



COMMONWEALTH OF AUSTRALIA

# Official Committee Hansard

JOINT COMMITTEE ON PUBLIC WORKS

**Reference: Redevelopment of the Army Aviation Centre, Oakey, Queensland**

WEDNESDAY, 1 AUGUST 2001

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**JOINT COMMITTEE ON PUBLIC WORKS**

**Wednesday, 1 August 2001**

**Members:** Mrs Moylan (*Chair*), Mrs Crosio (*Vice-Chair*), Senators Calvert, Ferguson and Murphy and Mr Forrest, Mr Hollis, Mr Lindsay and Mr Ripoll

**Senators and members in attendance:** Mrs Crosio and Mrs Moylan and Senators Calvert, Ferguson and Murphy

**Terms of reference for the inquiry:**

Redevelopment of the Army Aviation Centre, Oakey, Queensland

**WITNESSES**

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**Committee met at 1.12 p.m.**

**JONES, Colonel Trevor Ross, Commandant, Army Aviation Training Centre, Department of Defence**

**KELLY, Brigadier Garry Ross, Director-General Capital Infrastructure, Department of Defence**

**SHEPPARD, Mr Robert Sherman, Project Director Capital Infrastructure, Department of Defence**

**WILTSHIRE, Michael, Senior Project Manager, Connell Wagner Pty Ltd; Department of Defence**

**CHAIR**—Good afternoon everyone. I would like to declare open this public hearing into the redevelopment of the Army Aviation Centre, Oakey. This project was referred to the Public Works Committee on 24 May 2001 for consideration and report to the parliament. In accordance with subsection 17(3) of the Public Works Committee Act 1969:

- (3) In considering and reporting on a public work, the Committee shall have regard to –
- (a) the stated purpose of the work and its suitability for that purpose;
  - (b) the necessity for, or the advisability of, carrying out the work;
  - (c) the most effective use that can be made, in the carrying out of the work, of the moneys to be expended on the work;
  - (d) where the work purports to be of a revenue-producing character, the amount of revenue that it may reasonably be expected to produce; and
  - (e) the present and prospective public value of the work.

Earlier this morning the committee received a briefing and inspected existing facilities and the sites of the proposed works and we thank you for that opportunity and for a very thorough briefing and inspection. The committee has received a submission and several supplementary submissions from the Department of Defence. These submissions will be made available in a volume of submissions for the inquiry and they are also available on the committee's web site. Does the department wish to propose any amendments to those submissions?

**Brig. Kelly**—We have made some changes to the way we were going to move the Army helicopter school here and locate it in demountable buildings. That is not significant in terms of the evidence so I do not propose to change the evidence. However, I would be happy to provide an updated copy for the record.

**CHAIR**—The committee would appreciate that update being provided. I now invite one of you to make a presentation or opening statement in support of your briefing to us.

**Brig. Kelly**—The Department of Defence advocates the redevelopment of the Army Aviation Centre, Oakey, in Queensland. The Army Aviation Centre, Oakey, is Australia's primary Army aviation base. The main unit located on the base is the Army Aviation Training Centre. It is responsible for all Army pilot, ground crewmen, load master and aircraft maintenance training. The base has a permanent population of approximately 1,300 personnel consisting of 760 military members, 130 civilian public servants, 300 contract staff and 110 Singaporean armed forces personnel.

The importance of Oakey airfield as the primary Army aviation base will be enhanced with the relocation of the Army component of the ADF helicopter school to Oakey and the introduction of the armed reconnaissance helicopter into service in 2003. This will make Oakey the second busiest Defence airfield in Australia. Many of the existing facilities are 30 years old and have reached a point where they are not economically viable to maintain in their current form. Refurbishment, or in some cases demolition and rebuilding, is required to continue the useful life of the base facilities. Additionally, many existing facilities do not meet current occupational health and safety standards. Increased dependence on simulation, computer based training and sophisticated training aids to assist high risk and high cost training activities make the current facilities inadequate.

The base contains a significant number of temporary buildings. These appeared on the base as the current facilities became inadequate. The redevelopment will replace these with permanent constructions. The project includes a mix of refurbishment and new construction. Existing facilities have been evaluated and a comparison of the cost and functionality of refurbishing and extending has been compared to new construction to ensure that value for money is obtained. This process will continue to be carried out through the design phase of the project.

