The Parliament of the Commonwealth of Australia

RAAF Base Amberley Redevelopment Stage 2, Queensland

Parliamentary Standing Committee on Public Works

November 2005 Canberra © Commonwealth of Australia 2005

ISBN 0642787107 (printed version)

ISBN 0642787115 (HTML version)

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Ms Vivienne Courto

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List of Abbreviations

9FSB 9th Force Support Battalion

ADF Australian Defence Force

AKF Australian Koala Foundation

CEPS Central Emergency Power Station

Defence Department of Defence

EPBC Environment Protection and Biodiversity Conservation Act 1999

ESD Ecologically Sustainable Development

FFR Fitted for Radio

LEAP Living Environment and Accommodation Precinct

MRTT Multi Role Tanker Transport

POL Petrol, Oil and Lubricants

RAAF Royal Australian Air Force

Extract from the Votes and Proceedings of the House of Representatives

No. 44 dated Thursday, 23 June, 2005

29 PUBLIC WORKS – PARLIAMENTARY STANDING COMMITTEE – REFERENCE OF WORK – RAAF BASE AMBERLEY REDEVELOPMENT STAGE 2, QUEENSLAND

Dr Stone (Parliamentary Secretary to the Minister for Finance and Administration), 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: RAAF Base Amberley redevelopment stage 2, Queensland.

Question – put and passed.

List of Recommendations

3 Issues and Conclusions

Recommendation 1

The Committee recommends that the proposed RAAF Base Amberley redevelopment stage two, QLD, proceed at the estimated cost of \$285.6 million.



Introduction

Referral of Work

- 1.1 On 23 June 2005 the proposal for the RAAF Base Amberley Redevelopment Stage Two, Qld, was referred to the Public Works Committee for consideration and report to the Parliament in accordance with the provisions of the *Public Works Committee Act 1969* (the Act). The proponent agency for this work is the Department of Defence (Defence).
- 1.2 The Hon Dr Sharman Stone MP, Parliamentary Secretary to the Minister for Finance and Administration, advised the House that the estimated out turn cost of the proposed work was \$285.6 million. Subject to parliamentary approval, works are planned to commence in late 2005, and be completed by December 2007.

Background

RAAF Base Amberley

1.3 The RAAF Base Amberley site has been used for military operations since 1938. In the early 1940s the American Air Corps was stationed at the Base with approximately 2,000 personnel. After World War II the site became a major RAAF bomber base and major realignment of the main runway was undertaken. During the Vietnam War period,

Extract from the *Votes and Proceedings of the House of Representatives*, No. 44, Thursday 23 July 2005

- the Base was again used by the United States military. Additional accommodation and working facilities including a runway extension were constructed in the late 1960s and early 1970s.
- 1.4 In 1963 Australia commenced the procurement of the F-111's with the first six aircraft arriving at RAAF Base Amberley on 1 June 1973. The twenty fourth aircraft was delivered on 31 October of the same year.² Since the arrival of the F-111, upgrading and construction of facilities has been ongoing at the Base including a major redevelopment between 1999 and 2000.

Site of the Proposed Works

- 1.5 RAAF Base Amberley is located approximately eight kilometres west of the city of Ipswich as the western edge of the Brisbane Metropolitan Area. The Base is bordered to the north, west and east by the Bremer River and Warrill Creek to the south and east. The area surrounding the Base is primarily agricultural, but increasingly becoming more residential in nature.
- 1.6 The Base and its surrounding buffer area comprise 2,503 hectares, and the developed area of the Base within the perimeter security fencing covers 1,664 hectares.³
- 1.7 All the proposed works are within RAAF Base Amberley, where the site is Commonwealth owned and Defence controlled. The proposed redevelopment does not require the acquisition of additional land.⁴

Inquiry Process

- 1.8 The Committee is required by the Act to consider public works over \$6 million⁵ and report to Parliament on:
 - the purpose of the work and its suitability for that purpose;
 - the need for, or the advisability of, carrying out the work;
 - whether the money to be expended on the work is being spent in the most cost effective manner;
 - the amount of revenue the work will generate for the Commonwealth, if that is its purpose; and
- 2 Appendix C, Submission No. 1, paragraph 2
- 3 ibid, paragraph 3
- 4 ibid, paragraph 50
- 5 Public Works Committee Act 1969, Part III, Section 18 (8)

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- the present and prospective public value of the work.6
- 1.9 The Committee called for submissions by advertising the inquiry in *The Courier Mail* on Saturday, 30 July 2005. The Committee also sought submissions from relevant government agencies, local government, private organisations and individuals, who may be materially affected by or have an interest in the proposed work. The Committee subsequently placed submissions and other information relating to the inquiry on its web site in order to encourage further public participation.

