofields

- the growth of interstate and intrastate domestic services which will develop through market expansion to serve the western suburbs of Sydney

- the ultimate use of BCA by international passenger and freight aircraft.

## Demand for Aviation Services at BCA

77. In its submission the Liverpool City Council, which is one of the member councils of WSROC, criticised the FAC's forecasts for demand for aviation services at BCA. In its submission the FAC pointed out that it is difficult to forecast passenger levels at the second airport with any certainty as it is almost impossible to predict the responses of airlines and passengers to severe congestion at Sydney Airport and the alternative of using a second Sydney airport at Badgerys Creek. The FAC concluded that it is unlikely that there would be significant levels of airline traffic at Badgerys Creek until around 2005. It is important to note that it is not the FAC's policy to force or encourage the relocation of existing commercial aviation operators to move from Sydney Airport. However, the FAC will encourage new operators of business-type aircraft to establish themselves at Badgerys Creek.

78. The Liverpool City Council believes that the FAC should be able to analyse trends in the airline industry and develop an accurate model for projections of passenger activity. The Council stated that important changes in the Australian economy and aviation industry point to accelerated and significant demand for facilities at Badgerys Creek. These trends include:

- . the deregulation of the domestic and international airline industries where new entrants in Australia will be best suited by new airports where they can gain equal access to terminal facilities
- . BCA is already much closer to Sydney's demographic centre at Wentworthville than KSA, with future population growth accelerating this trend
- . the decline of manufacturing plants in East Sydney and growth of new industries in Sydney's West will make BCA a much more important airport for manufacturing interests than KSA. Equally, the Blue Mountains represent Sydney's fastest growing tourist destination
- . the move towards just-in-time warehousing makes BCA, a greenfields airport without a curfew, much more attractive than KSA

- Sydney's appeal as an international city will be greatly enhanced by the development of a second international airport. Already competitors for the Olympic 2000 bid such as Berlin have pointed to Sydney's lack of airport capacity as the main obstacle to it successfully hosting the Games.

79. WSROC believes that the FAC's assessment of the demand for BCA to be unduly pessimistic. Prior to the release of the One Nation statement in February 1992, WSROC put to the Government that it should:

- undertake full consultation with airline interests and export orientated firms to invoke private contributions for BCA
- alter the airport construction program and funding arrangements to maximise its economic feasibility
- establish that all new commercial airfreight and passenger operations in Sydney outside of KSA will need to be located at BCA
- continue Federal contributions for road projects needed to fully service BCA.

80. WSROC believes that as the economies of South-East Asia grow over the next 10 to 20 years, air traffic in the Asia-Pacific region is expected to experience rapid growth. Forecasts by the International Civil Aviation Organisation suggest that air traffic growth in this region is likely to be faster than in any other part of the world. It is the view of WSROC that it is not unreasonable to expect that Australia will be a destination for a large number of tourists and other visitors from the Asia-Pacific region. WSROC believes it important that Australia provides the airport capacity to meet this expected growth in passenger and aircraft volumes. If it does not, Australia runs the risk of losing valuable foreign earnings.

81. WSROC stated that the FAC proposal does not adequately satisfy the need for airport facilities. It points out that by limiting the runway to 1800 m and the taxiways and apron areas to a bearing capacity of 20 000 kg, the FAC proposal prevents a substantial part of the aviation market from showing its interest in BCA.

82. In its submission GWSRCC argued for a complete change of focus from the FAC proposal. GWSRCC believes that BCA should be designed to become Sydney's primary airport. Instead of the small general aviation airport proposed by the FAC, GWSRCC believes that a 4000 m long 60 m wide runway should be built as the first phase of the development of BCA. Having eliminated the jet-curfew constraint from the operation of the new airport, the GWSRCC believes it would be ridiculous if BCA was to be opened with the built-in restriction of limited runway capability. It believes BCA should be established, impediment free, to give fresh opportunities to new aviation markets and associated industries with potential for major growth.

83. GWSRCC indicated to the Committee that the FAC proposal is neither one thing nor the other – it is too big for small aircraft and too small for big aircraft and, in the view of GWSRCC, it must fail. On the other hand GWSRCC believes that its proposal is much more positive and with a curfew – free runway, able to take any size or type of aircraft, will quickly attract additional freight and passenger business to BCA. GWSRCC put forward what it regards should be the simple axiom for BCA development: 'You can land a small plane on a big runway, but you can't land a big plane on a small runway'.

84. A number of submissions including WSROC and the Liverpool City Council believe that there will be significant employment benefits for the Western Sydney economy from an expanded BCA proposal. WSROC believes there is unlikely to be any other development to match the airport in its impact on employment and economic development in the region.

85. The Liverpool City Council pointed out that the region has unemployment rates nearly double the national average and would benefit greatly from an expanded BCA proposal. Research done for both WSROC and the Council indicates that 36 000 new jobs could be created – 15 000 from export enhancement and manufacturing, 8000 from tourism and service industries and 13 000 from construction and operation of the airport.

86. In contrast to the evidence given to the Committee by those advocating the expansion of the FAC proposal, the Aircraft Owners and Pilots Association of Australia argued that there is no identified general aviation (GA) requirement for an airport at Badgerys Creek to be developed at this time. AOPA indicated that while an indeterminate, and most likely small number of GA aircraft, may elect to use it out of



convenience, such use is presently within the capacity of existing airports. It pointed out that GA activity has declined significantly in recent years with no indication of a recovery - and that recovery when it starts will be slow.