The scope of works includes the following: the redevelopment of training facilities for the Army Aviation Training Centre; construction of facilities to support the introduction of the armed reconnaissance helicopter; refurbishment and upgrading of helicopter operational maintenance facilities; the rationalisation of all ranks messing and living in accommodation, requiring a mix of refurbishment and new construction; construction of a new emergency response station; construction of a new civil aviation terminal; and upgrading of engineering and support infrastructure as necessary.

The budget for this project is \$76.2 million. This includes construction costs, professional design and management fees, furniture, fittings and equipment, together with allowances for contingencies and escalation. It does not include any allowance for goods and services tax liability. Subject to parliamentary approval, the works are planned to be committed in late 2001, with some interim facilities to be provided by 1 December 2001. Permanent construction works should commence in early 2002. The project completion is planned for mid-2004.

Over the construction period, it is estimated that an average of 100 personnel will be directly employed on construction activities. The redevelopment of facilities will enhance the efficiency and effectiveness of Army rotary wing training by providing modern, appropriate and safe facilities for all aspects of training. Improved living and working conditions at Oakey will raise morale and are expected to assist in the retention of Army aviation personnel.

There are no significant environmental or heritage issues. An internal Defence environmental certificate of compliance for the proposed works has been prepared in accordance with Defence environmental management policy. Consultation with the relevant government and statutory authorities has occurred and will continue through the design phase of the project. That completes my opening statement.

**CHAIR**—I will lead off with a couple of questions, the first of which relates to the new aircraft, which I understand have not yet been selected. Given that the contract will be let in the second half of this year, and that the aircraft will be in service by mid-2003, do you envisage that the proposed facilities will be adaptable for whichever aircraft is selected? Can you outline how the Air 87 aircraft, being larger and more sophisticated than the current aircraft, have influenced the design and works in this reference?

**Brig. Kelly**—Madam Chair, the design that we have done at this stage is very much conceptual only and is based on a generic and worst case situation. By the time the managing contractor is commissioned and we are entering into the design phase the decision will well and truly have been made on which Air 87 aircraft will be provided. So we are anticipating no difficulties in that area.

**CHAIR**—So you are saying the plan is flexible enough?

**Brig. Kelly**—It is, absolutely, but we have no details at this stage.

**CHAIR**—So the design has not been influenced by the larger, more sophisticated aircraft because you have not actually filled in the detail yet?

**Brig. Kelly**—The fact that the aircraft are larger than existing aircraft on the base at the moment has been taken into account in our costings, and in particular the sophisticated and more secure nature of the equipment on the aircraft has been taken into account in costings in terms of more sophisticated clean air rooms and additional security on the base.

**CHAIR**—Are there other influences in the design and scope of the work?

**Brig. Kelly**—There certainly will be when we get into detailed design but at this stage we are simply looking at concepts, and we have covered that generically.

**CHAIR**—Is Defence confident, given that some of the detail is not available yet, that this project will be able to be brought in at cost?

**Brig. Kelly**—The state of the estimate at this stage is probably plus or minus 10 to 15 per cent, but it contains the contingency which we believe is adequate at this stage of the estimate. Many of the facilities that we are building are similar to other facilities that we have built around Australia or are building around Australia at the moment and so we have a fair degree of confidence in the estimate, which has been produced by our commercial consultants based on commercial rates.

**CHAIR**—Despite not having all the detail that you would normally require.

**Brig. Kelly**—That is taken into consideration in the degree of contingency that we have at this stage.

**CHAIR**—Okay, thank you.

**Mrs CROSIO**—I have a couple of questions following the inspection this morning. Brigadier, are you absolutely certain—and I know confidence was extended to us but I would like to have it for the record—that you will be able to relocate here from Fairbairn in Canberra by 2003?

**Brig. Kelly**—The intention is actually to be here by December of this year. December 2003 is the critical time because that is when we start paying commercial rents if we are still located at Fairbairn. Colonel Jones is probably better able to explain exactly where we are up to.