Inspection and Public Hearing

1.10 On 9 September 2005 the Committee visited RAAF Base Amberley and inspected the site and environs of the proposed works. A confidential briefing from Defence and a public hearing were held within RAAF Base Amberley, later that day.⁷

⁶ ibid, Section 17

See Appendix D for the official Hansard transcript of the evidence taken by the Committee at the public hearing on Friday, 9 September 2005 in RAAF Base Amberley

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The Proposed Works

Purpose

- 2.1 The purpose of the proposed refurbishment is to ensure that RAAF Base Amberley can operate effectively as a Defence base over a thirty year planning horizon and will involve:
 - providing new working accommodation and infrastructure for the Multi Role Tanker Transport (MRTT) and 9th Support Battalion elements;
 - upgrading of existing aircraft pavements for MRTT operations; and
 - upgrading and refurbishing the Base's engineering services and infrastructure.¹

Need

- 2.2 The relocation from RAAF Base Richmond of No. 33 Squadron (RAAF's air to air refuelling capability) and the arrival of new MRTT aircraft at the end of 2008 requires the provision of new facilities as there are no suitable existing facilities at RAAF Base Amberley.²
- 2.3 9th Force Support Battalion provides strategic heavy lift vehicles to convey tanks, armoured vehicles, major construction plant, and bulk stores. Elements of the 9th Force Support Battalion, which are currently located in Townsville, Randwick, Moorebank, Richmond and Puckapunyal, are to be relocated to RAAF Base Amberley. Consolidating these elements at

¹ Appendix C, Submission No.1, paragraph 13

² ibid, paragraph 8, 5, 17

- Amberley requires the provision of new facilities as there are no suitable existing facilities at the Base.³
- 2.4 The existing base infrastructure is operational, but is ageing. Some services, such as water and sewer reticulations, require major replacement or significant upgrading.⁴ The proposal will also address the current shortcomings in the existing communications and trunk road systems.⁵

Scope

- 2.5 The proposed scope for the MRTT include:
 - a new aircraft parking apron with an aircraft washpoint;
 - a new Squadron Headquarters, Maintenance Complex and Ground Support Equipment shelter;
 - an extension to the refuelling system with hydrant points on the apron;
 - upgrades to the main runway and parallel taxiway;
 - a new office facility for the Logistics Management Unit; and
 - a simulator facility (included in acquisition contract).⁶
- 2.6 The proposed scope for the 9th Force Support Battalion include:
 - a new combined Battalion Headquarters and Logistic Supply Company office and stores building;
 - new office, stores and maintenance facilities for 26 Transport Squadron;
 - a new area fuel and vehicle washpoint; and
 - new office and stores facilities for 37th Force Support Company and a separate Petrol Platoon complex.⁷
- 2.7 The proposed scope for the Base Engineering Services Infrastructure Upgrade include:
 - upgrading of the electrical reticulation, central emergency power station and service supervisory systems;
 - upgrading of the water, sewerage and stormwater reticulation (including rehabilitation of the Sewerage Treatment Plant);
 - upgrading of the communications infrastructure and networks; and
 - providing new link roads and an upgrade of an existing road.⁸
- 3 Appendix C, Submission No. 1, paragraph 11, 18, 19
- 4 ibid, paragraph 12
- 5 ibid, paragraph 20
- 6 ibid, paragraph 23
- 7 ibid, paragraph 24

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Project Delivery

2.8 Subject to parliamentary approval, the RAAF Base Amberley Redevelopment Stage Two project is proposed to commence in the latter half of 2005 and be completed by December 2007.9

2.9 The project delivery system will be a combination of Managing Contractor (used to deliver the MRTT facilities and for upgrading the engineering services infrastructure) and Head Contractor (used to deliver 9th Force Support Battalion facilities). A project manger has been engaged to represent Defence and to act as contract administrator for the entire project.¹⁰

Cost

- 2.10 The estimated out-turn cost of the proposed redevelopment is \$285.6 million. This figure includes:
 - construction costs;
 - fitout;
 - professional fees;
 - furniture and fittings; and
 - a contingency sum.¹¹

⁸ Appendix C, Submission No. 1, paragraph 25

⁹ ibid, paragraph 21

¹⁰ ibid, paragraph 80-82

¹¹ ibid, paragraph 31

3

Issues and Conclusions

Options Considered

3.1 In its main submission Defence states that:

While other options were considered for home basing the Multi Role Tanker Transport, RAAF Base Amberley is considered as the only viable location...¹

The Committee sought more information on the other options considered by Defence, as they were not listed in its main submission.

