

## Issues and Conclusions

### Air Traffic Issues

- 3.1 The Committee received a submission from the Northern Territory Regional Airspace Users Advisory Committee (NT RAPAC) , co-signed by the Chief Executive Officer of Darwin International Airport (DIA) expressing concern at:
- air safety implications of the Defence proposal;
  - the potential for *Tiger* helicopters operating from Robertson Barracks to disrupt civil aviation operations at Darwin airport; and
  - the ongoing validity of Defence's arrangements in relation to the proposed helicopter flight path.<sup>1</sup>
- 3.2 Both written and verbal evidence received by the Committee demonstrated that Defence is aware of the issues surrounding air traffic management and is working to address them.<sup>2</sup>

### Air Safety

- 3.3 The NT RAPAC submission expressed the view that airspace changes at Darwin airport should be the subject of a safety case investigation by the Civil Aviation Safety Authority (CASA). The authors stated
- 

1 Submission No. 3

2 Appendix C, Submission No. 1, paragraph 27 and Appendix D, Official Transcript of Evidence, p. 7

further that the proposed works at Robertson Barracks should proceed only if the safety case were to demonstrate that

“...the ADF operation will not compromise the safety of civil operations at Darwin International Airport.”<sup>3</sup>

- 3.4 At the public hearing, Defence tabled a letter from the Airspace and Military Liaison Manager of Airservices Australia confirming verbal advice from CASA that the Robertson Barracks Safety Case had been approved. A copy of the safety case was also submitted as an exhibit.<sup>4</sup>
- 3.5 DIA acknowledged the completion of the safety case, but stated that they had not had the opportunity to review the safety case documents or CASA’s findings.<sup>5</sup>
- 3.6 The Chair requested that Defence supply the Committee, NT RAPAC and DIA with written notification from CASA of the safety case approval.<sup>6</sup>
- 3.7 Subsequent to the public hearing, Defence supplied written confirmation from CASA notifying approval of the Robertson Barracks safety case as requested. A copy of the CASA letter was forwarded to the Committee, NT RAPAC and DIA.<sup>7</sup>

## Airspace Management

- 3.8 At the hearing, Defence explained that *Tiger* helicopters would use Robertson Barracks as a departure and arrival point only. Defence proposes that the aircraft will follow a specified flight corridor to undertake operations well away from residential and environmentally sensitive areas.<sup>8</sup>
- 3.9 Defence stated that helicopters using the flight corridor would fly at an altitude of 200 feet, which
- “...should be below most civil aircraft operations that...could possibly be in that location.”<sup>9</sup>

---

3 Appendix D, Official Transcript of Evidence, p. 2

4 ib id, p. 1 and Exhibit 1, *Letter from Airspace and Military Liaison Manager, Airservices Australia and copy of design safety case titled “Darwin Terminal Airspace Re-Design to Facilitate Helicopter Operations at Robertson Barracks”*

5 Appendix D, Official Transcript of Evidence, p. 24

6 ib id

7 *Letter from Civil Aviation Safety Authority to Airservices Australia*, 17 July 2003

8 Appendix D, Official Transcript of Evidence, p. 7

9 ib id, p.28

- 3.10 It is envisaged that any potential airspace use conflicts would be resolved by radio communications.
- 3.11 Defence added that its proposed flight corridor accommodates the airspace control zone currently in force around Darwin airport. A nationwide reduction of airspace control zones, expected by the end of 2003, would enable Defence aircraft to operate from Robertson Barracks without any impact upon civil air traffic.<sup>10</sup>
- 3.12 Further, Defence stated that the Army facility at Holsworthy has operated under Sydney controlled airspace, immediately adjacent to Bankstown airport
- “...with no major concerns, in consultation with CASA and other air authorities, for a considerable period of time...”<sup>11</sup>
- 3.13 The NT RAPAC submission raised further concerns that, although written assurance had been received from the Chief of Army, General Peter Cosgrove, that civil aircraft would be given priority at all times except emergency or conflict situations, civil airspace users feared that changes in the Defence hierarchy may render the agreement invalid. Defence assured the Committee that the undertaking given by the Chief of Army is an ongoing policy commitment.<sup>12</sup>

### Flight Path ‘Quarantine’

- 3.14 Both NT RAPAC and DIA expressed the view that land located beneath the proposed *Tiger* flight path should be “permanently quarantined” from future residential development. The groups fear that future urban development of the land may lead to complaints about aircraft noise, resulting in the alteration of the flight corridor to the detriment of civil aviation operations.<sup>13</sup>
- 3.15 When questioned by the Committee about this issue, Defence responded that the selection of Robertson Barracks as the location for the *Tiger* capability resided partially in the relative isolation of the site from residential areas, compared with Darwin airport.<sup>14</sup>
- 3.16 Defence does not intend to undertake significant development at Robertson Barracks in the near future and does not expect urban

---

10 Appendix D, Official Transcript of Evidence, p. 27

11 ib id, p. 26

12 ib id, p. 27

13 ib id, pp. 11 and 23

14 ib id, p.7

development of the surrounding area. This view was supported by witnesses from the Northern Territory Government, who described the land beneath the proposed *Tiger* flight path as comprising a hunting reserve and a recently gazetted conservation area, in which no future development was anticipated.<sup>15</sup>

- 3.17 Defence articulated a commitment to address any concerns that may arise with regard to the flight path in the future.<sup>16</sup>

## Environmental Impacts

- 3.18 At the public hearing, Defence stated that an environmental management plan covering the entire introduction of the armed reconnaissance capability was being prepared in consultation with Environment Australia. This plan covers not only construction aspects of the project, but also use of training areas and flight paths.<sup>17</sup>