**Col. Jones**—The intention is that we will move the helicopters from Fairbairn to Oakey during the first week in December. We then intend—and action is in hand to do this already—to engage a commercial removal company to remove the bulk of the unit, including all of the maintenance facilities and repair parts that are held there. That will occur in the second and third week of December. Families will then be relocated from Canberra to Oakey, Toowoomba over the Christmas school holiday period and we intend to commence operations of the new Army helicopter school here on 24 January next year.

**Brig. Kelly**—I should say that to achieve that time line, one component of this project—and it is currently within the project—is that we have to complete facilities for the maintenance contractors and get demountable facilities on site for the additional personnel who will be relocating, by the end of October for the maintenance and by the beginning of December for the additional people. Those components of the work need to proceed in parallel with this approval process. It must happen, and if this project is not approved then Defence would have to proceed with that as a medium or a minor work to ensure that that plan—the relocation—can occur.

**Mrs CROSIO**—So it is not depending on this particular reference?

**Brig. Kelly**—It is currently costed within this project. Should the committee decide not to recommend this project and it is not approved then we would have to do it under other arrangements, which would be a very simple matter.

**Mrs CROSIO**—I will come back to a couple of other questions.

**Senator CALVERT**—I note with interest the presence of the Singapore group. I understand that they have a 15-year lease. Have any other international air forces shown interest in using this facility? Or are they likely to be more interested after the refurbishment works have taken place?

**Col. Jones**—I am unaware of any other foreign national forces showing an interest in Oakey. We have a very good relationship with the Republic of Singapore Air Force. They have indicated to us informally that they might like to do their basic helicopter flying training here, for example, at some point in future, but at this stage there have been no formal proposals to that effect, and we have no notice of any increased scope in their activity.



**Senator CALVERT**—I asked this question informally when we were looking at the new simulator. How much is the new simulator worth, including the building and the whole box and dice?

**Col. Jones**—The entire project cost was approximately \$31 million at the point at which the contract was signed in early 1996. I am uncertain of the exact figure, but that is pretty close to being the case.

**Senator CALVERT**—How long have we had Black Hawk helicopters?

**Col. Jones**—The first Black Hawk helicopters entered service in 1988.

**Senator CALVERT**—Is it because of a lack of finance, a lack of planning or whatever that we have had to wait so long for a simulator?

**Col. Jones**—There were several issues. The first was that the simulator was not originally part of the helicopter acquisition. We have to remember that that project was generated in the early 1980s, and at that time the technology to replicate helicopters as simulators did not exist, so a simulator was not part of the original project. It was only as technology developed that we then raised a project. That project was approved in the mid-1990s. As I have said, in early 1996 we signed a contract for the construction of the simulator. The Black Hawk is a very sophisticated aircraft, and there have been challenges in constructing a simulator that replicates it well, but we expect that the simulator will enter service about midway through next year.

**Senator CALVERT**—The task of putting together a simulator for a helicopter would be much greater than putting together a fixed-wing aircraft, I presume.

**Col. Jones**—It is far more difficult to replicate. The essential difference is that a fixed-wing aircraft is stable, so the software that replicates the behaviour model of the fixed-wing aircraft is simple. Helicopters are unstable, and the behaviour model of the software that replicates its behaviour is much more complicated. Also, there were difficulties with replicating the field of view from a helicopter, which is very wide. The mirror in our simulator, for example, has a vertical field of view of 60 degrees and a horizontal azimuth field of view of 220 degrees. That is the biggest mirror in a simulator in the world, to our knowledge, and constructing that sort of thing has been a difficult task for us.

**Senator CALVERT**—I understand that currently some of your trainee pilots travel internationally to do simulator training. When the simulator is proved to be workable and up and running, would you expect international trainee pilots to come to Australia to use it?

**Col. Jones**—That is possible. We intend to make very heavy use of that simulator. The business case says that we have to do that, and it will be a very good simulator, so we will be inclined to want to use it. There will be only a small ability to add operating hours on top of what we intend to use the thing for now. Certainly we will be prepared to listen to approaches on a commercial basis to use the simulator, but at this stage I am not aware that any approaches have been made.

**Senator CALVERT**—What is the difference between the cost of training a pilot in live training as against in a simulator?