- 3.2 Due to the confidential nature of some of the options, Defence could not provide detailed specifics of the options considered, however did mention that a number of options were considered. Current Multi Role Tanker Transport (MRTT) location of RAAF Base Richmond was one option that was considered, but was ruled out due to the physical limitations for the operation of the newer and larger aircraft. The option of operating from a commercial airfield was also examined, but ruled out on financial and operational grounds.²
- 3.3 Defence continued that as the primary role of the MRTT aircraft is air-to-air refuelling of aircraft based at Amberley and Williamtown, RAAF Base Amberley represented a more cost effective option. Defence reassured the Committee that the work and research undertaken within Defence indicated RAAF Base Amberley as the optimum location.³

¹ Appendix C, Submission No. 1, paragraph 33

² Appendix D, Official Transcript of Evidence, page 5

³ Appendix D, Official Transcript of Evidence, page 5

MRTT Location on Base

3.4 On the site inspection, the Committee viewed the proposed specific location for the MRTT aircraft accommodation on base. The Committee was interested in what options Defence had considered for the specific location of the MRTT aircraft on the Base. Defence explained that it had considered various locations on Base, however ran into issues of aircraft parking aprons being too soft for the large MRTT aircraft, and the requirement for extensive modifications to existing taxiways. Cost and constructability issues led Defence to choose the area adjacent to the 38 Squadron as the location for the MRTT aircraft accommodation.⁴

Project Delivery

- 3.5 Defence states in its main submission that subject to parliamentary approval, the redevelopment of RAAF Base Amberley is to commence in the latter half of 2005 and completed by December 2007.⁵ The Committee sought reassurance that pending parliamentary approval, Defence could deliver the project in the stated time frame.
- 3.6 Defence responded that it had used individual consultants and contractors for the three elements of the project: the MRTT works; the base services infrastructure; and the 9th Force Support Battalion (9FSB) project. Defence added that, subject to parliamentary approval, the works could commence quickly and completed as scheduled.⁶

Contracting Methodology

- 3.7 The Committee sought more detail on the contracting methodology employed by Defence for the project. Defence commented that in selecting particular contractors and contracting methodologies, it assessed the risk of the individual project elements and selected an appropriate project delivery method.
- 3.8 For the MRRT element of the Base redevelopment, Defence have a contractor engaged for the planning phase of the project, providing flexibility for further negotiation. Given the 9FSB element of the project is planned to be on a greenfield site, Defence opted for a head contractor approach which provides better value for money and control of the project. As for the works to the Base infrastructure, Defence opted for a

⁴ Appendix D, Official Transcript of Evidence, page 9

⁵ Appendix C, Submission No. 1, paragraph 2

⁶ Appendix D, Official Transcript of Evidence, page 4

managing contractor approach, allowing for the Base's operations to continue throughout the redevelopment.⁷

Consultation

- 3.9 Defence lists in its main submission organisations consulted, or that Defence plan to consult, with regard to Base redevelopment.⁸ The Committee sought clarification on which organisations had been consulted to date and what issues had been raised throughout the consultation process.
- 3.10 Defence confirmed that all organisations listed in its main submission have been consulted. An example of consulting forum is the RAAF Amberley strategic advisory group which was established to discuss issues regarding the Base and also the development of the region. The group meets every two months and comprises of representatives from the Ipswich City Council, senior executives from the Base, the Chamber of Commerce and local industry members. All feedback from local community, relevant agencies and the advisory group has been positive in support of the Base redevelopment.⁹
- 3.11 The Ipswich Region Chamber of Commerce and Industry supported the project and indicated that it had not received any negative feedback or comments from the community. The Chamber added that its relationship with the Base was very good and any issues, such as increased traffic congestion and disturbance to the community, were addressed and communicated well.¹⁰
- 3.12 The Ipswich City Council further supported the project and informed that the once poor communication between the Base and the Council had since greatly improved, and the Council welcomed the opportunities of the Base redevelopment.¹¹