87. The AOPA position was supported by the Australian Business Aircraft Association Inc. (ABAA). In its submission the ABAA, while acknowledging the need to develop long-term plans for an additional major airport in the Sydney region, believes that the FAC proposal would appear to serve no practical purpose that would justify at this time the level of expenditure proposed by the FAC. The ABAA does not believe that there will be significant number of users for a 1800 m runway, with minimal support and communication infrastructures, at Badgerys Creek in the foreseeable future.

### **The WSROC Proposal**

88. In its submission WSROC indicated its belief that the FAC proposal does not adequately satisfy the needs for airport facilities and that it is possible to provide a facility which includes a 2900 m runway and the bearing capacity for large aircraft within the \$56.1m allocation.

89. WSROC commissioned a consultant to examine the concept design report for BCA. As a result of this examination WSROC believes the initial phase of an international cargo airport with a 2900 m long 45 m wide runway can be provided for less than the \$56.1m cost of the FAC's general aviation airport. WSROC believes that the total cost of its proposal including associated roads and site services is only \$42.46m – leaving some \$14m for construction of an initial terminal to handle passenger traffic on other works.

90. WSROC believes that its alternative development provides not only for general aviation traffic and international cargo traffic in the early years but also provides a much more attractive 'platform' for future private sector investment in BCA than does the FAC proposal. WSROC told the Committee that with a 2900 m runway, those in the aviation industry, whether cargo or passenger operators, have the basic element of infrastructure they need to operate, thus providing Sydney and Australia, in the view of WSROC, with greater airport capacity and facilitating competition in the one area of the aviation industry – airport operation – yet to be deregulated.

91. WSROC's basic proposal, based on a detailed examination of the concept design report and firm quotes from two excavation and pavement contractors, indicates that a 2900 m runway, 400 m taxiway and 2.25 ha apron area can be provided for only \$2.19m more than the cost of the site works and pavements for the FAC proposal. WSROC believes further cost reductions totalling \$10.28m are available principally in the area of site services. In summary WSROC believes that a basic international cargo airport can be developed at Badgerys Creek for approximately \$42.46m. In order to achieve the figure of \$42.46m the following measures are proposed:

- . parallel taxiway not provided with the initial development
- . elimination of a contingency allowance
- . phasing of the provision of services and facilities
- . earthworks and pavement costs-reduced cost estimate
- . runway displaced 400 m to the south-west
- . minimisation of GA stage/phase specific development
- . elimination of FAC costs
- . re-use of construction facilities as an administration building.

92. WSROC believes the difference in cost between its proposal and that of the FAC should be put towards the development of BCA. The following options could be considered:

- . construction of a modest passenger terminal capable of handling a B747
- . provision of navigational and visual aids including an instrument landing system
- . the runway could be constructed initially to its final 60m width rather than the proposed 45 m width
- . funds could be set aside to provide additional services to the sites to be leased by various aviation-related uses

- the funds could be used to provide a short additional length of taxiway to improve the airport's use by GA traffic.

93. WSROC proposes that the use of the additional \$14m should be considered by the BCA Management Committee.

94. The role of the BCA Management Committee would be to oversee the airport's development and its integration into the Western Sydney economy. The Committee should be comprised of a range of interests in Western Sydney - councils, business, parliamentarians and those with expertise in the aviation sector and the airport operator. WSROC sees the role of the BCA Management Committee to:

- determine the use of the \$14m in additional funds and oversee the use of those funds
- secure private sector investment in the airport
- keep under constant review the airport Master Plan.

#### **Committee's View**

95. The Committee finds itself in agreement with the organisations representing the Western Region of Sydney that the FAC proposal is inadequate and does not provide the capacity to attract demand to Badgerys Creek particularly the expansion of trade between Australia and the Asia-Pacific region. The Committee believes that for Badgerys Creek Airport to be viable a 2900 m runway must be provided in the initial development.

#### **FAC Response to Alternative Proposals**

96. In response to alternative proposals put to the Committee and of criticisms of its proposal the FAC made the following points.

#### **Capacity at KSA**

97. The FAC believes that the development of parallel runways will extend the time before the runway system at KSA reaches capacity. Delays can be minimised by various physical and operational techniques and by changes to aircraft schedules and therefore predictions about when capacity will be reached may change. The FAC indicated that current forecasts

predict 'capacity' for KSA to be reached about the year 2010. It pointed out that additional aircraft movements could be accommodated but with increased delays.

#### Scope of Stage 1 Development

98. The FAC strongly rejects claims that the Stage 1 development is too small. In evidence the FAC stated that Sydney's airline passenger market will grow to a size which cannot be catered for at KSA. However, world experience has shown that for a variety of reasons, second airports have little success in attracting airline passengers until the following conditions apply:

- . the total airline passenger market must be sufficient to support the operation of two major airports
- . the existing or primary airport must have reached or be nearing its capacity.

99. The FAC does not believe that these conditions yet exist at Sydney. It indicated that the total annual passenger market required to support the operations of two major airports is approximately 25 million passengers, while the current annual market in Sydney is close to 14 million passengers. The FAC believes that improved methods of managing traffic at KSA and the construction of the parallel runway will extend capacity to at least the end of the year 2010.