## Codes and Standards

- 3.19 Considering that the proposed works are to be constructed on Defence land, the Committee was interested to know whether Defence intended to observe Commonwealth or Northern Territory building standards, particularly in respect of local adaptations for cyclone conditions.<sup>18</sup>

- 3.20 Defence replied that it would be adopting the nationally applicable Building Code of Australia (BCA) certification standards, which include provisions for cyclones. Defence also intends to comply with any additional local provisions, plus

“...an additional raft of Defence requirements which in some cases exceed local code requirements.”<sup>19</sup>

---

15 Appendix D, Official Transcript of Evidence, p. 18

16 ib id, p. 27

17 ib id, p. 6

18 ib id, p. 9

19 ib id

## Capacity of Local Construction Industry

- 3.21 The Committee asked if Defence anticipated any specific difficulties relating to ability of the local market to provide materials and labour for the proposed works.
- 3.22 Defence acknowledged that, while some materials would need to be imported, most were readily available on the local market and that successful contractors would be provided with sufficient notice to undertake forward ordering.<sup>20</sup>
- 3.23 The Committee inquired further whether the proposed works would be impeded by the demands placed upon local industry by large infrastructure projects such as the Darwin LNG plant and the Alice Springs to Darwin railway.
- 3.24 Defence responded that it monitors local industry with regard to such issues and remains confident that the capacity exists to meet the project requirements. Defence stated that it hoped to commence the proposed works before the full impact of other larger projects begin to affect local industry.<sup>21</sup>

## Life Cycle Design

- 3.25 Committee members were interested to learn what life cycle provisions were to be incorporated into the proposed works to account for harsh local environmental conditions.
- 3.26 Defence responded that whole-of-life considerations and ecological sustainability form part of the design philosophy for all Defence projects.<sup>22</sup> Defence stated further that its buildings were generally designed for a minimum life of 25 years.<sup>23</sup>
- 3.27 In relation to the works proposed for Robertson Barracks, Defence intends to address life cycle issues through:
- extensive use of local industry knowledge;
  - use of resilient and appropriately constructed materials;

---

20 Appendix D, Official Transcript of Evidence, pp. 3-4

21 *ib id*

22 *ib id*, p 3

23 *ib id*, p. 10

- installation of durable plant and equipment with a proven performance track-record in the local area, and
- drawing upon experience gained from previous construction projects in the area.<sup>24</sup>

3.28 In support of these statements, Defence tendered an exhibit comprising two pages of ecological sustainability and life cycle design principles, which forms the special conditions for the request for tender distributed to prospective contractors for the works.<sup>25</sup>

## Utilities

3.29 Committee members wished to know how the proposed works may impact upon the provision of essential services to Robertson Barracks, and whether existing services would be sufficient to support the new facilities.

3.30 Defence responded that it was engaged in discussions with local utilities companies and had notified the relevant bodies of expected demand requirements for the site.

3.31 Defence explained that while some modification and expansion of the existing utilities would be required, this would not exceed the demand anticipated in the original master plan for the site, which made allowance for future development. In addition, Defence does not believe that the proposed development will add significantly to the overall development density of the barracks.<sup>26</sup>

3.32 Costs associated with the modification and extension of service infrastructure are included in Defence's construction cost estimate for the project.<sup>27</sup>

---

24 Appendix D, Official Transcript of Evidence, p. 3

25 ib id, p. 4 and Exhibit 2, *Attachment 6 to the Special Conditions: Commonwealth Draft Policy on Ecologically Sustainable Development*

26 Appendix D, Official Transcript of Evidence, p. 12

27 ib id, p. 13

## Costs

### Currency of Cost Estimate

- 3.33 The Defence main submission records that the project budget estimate of \$75 million was based on July 2002 prices. At the public hearing, Committee members inquired whether this estimate remained valid some 12 months after the original calculation.
- 3.34 Defence replied that a recent review of costs had shown that the budget of \$75 million remained current and that the project contingency allowance was sufficient to cover any further increase to completion.<sup>28</sup>

### Accommodation for Larger Aircraft

- 3.35 Defence's written evidence states that the provision of accommodation for *Black Hawk* will allow for
- “...operational and training rotations with squadron sized elements of units such as the *Black Hawk* equipped 5<sup>th</sup> Aviation Regiment...”.<sup>29</sup>
- 3.36 Facilities to accommodate *Black Hawk* will include:
- six enlarged aircraft shelters,
  - an enlarged maintenance bay, and
  - strengthened aircraft pavements.<sup>30</sup>
- 3.37 During the course of the public hearing, the Committee questioned Defence about any additional costs associated with the provision of accommodation for larger, *Blackhawk* aircraft.
- 3.38 According to Defence quantity surveyor estimates, facilities to accommodate *Black Hawk* will add 1,300 m<sup>2</sup> to the overall project floor area at a cost of some \$1.3 million in excess of providing for *Tiger* alone.<sup>31</sup> This expenditure has been included in the overall project budget.

---

28 Appendix D, Official Transcript of Evidence, p. 4

29 Appendix C, Submission No. 1, paragraph 43

30 ib id, paragraphs 41, 44 and 47

31 Appendix D, Official Transcript of Evidence, p. 10

**Recommendation 1**

**The Committee recommends that the proposed provision of facilities for the collocation and re-equipping of the 1<sup>st</sup> Aviation Regiment at Robertson Barracks, Darwin, NT, proceed at the estimated cost of \$75 million.**

Hon Judi Moylan MP

Chair

20 August 2003