**Col. Jones**—There is probably a difference of a factor of 10. A Black Hawk is a good example. A Black Hawk flying hour costs us approximately \$7,000. The contract operating cost of the Black Hawk simulator is about \$455. It sounds a lot, but it is very much lower than the \$7,000 for a real live aircraft hour.

**Senator CALVERT**—Is it presumed that there will be a simulator for the new aircraft as well?

**Col. Jones**—We have very high confidence that a simulator will be acquired at the very beginning of the armed reconnaissance helicopter project so that we can take advantage of the benefits it gains and give them training from day one.

**Brig. Kelly**—This proposal includes funds to build the building for the ARH simulator. However, the tenders for the ARH include the option for the equipment provider to also build the building. If that looks like a smart solution and is cost effective, then we will take that option because it transfers that risk of integration of the building and the equipment to the provider.

**Senator CALVERT**—Just say all things go well and you get this new simulator as well, would you be expecting to get more interest from overseas trainees to come to Oakey to use either/or or both? If that were the case, would you have sufficient accommodation for any trainee pilots coming in from other countries, for instance?

**Col. Jones**—Certainly we will satisfy our own needs first, and then we will be in the same situation as we are with Black Hawk. We will use the simulator very heavily, again because of the cost benefit and also the advantage it gives you in being able to do things in a simulator that you cannot really do in a live aircraft. You cannot practise many emergencies in a live aircraft, for example; you cannot replicate them. So we will use the simulator at least for 50 per cent of the flying training that we conduct on the new aircraft. That is our target. If there were other friendly countries that had the same helicopter that wanted to make use of it, again we would listen on a commercial basis to approaches. I do not know what helicopter we will eventually sign up with at this stage, so I am not aware of any approaches that might have been made.

**Senator MURPHY**—In the brief you gave us this morning you said there were 1,350 people full time. Is that current?

**Col. Jones**—It is a fluctuating figure. The variation comes with the contractors. We do not dictate how many commercial aircraft maintenance workers the contractor might have, for example, and he will vary that as the need arises. But it is certainly in that range, from 1,300 to 1,350.

**Senator MURPHY**—What is the uniform number?

**Col. Jones**—It is of the order of 900, and again that varies depending on what operational commitments we have. One of the flying squadrons here, for example, has been committed to

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Bougainville for the last three years. Effectively half the strength of that squadron has been permanently in Bougainville for three years.

**Senator MURPHY**—What would you say your current uniform number is?

**Col. Jones**—It is of the order of 900 people.

**Senator MURPHY**—Is that likely to increase?

**Col. Jones**—In the short term it will certainly increase with the arrival of the Defence Force helicopter school. The helicopter school has 47 military staff and about 50 commercial contract maintenance personnel with it. So it will increase by about 100 at Christmas time this year.

**Senator MURPHY**—Again, with regard to the briefing that you provided us this morning, I noticed in the key facts in terms of operation of Army aviation that there are something like 1,393 people at an annual operational cost of \$433 million.

**Brig. Kelly**—That is aviation around the country.

**Senator MURPHY**—But, if we have got 1,390, the great bulk of them would be here.

**Col. Jones**—There are some people who are counted as being here who are not part of Army aviation. For example, the Republic of Singapore Air Force are counted in the Oakey figures—

**Senator MURPHY**—The 900?

**Col. Jones**—They are included in the figure of 900 at Oakey.

**Senator MURPHY**—They are of no cost to us though, are they?

**Col. Jones**—No, they pay their way here. We give them a bill for their pro rata costs of the operation of Oakey.

**Senator MURPHY**—I would like to disaggregate that for my own understanding. Are we talking about the key statistics or the key factors of 1,393 national uniformed Army air force?

**Col. Jones**—This is the total Army aviation figure?

**Senator MURPHY**—Army aviation per head.

**Col. Jones**—That is the Australian national uniformed personnel, predominantly in Oakey, Fairbairn, Townsville and Darwin, and also overseas deployments from Townsville, Darwin and here.

**Senator MURPHY**—With regard to the proposal, you would be aware of the letter sent to the committee from the Australian Greenhouse Office. What discussions have you had with them on the issues that they raised?