100. The FAC told the Committee that in its view the 1800 m runway proposed in Stage 1 will be sufficient to enable the possible unknown demand for a second airport to manifest itself. The FAC believes that it is not possible to confidently predict the amount of traffic which will be attracted to Badgerys Creek. Components of the demand could include:

- . scheduled passenger flights
- . charter services
- . instrument landing training
- . carriage of large or small freight items
- . express overnight parcel services

101. The FAC anticipates a gradual increase in the number and size of aircraft using Badgerys Creek.

#### Cost Differences Between the WSROC and FAC Proposals

102. As indicated in paragraph 89 the cost of the WSROC proposal has been estimated to be \$42.46m while the estimated cost of the FAC Stage 1 proposal is \$56.1m. (See paragraph 3).

103. The FAC in evidence advised the Committee that the cost estimates prepared by the WSROC consultant omitted essential elements of work such as the parallel taxiway and other major cost elements usually allowed for in major projects such as design and construction contingencies. The FAC also believes that the construction costs of some elements are seriously underestimated.

104. At the public hearing the FAC told the Committee that the cost of the WSROC proposal was more likely to be \$140m than \$42.46m.

105. The FAC stressed that its estimates which have been accepted by the Government were prepared by consultants with specialist knowledge of the site and airport facilities.

106. The FAC consultants also investigated the design concepts and prepared the alternative Master Plans. The FAC is firmly of the view that its estimates are realistic.

#### FAC Estimate of WSROC proposal

107. At the public hearing the Committee requested the FAC to prepare an estimate of the cost for the development at Badgerys Creek of an airport and associated facilities with a 2900 m runway, equivalent to that proposed by WSROC, with sufficient services and facilities for the airport to be functionally viable.

108. The estimate has been prepared by adjusting the FAC's previous estimate of its Stage 2 development – domestic/international – to reflect the WSROC proposal.

109. The estimated cost of the works required for a 2900 m runway and limited support facilities is approximately \$152m at December 1990 prices.

The estimate includes the 2900 m runway and stub taxiway and heavy apron as included in the WSROC proposal. However, the FAC advised that an additional GA apron has been included as the combined general aviation/cargo apron proposed by WSROC is considered impractical. The scope of work has only been adjusted to include increased quantities where the WSROC figures are considered to be underestimated – particularly site developments, earthworks and drainage – and where additional services/facilities are necessary for the airport to be functionally viable. These are particularly, site services, buildings and navigational aids.

110. However, the FAC stressed that while the estimate reflects a reasonable order of cost it is not based on a specific preliminary design and does not reflect the accuracy of the Stage 1 estimate from which it was derived.

111. The FAC estimate of \$152m includes allowances for:

- . project development
- . construction facilities
- . site development
- . site services
- . runways/taxiways/aprons
- . buildings/structures/navigational/visual aids
- . roads
- . offsite infrastructure
- . mobile equipment
- . contingency.

**Badgerys Creek Airport Management Committee**

112. As discussed in paragraph 93, WSROC recommend the establishment of the Badgerys Creek Airport Management Committee with the basic

objective of facilitating the airport's early development as an international cargo and charter airport and its integration with the Western Sydney economy.

113. In its submission the Liverpool City Council claimed that the development of BCA and the attraction of curfew-free operations would bring substantial competition to and cut into the profits of KSA. The Liverpool City Council advocated a model which would remove major airports such as KSA and BCA from the control of the FAC and give each a separate charter to operate as an autonomous management authority. These airports would then be forced into competition providing the stimulus for upgrading and innovation in their own right.

114. The FAC strongly rejected any suggestion that it has promoted the development of KSA 'as a low cost check against the growth of Badgerys Creek'. It pointed out that competition between airports can be achieved only after a new airport has grown to the point where it can support a wide range of airline services.

115. In relation to the possible privatisation of Federal airports the FAC indicated that this is a matter of Government policy on which it did not wish to comment.

#### **THE COMMITTEE'S VIEW**

116. Having considered all the evidence presented to it and examining in detail the proposals put to it by both the FAC and those proposing an expanded facility at Badgerys Creek the Committee makes the following observations:

- there is clearly a requirement to establish the use of the Badgerys Creek site as the location for the second airport for Sydney as soon as possible. This is best done by physical development as a precaution against decisions being taken, even including the sale of part or all of the site which would undermine Badgerys Creek becoming the second Sydney airport site
- the FAC proposal does not recognise the impact that an expanded Badgerys Creek Airport proposal would give to the economic development of the Western Sydney region

- the Committee is of the view that the FAC proposal will do little to attract aircraft operators to use BCA, particularly as the FAC will not force operators from KSA. In these circumstances the Committee, bearing in mind evidence from the general and business aviation sectors which indicates little enthusiasm for Badgerys Creek, can see little merit in the FAC proposal which does not optimise the already considerable Commonwealth investment at the Badgerys Creek site
- the Committee believes that the initial development must include a 2900 m runway capable of accepting larger aircraft than that proposed in the Stage 1 development
- the FAC proposal does not have the runway capacity or infrastructure support which would provide the opportunity for new passenger and freight services to develop using aircraft up to B747 size
- in relation to the WSROC proposal the Committee believes that the costing figures provided for its 2900 m development are underestimated and believes the FAC estimate of \$140m to be a more realistic figure. However, the Committee believes that the initial development at Badgerys Creek should include a 2900 m long runway as proposed by WSROC with the minimum associated infrastructure necessary to allow for both domestic and international operations
- should the Government be unwilling to provide the necessary additional funding for an expanded Stage 1 proposal a consortium including Federal and State Government bodies, local government (through WSROC) and other interested parties should be formed to develop and operate Badgerys Creek Airport through private funding.

### **Committee's Conclusions**

**117. There is a requirement to establish the use of the Badgerys Creek site as the location for the second Sydney airport as soon as possible.**



118. The Committee believes that the Stage 1 proposal by the Federal Airports Corporation for the development of Badgerys Creek Airport is inadequate and unlikely to attract potential users.