⁷ Appendix D, Official Transcript of Evidence, page 4

⁸ Appendix C, Submission No. 1, paragraph 45

⁹ Appendix D, Official Transcript of Evidence, page 9

¹⁰ ibid, page 14

¹¹ ibid, page 17

Local Impact

Workforce

- 3.13 The Committee enquired, given the size of the project, whether Defence anticipated any issues with shortage of skilled workers or supplies and materials. Defence assured the Committee that even though it had factored worker and material supply issues into the planning of the project, it does not expect trouble with finding skilled workers in the area. In the event of a skills shortage in the south-east Queensland region, Defence are confident that it would not be difficult to attract skilled workers to the area.¹²
- 3.14 With regard to the workforce involved with the project, Defence states that according to its latest estimates:

...we [Defence] are probably looking at more than 350 people employed across the three projects when they are all up and running.¹³

Traffic Considerations

- 3.15 The Committee enquired as to what initiatives Defence would be incorporating to minimise impact on the local community during the construction phase of the project. Defence acknowledged that the Base redevelopment would impact on the level of traffic accessing the Base. To minimise this impact, Defence have identified a separate access point for construction traffic.¹⁴
- 3.16 Defence's research indicates that much of the traffic flow issues would occur between the Cunningham Highway and the construction site. This route is used heavily by Base population, and Defence anticipate more impact on Base population rather than the local community. Contractors have agreed with Defence to use Southern Amberley Road to get to the construction site, thus avoiding the Amberley State School area on Rosewood Road. Defence also look to have traffic diverts for construction traffic so as to avoid the child-care centre. Defence expect the highest road loading period between the months of May and June, when the overlay work for the runway would be carried out.

¹² Appendix D, Official Transcript of Evidence, page 13

¹³ ibid, page 12

¹⁴ ibid, page 11

¹⁵ ibid, page 12

Hazardous Materials

3.17 Defence's main submission states that as part of the MRTT works, a Maintenance Complex is proposed to accommodate equipment, personnel and facilities. The design of the complex incorporates an external hazardous waste collection point. The Committee enquired as to what hazardous materials would be collected, and what procedures were in place for disposal.

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- 3.18 Defence assured the Committee that the Base has procedures for the handling of hazardous waste, and meet all of the standards for hazardous waste collection and disposal. In the case of MRTT and 9FSB facilities, hazardous waste issues mainly relate to fuel spillage. These facilities will have triple interceptor technology incorporated into the design to capture any spillages that may occur.¹⁷
- 3.19 Defence added that MRTT fuel tank work, where fuel spillages may occur, is not carried out on a frequent basis. However:

The work activity is strictly controlled using appropriate personal protection equipment and procedures. The building services inside the hangar also allow for mechanical fuel vapour exhaust systems.¹⁸

Any trade waste that is generated is collected in sump areas, treated and disposed off site. All drum trade waste and bulk liquid waste is removed for disposal under contract.

Building Services

Building Management Systems

- 3.20 In its main submission Defence states that facilities on the Base will incorporate building management systems, metering and other provisions to monitor and measure energy use and to allow regular energy audits.¹⁹ The Committee sought further information on the benefits of the building management systems and the other provisions being utilised to measure energy use.
- 3.21 Defence responded that all elements of the project have complied with the Department of the Environment and Heritage's *Ecologically Sustainable*

¹⁶ Appendix C, Submission No. 1, attachment 4, paragraph 8

¹⁷ Appendix D, Official Transcript of Evidence, page 6

¹⁸ ibid

¹⁹ Appendix C, Submission No. 1, paragraph 70

Development Design Guide for Australian Government Buildings. Defence also plan to incorporate multiple metering points into building design to be able to accurately monitor energy consumption and adjust usage accordingly. Currently, Defence have utilise a single point of metering with the supply authority to measure and monitor energy usage.²⁰

Air Conditioning

3.22 In its main submission Defence outlines that new facilities will "generally" be air-conditioned. ²¹ The Committee sought detail on exactly which facilities were to be air-conditioned and what types of air-conditioning units would be used. Defence clarified that personnel areas would be air-conditioned, however areas such as vehicle shelters would not. Air-conditioning units to be used in the project make use of a mixed-mode operation system, enabling units to utilise natural ventilation in appropriate climate conditions. Therefore, air-conditioning would not be used unnecessarily outside hotter and cooler periods of the year. The air-conditioning units will be air-cooled, rather than water cooled, to ensure no danger of Legionella Bacillus. ²²