**Brig. Kelly**—We had face-to-face discussions about two weeks ago. One of the members of my staff met with the Greenhouse Office and addressed the issues that were raised in their submission. We have agreed that we will work with them to develop a framework to assess our approach to energy usage, and we have agreed that we will commission an energy specialist from among our consultants to assist us in designing and delivering a project.

**Senator MURPHY**—I have a couple of questions on the costings. In the costings, you have an escalation provision of 2½ per cent; yesterday, when we were in Townsville, it was 5½.

**Brig. Kelly**—No, it was 2½. The total was about six per cent over the life of the period, but that was based on an escalation per year of 2.4 or 2.5, which is based on the building price index.

**Senator FERGUSON**—This is 2.5 per cent per year?

**Brig. Kelly**—Yes.

**Senator MURPHY**—So you have a total program in terms of the Townsville project?

**Brig. Kelly**—Yes. I acknowledge that we described it to you in two different ways, but I did at the time indicate that the percentage that was shown as a percentage of the total was based on a building price index of 2.4 or 2.5 per year.

**Senator MURPHY**—I am pleased about that.

**Brig. Kelly**—It is consistent subject to regional variation, of course.

**Senator MURPHY**—And the management costs?

**Brig. Kelly**—With regard to the management costs, for this type of contract we call a project consultant. We have absolute confidence in that estimate because it is actually the tendered price for the consultant that we have commissioned. Our project consultant has been commissioned to take us through until today and through the next little phase and, subject to approval, they will be commissioned for the remainder of the project at the price represented there at 0.9 of one per cent.

**Senator MURPHY**—Does your price structuring for emergency power upgrade, demolition and infrastructure works include services?

**Mr Wiltshire**—It is under general works.

**Senator MURPHY**—Who did the cost estimates? Are they by two different people?

**Brig. Kelly**—No, Connell Wagner.

**Senator MURPHY**—In terms of item 10, as you know yesterday we were discussing what gets factored in where. We had engineering services, demolition and deferred works. Take out

deferred works; we have here, under the heading of 'General works', emergency power upgrade, demolition and infrastructure work. Are they different from engineering services or are they the same?

**Brig. Kelly**—I think the way it is shown here is the same way we showed it yesterday. You are also referring to the document in which I showed a cumulative cost, with those costs amortised over the project packages. We have not done that for this project because it was not an issue.

**Senator MURPHY**—But emergency power upgrade is a fixed cost, isn't it?

**Mr Wiltshire**—Emergency power upgrade is a specific package of work. That is a fixed cost.

**Senator MURPHY**—So why is it in with 'General works'?

**Mr Wiltshire**—It is not identified as an individual element; it is picked up here as an individual item. It is grouped within the miscellaneous type of works.

**Mr Sheppard**—It is grouped that way because it is only a small element; all the small elements have just been grouped together as 'General works'.

**Senator MURPHY**—Why wasn't the Museum of Australian Army Flying grouped in there as well, or the concessions area or Airservices Australia?

**Brig. Kelly**—'General works' is related to engineering services and infrastructure, as opposed to building or civil engineering components.

**Senator MURPHY**—I assume infrastructure works is engineering services, is it?

**Mr Wiltshire**—Yes, across the base—not related to any specific facility.

**Senator MURPHY**—Those costs will be attributed to some parts of the project more than others, won't they? There will be greater engineering costs with some developments, like the training centre, for instance. The Aviation Support Group Workshop is likely to have more engineering services work than the additional gym facility.

**Mr Wiltshire**—If you are looking at, for example, power loads, it is difficult to attribute it to any particular facility when you have to go into upgrade of the existing service. The existing service can provide a limited amount of power. Which facility takes over that capacity and therefore requires an infrastructure upgrade is difficult to identify without a detailed design.

**Senator MURPHY**—But when you get the detailed design it will be—

**Mr Wiltshire**—It would then be apparent which area of the base is affected—

**Senator MURPHY**—And what the specific costs will be?

**Mr Wiltshire**—Yes.

**Senator MURPHY**—So we will finally deal with specific costs, won't we?

**Brig. Kelly**—The only reason we showed it to you in that meeting yesterday was to demonstrate, because we were capped at a level less than the anticipated cost or the estimated cost, where we would get to if we did not make savings. We distributed those costs across the other packages. We have not done that on this project because it is not an issue at this point.