119. The Committee believes that the \$152m estimate provided by the Federal Airports Corporation for a Western Sydney Regional Organisation of Councils type proposal is more realistic than the \$42.46m estimate provided by Western Sydney Regional Organisation of Councils.

120. The Committee believes that the initial development at Badgerys Creek should include a 2900 m long runway with the minimum associated infrastructure necessary to allow for both domestic and international operations. This should include the provision of navigational/visual aids and an instrument landing system.

#### Committee's Recommendations

121. The Committee recommends that the Stage 1 development of Badgerys Creek Airport as proposed by the Federal Airports Corporation should not proceed.

122. The Committee recommends that the Federal Airports Corporation should prepare and cost as a matter of urgency an expanded Stage 1 proposal in accordance with the Committee's recommendations.

#### ENVIRONMENT

123. An EIS for the Second Sydney Airport Site Selection Program was prepared in 1985. The EIS recommended Badgerys Creek as the most suitable site for a second Sydney airport.

124. Following assessment of the EIS, the Minister responsible for the environment made recommendations which outlined environmental monitoring and protection programs which should be implemented. The DTC developed an environmental management program for the BCA which addressed the Minister's recommendations. Action has been taken to implement all major elements of this program, which includes conservation of vulnerable botanical species, conservation of a site of European heritage value (Vicary's Winery), establishment of a noise monitoring program, an air quality study and a water management plan.

125. In March 1990, the then Department of Arts, Sport, the Environment, Tourism and Territories (DASETT) advised that provided the planning, operational and design parameters specified in the EIS were adopted it could not foresee a requirement for further formal environmental impact assessment under the *Environmental Protection (Impact of Proposals) Act 1974*. The development parameters for the proposed airport are consistent with those specified in the original EIS.

## **CONSULTATION**

126. The DTC has progressed several initiatives with NSW State Government departments and the surrounding local governments to ensure land use compatibility with BCA. These initiatives take three forms, namely:

- . an indicative State Government regional land use strategy
- . State Government delegated legislation (in the form of planning policies and ministerial directions)
- . local government planning policies formed in response to the State Government delegated legislation.

### **The South Creek Valley Regional Environmental Study (RES)**

127. The effects of future airport operations at Badgerys Creek are a major focus of the RES. It accordingly embodies the goals of recognising the opportunities provided by and ensuring land use compatibility with the development of BCA, through the adoption of four main features.

128. First, the RES recognises the restrictions on the height of structures in the vicinity of the airport may affect development such as high-rise buildings, electricity lines and communications towers.

129. Second, the 20 ANEF contour is regarded as a development constraint for residential land uses. Accordingly, the RES stipulates that residential areas be sited to the south of the proposed airport, outside the forecast noise-affected areas.

130. Third, the RES states that employment areas should be located within the predicted noise-affected areas because:

- industrial and commercial buildings can be more easily buffered than residential dwellings
- land in the noise-affected areas east of the airport provides an ideal location for airport-related uses, due to its proximity to both the proposed airport and the arterial road system linking the South Creek Valley Sector with the rest of Sydney's metropolitan region
- noise-affected areas would have lower residential amenity.

131. Fourth, the planned transport network is based, among other objectives, on meeting the needs of Badgerys Creek Airport. Accordingly, allowance has been made for road upgrading and construction to cater for airport-generated traffic. A public transport corridor from Glenfield through the airport site to Werrington is to be identified and preserved.

132. Since the completion of the RES and in response to its own concerns about ensuring environmentally sensitive development, the State Government issued a revised South Western Sydney Strategy. The Strategy defers the rezoning of new areas within the upper reaches of the Nepean River pending the outcome of further studies at which time further decisions about the development of South Western Sydney can be considered.

#### **State Government Delegated Legislation**

133. Two items of State Government delegated legislation are in place, and another is being drafted, to ensure that local authority land use (Environmental) plans are compatible with the proposed airport. The items of delegated legislation are binding on local authorities.

#### **Local Authority Policy Initiatives**

134. Four councils – Fairfield, Liverpool, Penrith and Wollondilly – are bound by the delegated legislation because portions of their land fall within the 20 ANEF noise contour surrounding the proposed airport. This prevents rezoning for more intensive development in potentially noise-affected areas. Councils have also been advised not to approve

development applications for new houses in areas which would be within the 25 ANEF shown in the 1985 EIS, but renovation and extensions are still allowed.

### **Other Consultations**

135. The FAC has held discussions with the Western Sydney Economic Development Committee, and its Transport Energy and Waste Management Sub-Committee, Western Sydney Regional Organisation of Councils and the Liverpool City Council Economic Development Unit in addition to the relevant Commonwealth Government departments and authorities.

136. Consultation with these organisations is continuing, not only to inform them about proposals and assess community reaction, but to assess and generate interest in potential business opportunities on the airport.

### **Relocation of Power Line**

137. It is proposed that the 330 kV transmission line which crosses the western corner of the site be relocated at the earliest opportunity. While the transmission line poses no difficulties for the construction and operation of the initial airport development, it is essential that the airport's longer-term future development is not compromised by the existing transmission line. In its present location, the transmission line imposes both physical and operational constraints on the planning and development of airport facilities.

138. Pacific Power has undertaken a preliminary study into the relocation of the transmission line and identified two indicative route options. The DTC has held discussions with Pacific Power and the FAC on arrangements necessary to proceed with the relocation exercise. Commonwealth funds have been set aside to enable an early commencement of the route selection and EIS process.