Water Reticulation

- 3.23 Defence states in its main submission that none of the proposed sites for new facilities present any particular civil engineering problems²³, however on the site inspection Defence explained issues that had arisen with regard to water reticulation. The Committee wanted clarification on these issues and how Defence propose to overcome them.
- 3.24 Defence informed the Committee that the existing water reticulation system has pipes that run underneath the runway. While this was suitable at the time they were laid, the pipes have since been stressed by vehicles and aircraft traffic and deteriorated in quality. This project addresses the water piping issue by diverting the water main to the southern side of the airfield. Ipswich Water also proposes to establish another water main from the northern side of the airfield, resulting in dual feed into Base.²⁴
- 3.25 Extensive topographical and geotechnical surveys have been, and will continue to be, carried out to identify any potential soil or underground

²⁰ Appendix D, Official Transcript of Evidence, page 7

²¹ Appendix C, Submission No. 1, paragraph 73

²² Appendix D, Official Transcript of Evidence, page 8

²³ Appendix C, Submission No. 1, paragraph 78

²⁴ Appendix D, Official Transcript of Evidence, page 10

services issues. Surveys have shown that some water and sewer lines require maintenance, which will be addressed as part of this project.²⁵

Security

3.26 Given the large amount of works proposed for the Base, the Committee enquired as to effect on the Base's defence capability during the construction phase of the project. Defence explained that whilst there will be interruptions to Base services due to infrastructure works, the managing contractor project delivery provides for flexibility as to how the work is staged and carried out. Defence also assured the Committee that:

In terms of operational capability, the plans have been worked so that we [Defence] retain our full F111 and Caribou capabilities throughout the construction period.²⁶

3.27 While on the site inspection, the Committee were shown the new site for the electrical substation. Given the location of the new substation would be off-base, the Committee expressed concern over possible security issues. Defence explained to the Committee that the off-base location of the new electrical substation provides 24-hour access to authorised electrical technicians without having to gain access to the grounds of the Base, be it for regular maintenance or in the case of emergency.²⁷

Future Projects

3.28 Defence states in its main submission that:

...further redevelopment of RAAF Base Amberley is included in Defence's unapproved Major Capital Facilities program for consideration later this decade.²⁸

The Committee was interested in what future redevelopment for RAAF Base Amberley was anticipated. Defence were unable to elaborate in detail of future projects, however stated that subject to parliamentary approval of the current project, further redevelopment of the Base is anticipated. Future works would cover issues not addressed by the current project before the Committee.²⁹

²⁵ Appendix D, Official Transcript of Evidence, page 10

²⁶ ibid, page 12

²⁷ ibid, page 10

²⁸ Appendix C, Submission No. 1, paragraph 43

²⁹ Appendix D, Official Transcript of Evidence, page 13

3.29 Defence indicated that certain elements proposed as part of this project will have capacity for future expansion. The design philosophy extends to project elements such as mechanical services and building design. Buildings will be designed to be able to handle an increase in staff number, or a change in function.³⁰

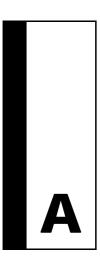
Recommendation 1

The Committee recommends that the proposed RAAF Base Amberley redevelopment stage two, QLD, proceed at the estimated cost of \$285.6 million.

Hon Judi Moylan MP

Chair

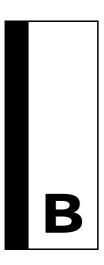
2 November 2005



Appendix A - List of Submissions

Submissions

- 1. Department of Defence
- 2. Australian Koala Foundation
- 3. Mayor of Ipswich
- 4. Ipswich Region Chamber of Commerce and Industry Inc.
- 5. Department of Defence (supplementary)



Appendix B - List of Witnesses

Wing Commander Mark Bartetzko, Commanding Officer/Base Commander, Combat Support Unit, Amberley, Royal Australian Air Force

Group Captain Stephen Bucholtz, Director, Multi Role Tanker Transport, Transition Team, Royal Australian Air Force

Air Commodore Dennis Green, Director General, Strategy and Planning, Royal Australian Air Force

Lieutenant Colonel Anthony Hambleton, Commanding Officer, 9th Force Support Battalion, Army, Department of Defence

Brigadier Peter Hutchinson, Director General, Infrastructure Asset Development, Infrastructure Asset Development Branch, Department of Defence

Councillor Charles Pisasale, Elected Councillor, Ipswich City Council

Mr Peter Pullman, Project Manager/Contract Administrator, Amberley Stage 2 Redevelopment Project, Department of Defence

Mr Anthony Russell, Immediate Past President, Ipswich Region Chamber of Commerce and Industry

Mr Robert Sheppard, Project Director, South Queensland, Infrastructure Asset Development Branch, Department of Defence



Appendix C Submission No. 1 from the Department of Defence



Appendix D - Official Transcript of Evidence