### **GOVERNMENT/FAC DEVELOPMENT AGREEMENT**

139. On 1 April 1992, a development agreement was established between the Government and the FAC for the initial general aviation airport. This agreement established the conditions under which the FAC would assume responsibility for the development and operation of the new airport and also documented the Commonwealth's requirements of the FAC. As part of the arrangements the Commonwealth provided an equity injection of \$47m to

the FAC. This agreement opened the way for the FAC to proceed with the detailed design and construction of the airport.

#### **Airport Site Lease**

140. The Government decided that the freehold title of the site should remain with the Commonwealth until the commercial future of the airport was more secure. This will ensure that the FAC's commercial charter is protected and at the same time allow the Commonwealth to recoup an improved return on the land at some time in the future.

141. The Commonwealth will therefore be leasing the airport site to the FAC for a period of 10 years, with an option of up to a further 15 years, for nominal rental of \$1 per annum. The FAC will have an opportunity to purchase the airport site at an agreed price at any time during the duration of the lease.

#### **FINANCIAL AND PROGRAMMING ASPECTS**

142. The upper limit cost for the FAC's Stage 1 proposal is estimated to be \$56.1m (December 1990 prices). The estimate includes project development costs, engineering, fitout and mobile equipment and an allowance for contingency but does not include escalation, holding charges during construction, land acquisition or other DTC costs incurred prior to the declaration of the airport as a Federal airport development site.

143. On 1 April 1992 the Commonwealth provided a direct equity injection of \$47m to the FAC. This figure was arrived at after assessment of benefits available to the FAC from this early payment including income to be derived by the FAC from interest earned on the equity injection (until it was drawn down by construction payments) and the income derived from net revenue from property inside the airport acquisition boundary but outside the area required for Stage 1 development.

144. The development program for Stage 1 is based on the airport being operational before the end of 1994.

145. The proposed time frame from commencement of design to commissioning of Stage 1 is approximately 27 months.

146. The Committee has recommended that the Stage 1 proposal should not proceed and should be replaced by an expanded proposal based on a 2900 m long runway and associated infrastructure to be costed by the FAC. (See paragraph 120).

147. The Committee believes that the FAC should approach the Commonwealth Government seeking the additional funding for the expanded Stage 1 development. Should the Government be unwilling to provide the necessary additional funding for an expanded Stage 1 proposal, a consortium including Federal and State Government bodies, local government (through WSROC) and other interested parties should be formed to develop and operate Badgerys Creek Airport through private funding.

148. The FAC should immediately prepare a new development program based on the expanded Stage 1 proposal recommended by the Committee with the aim of commencing construction at the earliest opportunity.

#### **Committee's Recommendations**

149. The Federal Airports Corporation should seek additional Commonwealth funding for the expanded Stage 1 proposal. Should the Government be unwilling to provide the necessary additional funding a consortium including Federal and State Government bodies, local government (through the Western Sydney Regional Organisation of Councils) and other interested parties should be formed to develop and operate Badgerys Creek Airport through private funding.

150. The construction of an expanded Stage 1 proposal at Badgerys Creek should commence as soon as possible.

## CONCLUSIONS AND RECOMMENDATIONS

153. The conclusions and recommendations of the Committee and the paragraphs in the report to which each refers are set out below:

	Paragraph
1. The Committee agrees that there is a need for a second major airport in the Sydney Basin. The Committee further agrees the Badgerys Creek site is the most suitable location for the development of a second major airport in the Sydney Basin. However for reasons stated in the report the Committee believes that the Federal Airports Corporation proposal places too much emphasis on passenger demand and does not take account of the potential growth of freight services to the Asia/Pacific region or the scope for industrial growth in the Western Region of Sydney.	18
2. The Committee believes that the long term development of Badgerys Creek Airport as proposed in the Master Plan is appropriate.	55
3. The Committee believes that the staged development of Badgerys Creek Airport is appropriate but as indicated in the report the initial development should provide for a 2900 m runway and not a 1800 m runway as proposed by the Federal Airports Corporation.	62
4. The Committee recommends that the Commonwealth include in its acquisition program at the Badgerys Creek Airport site those properties without dwellings which are within the 35 ANEF zone.	74
5. There is a requirement to establish the use of the Badgerys Creek site as the location for the second Sydney airport as soon as possible.	117
6. The Committee believes that the Stage 1 proposal by the Federal Airports Corporation for the development of Badgerys Creek Airport is inadequate and unlikely to attract potential users.	118

7. The Committee believes that the \$152m estimate provided by the Federal Airports Corporation for a Western Sydney Regional Organisation of Councils type proposal is more realistic than the \$42.46m estimate provided by Western Sydney Regional Organisation of Councils. 119
8. The Committee believes that the initial development at Badgerys Creek should include a 2900 m long runway with the minimum associated infrastructure necessary to allow for both domestic and international operations. This should include the provision of navigational/visual aids and an instrument landing system. 120
9. The Committee recommends that the Stage 1 development of Badgerys Creek Airport as proposed by the Federal Airports Corporation should not proceed. 121
10. The Committee recommends that the Federal Airports Corporation should prepare and cost as a matter of urgency an expanded Stage 1 proposal in accordance with the Committee's recommendations. 122
11. The Federal Airports Corporation should seek additional Commonwealth funding for the expanded Stage 1 proposal. Should the Government be unwilling to provide the necessary additional funding a consortium including Federal and State Government bodies, local government (through the Western Sydney Regional Organisation of Councils) and other interested parties should be formed to develop and operate Badgerys Creek Airport through private funding. 149
12. The construction of an expanded Stage 1 proposal at Badgerys Creek should commence as soon as possible. 150

  
Colin Hollis  
Chairman

8 December 1992



## APPENDIX A

### WITNESSES

**ALCHIN**, Mr Stephen David, Executive Director, Western Sydney Regional Organisation of Councils, 80 Main Street, Blacktown, New South Wales 2148

**ANDREWS**, Mr Mark, Environmental Planner, Penrith City Council, 114 Henry Street, Penrith, New South Wales 2751

**BEAMER**, Alderman Diane, Deputy Mayor, Penrith City Council, 114 Henry Street, Penrith, New South Wales 2751

**BENDALL**, Mr Kirk Kennaugh, c/- PO Box K606, Haymarket, New South Wales

**CADY**, Mr William Robert, Environmental Scientist, Environmental Impact Reports Pty Ltd, 214A Old South Head Road, Vaucluse, Sydney, New South Wales 2030

**CONDON**, Mr Warwick Arthur, General Manager-Commercial, Federal Airports Corporation, 2-2A Lord Street, Botany, New South Wales 2019

**GORRICK**, Mr Christopher, Consultant, Western Sydney Regional Organisation of Councils, 80 Main Street, Blacktown, New South Wales 2148

**GRACE**, Mr Geoffrey, Secretary, Citizens Revolt Against Sound Harassment, 47 Farnell Street, Hunters Hill, New South Wales

**GRANT**, Mr Colin Francis, Principal Aerodrome Engineer, Australian Construction Services, Sirius Building, Furzer Street, Phillip, Australian Capital Territory

**GRAY**, Mr Alan William Penton, General Manager, Finance and Administration, Federal Airports Corporation, 2-2A Lord Street, Botany, New South Wales 2019

**HAYMAN**, Mr Donald Malcolm, Manager—Projects and Consulting Services, Federal Airports Corporation, 2-2A Lord Street, Botany, New South Wales 2019

**LADE**, Mr John William, General Manager—Technical and Standards, Federal Airports Corporation, 2-2A Lord Street, Botany, New South Wales 2019

**MILCZAREK**, Mr Michal Tadeusz, Senior Professional Officer Grade B, Commonwealth Department of Transport and Communications, 5th Floor, Trace Building, 22 Cooyong Street, Canberra, Australian Capital Territory 2600

**MILNER**, Mr Gary John, Planning and Environment Manager, Sydney Airport, Federal Airports Corporation, PO Box 63, Mascot, New South Wales

**RISCHBIETH**, Mr Ian Roland, Assistant Secretary, Aviation Division, Commonwealth Department of Transport and Communications, 5th Floor, Trace Building, 22 Cooyong Street, Canberra, Australian Capital Territory 2600

**SPROATS**, Grahame Joseph, Project Manager, Gutteridge Haskins and Davey Pty Ltd, 39 Regent Street, Railway Square, New South Wales 2000

**THOMPSON**, Mr Barry Edward, General Manager—General Aviation, Federal Airports Corporation, 2-2A Lord Street, Botany, New South Wales 2019

**WILLIAMS**, Mr Tony, Consultant, Western Sydney Regional Organisation of Councils, 80 Main Street, Blacktown, New South Wales 2148

## DESCRIPTION OF THE PROPOSED STAGE 1 WORKS

1. The Government and the FAC have agreed that the scope of works for the Stage 1 development of the site would be as set out in the following paragraphs:

### General Site Requirements

- all facilities are to be designed and located in a manner that will allow for cost effective phased development from the initial general aviation airport through to the ultimate development as envisaged in the master plan
- earthworks and levels associated with the general aviation runway, taxiways, apron, building area and any surplus fill areas are to be consistent with the requirements of the future development of major airport facilities.

### Airside Facilities

- a 1800 m x 30 m sealed runway for unrestricted operations by aircraft up to 20 000 kg weight, eg F27 and F50, to be located within a 90 m wide graded runway strip. The runway will be suitable for infrequent use by F28 and BAe 146 aircraft. The runway is to be constructed on a master planned parallel taxiway alignment
- a 15 m wide parallel taxiway and connecting taxiways to match the operational capability of the runway
- a sealed aircraft parking apron of 25 000 m<sup>2</sup>. The apron area to be equally divided into areas catering for 5700 kg and 20 000 kg aircraft
- additional 25 000 m<sup>2</sup> of earthwork benching to facilitate easy extension of the general aviation apron in accordance with the airport master plan
- runway and taxiway lighting

- . a general aviation aircraft wash-down facility
- . the entire airside area to be enclosed with a standard post and wire fence
- . the large open areas between runways and taxiways and embankment slopes to be grassed with particular regard to maximising soil stabilisation and discouragement of bird life
- . all movement area facilities are to comply with the relevant standards as detailed in the current edition of the Civil Aviation Authority's publication 'Rules and Practices for Aerodromes'.

### **Landside Facilities**

- . a two lane, sealed access road connecting Badgerys Creek Road to the airport building area
- . a sealed car park for fifty cars
- . street lighting on the access road and in the carpark
- . a terminal building of some 100 m<sup>2</sup> in area with a lounge/waiting room and amenities for general use by airport patrons, and facilities for flight briefing activities. The building could also include accommodation for airport administration
- . the existing water supply system in Badgerys Creek Road to be extended to the airport building area via a main constructed along the alignment of the airport access road
- . the building area to be sewered, with sewage being treated on site in a 100 equivalent persons capacity sewerage treatment plant. Treated effluent to be disposed of on site by way of a land irrigation system
- . electricity supply to be provided by an extension of the existing 11 kV system in Badgerys Creek Road. A transformer to be located within the building area to enable the reticulation of low voltage electricity to various airport facilities and lease sites
- . telephone facilities to be provided from an extension of the existing Telecom network

- sufficient lease sites for general aviation support facilities to be developed to match the size of the aircraft apron
- a suitable site to be prepared for the installation of aircraft fuelling facilities
- the car park and areas surrounding the airport terminal building to be landscaped by the planting of shrubs and trees. The verges of the airport access road to be selectively planted with trees.

### **Environmental Management**

- all effluent and runoff from the site to comply with the water management system (detailed in studies undertaken in 1991)
- appropriate measures to be taken to minimise potential noise and dust nuisance from airport construction activities.

### **External Infrastructure**

- contribute as necessary towards any headworks improvements necessitated by the development of the general aviation airport.

### **Mobile Equipment**

- provide all necessary vehicles, plant, equipment, tools etc to facilitate the operation and maintenance of the general aviation airport.

### **Implementation**

- the airport is to be licensed by the Civil Aviation Authority and commissioned for operations before the end of 1994.

### **Airport Site Access Upgrading**

2. In deciding in 1989 to commence airport development on the Badgerys Creek site, the Federal Government agreed to assume responsibility for some local road upgrading in the Badgerys Creek area. The Commonwealth provided \$20m for this purpose.
3. The aim was to upgrade two key routes servicing the Badgerys Creek

site which would be used both for the delivery of construction materials and subsequently as the primary access to the general aviation aerodrome. One of the routes that has been upgraded is from the Great Western Highway and Western Freeway via Wallgrove Road and Elizabeth Drive to the airport site. The other is along The Northern road from Penrith and Camden. The Northern Road would be a major access route for construction materials for the airport. The road network surrounding the airport is shown at Appendix C-1.

4. The upgrading program consisted of some 27 individual projects. The largest single project involved the provision of entry and exit ramps on the F4 Western Freeway/Wallgrove Road intersection at an estimated cost of over \$6m. The balance of the program comprised a number of intersection improvements, bridge widening, shoulder widening and pavement rehabilitation. The Committee was advised that following the upgrading both Elizabeth Drive and Bringelly Road will still be subject to periodic nuisance flooding following sustained rainfall for at least a two day period. However, flood free access is available via the M4 Motorway and The Northern Road.

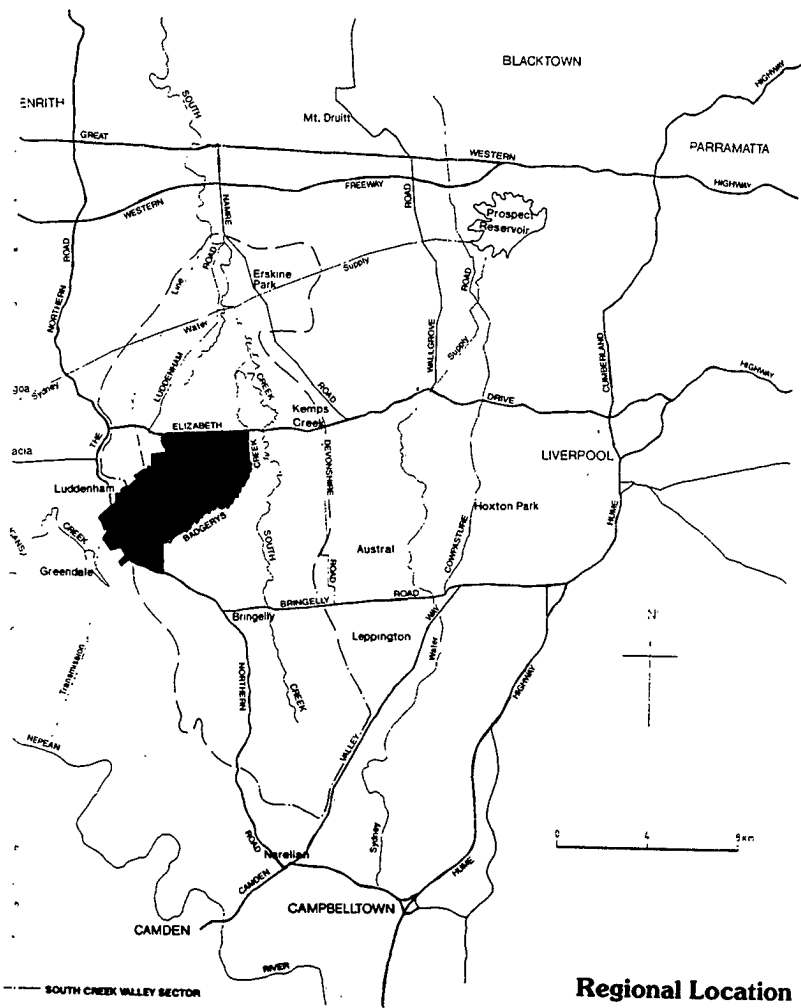
5. The works were implemented by the NSW Roads and Traffic Authority under a special agreement with the Commonwealth. The works commenced in 1990/91 and were completed in June 1992.

6. Actual expenditure by the Commonwealth on the program of works was \$11m in 1990/91 with the balance of \$9m in 1991/92.

## **APPENDIX C**

### **PROJECT DRAWINGS**

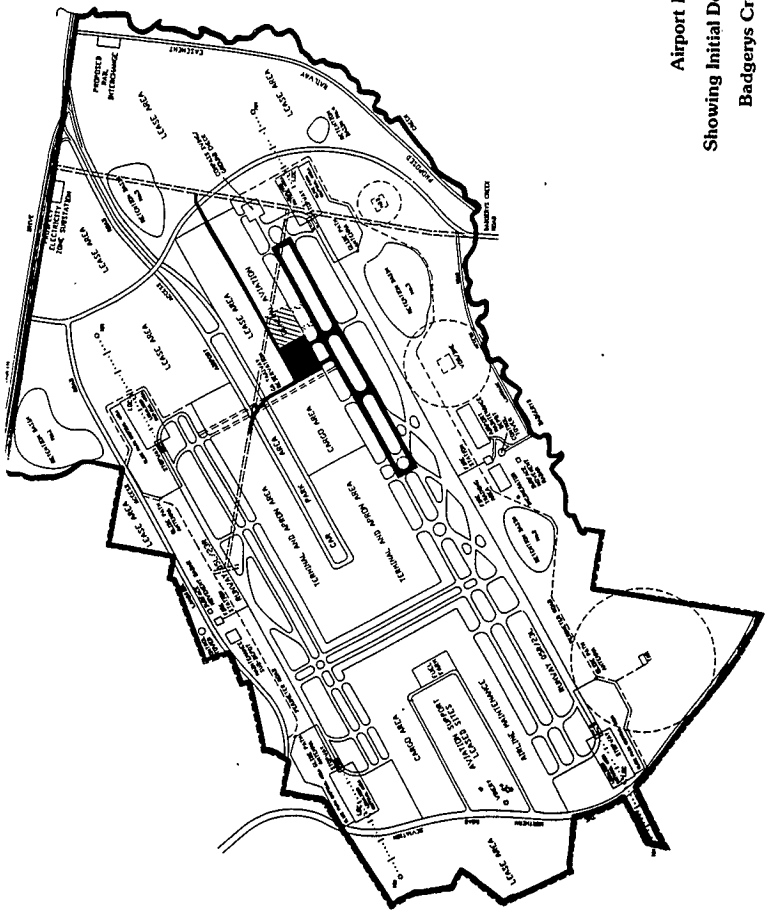
	<b>Page</b>
<b>Regional Location</b>	<b>C-1</b>
<b>Airport Master Plan Showing Initial Development</b>	<b>C-2</b>
<b>Site Services</b>	<b>C-3</b>

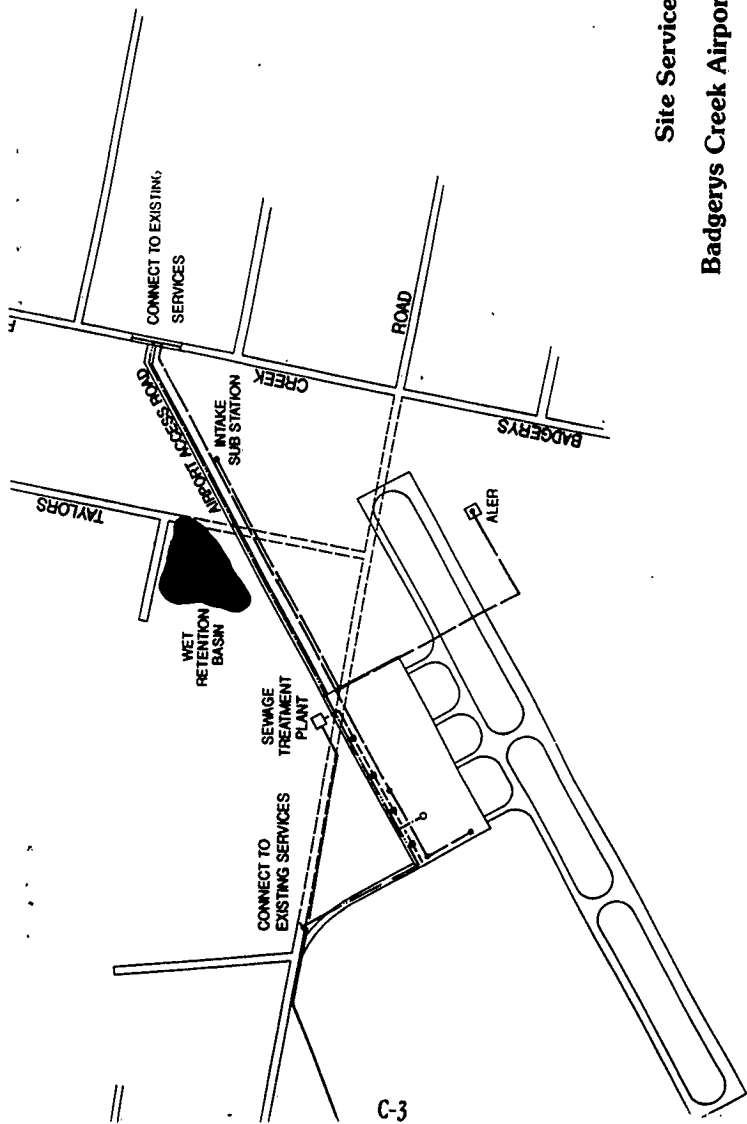


**Regional Location  
Badgerys Creek Airport**



**Airport Master Plan  
Showing Initial Development  
Badgerys Creek Airport**





**Site Services**  
**Badgerys Creek Airport**