**Senator MURPHY**—I do not want to seem difficult but what worries me about it is this: if you had come to us with, say, the Aviation Support Group Workshop as a single project, you would have costed your service costs for that particular project.

**Brig. Kelly**—Yes, that is correct. But it is common for estimators to group this sort of thing as a single trade package across the project. There is no doubt that we could distribute it. For example, a demolition could be distributed across all of those packages. We would not normally do it that way, we would normally do it this way. I gave you supplementary information yesterday only to try to explain that difficult issue.

**Senator MURPHY**—It worries me in terms of us having to approve the project. You have here a cost estimate where you proceed with the project but you may not complete all of the elements of the total project. We have no idea how much of the \$5.165 million is allocated to what has been completed and how much might be allocated to that which is not completed. That does cause me some concern.

**Brig. Kelly**—I understand that we could give you—quite readily, I assume—a break-up of those general works across those packages, if that would be useful.

**Senator MURPHY**—Thank you.

**CHAIR**—Would you like that information, Senator Murphy?

**Senator MURPHY**—Yes, I would.

**Senator FERGUSON**—Brigadier Kelly, I notice in the last part of paragraph 31 of your submission—which I discussed with Senator Murphy this morning, or he with me—that you are making a justification for spending money at Oakey and not elsewhere. You say:

To rebuild elsewhere would incur the proposed \$76.2m cost ... Associated personnel relocation costs would be significant, as would the impact upon the local economy.

If we had applied the same criteria to Queenscliff, would we still be there?

**Brig. Kelly**—It is one of the factors in a business case, I suppose. I suspect that the impact on the Queenscliff community compared with this is much less significant. What we look at as much as anything is the impact on employment and the impact on contractual support and all the domestic support that goes with it. There were about 100 people at Queenscliff; there are 13

times that many here, so it would be more significant. It is the same factor; it is a matter of degrees, I would say.

**Senator FERGUSON**—I will accept your argument.

**Brig. Kelly**—I point out that we did backfill Queenscliff after some further discussion.

**Senator FERGUSON**—I want to raise the issue of energy conservation measures. You talk about using solar energy and hot water systems where considered cost effective and using geothermal airconditioning systems if feasible and cost effective. Have you used these systems in other recent Defence Force projects?

**Brig. Kelly**—We have used geothermal heating at the headquarters building at Duntroon, which you are probably familiar with. That has geothermal heating—and it was appropriate there. The figures worked out that that was a cost-effective way of doing business. On the next project that same project officer worked on—he was very keen on employing it—the figures did not work out so we did not employ it. In terms of solar heating we would, as part of our initial design assessments, require our architects and consultants to do a through-life analysis of the operating costs, which would include different ways of heating, cooling, heating water and so on. Sometimes that indicates that solar hot water is cost effective and sometimes that it is not.

What is difficult in terms of some of these decisions is to know what we are actually measuring. Are we measuring dollars—that is, cost to us? Are we measuring the amount of energy that is used? Or are we measuring the amount of greenhouse gas caused as a result of the entire process? We did one project for which I assumed we would go solar. We did not go solar because the through-life analysis indicated that the manufacturing process for solar panels was so intensive in electricity that that was not a global decision.

**Senator FERGUSON**—What you are saying in your submission is that you will do it if it is cost effective. You are not talking about greenhouse and all the other issues that are raised; you are just talking about it being cost effective.

**Brig. Kelly**—Cost effective generally implies, I suppose, operating costs, and we are expected to minimise the through-life costs of a facility. However, Defence has now signed the Greenhouse Challenge. We are engaging with the Greenhouse Office and there is no doubt that, because Defence is required to report annually on our energy usage and hence greenhouse gases, we have to take a greater account of minimising greenhouse gases—even if it costs us. That is nevertheless not a straightforward issue because we are often cash challenged, as I put it. We have budgets and we have to determine which is the best overall approach or the way ahead. I cannot guarantee that we will always take the best greenhouse solution if we cannot afford it but, increasingly, it is a significant factor in our decision making process.

**Senator FERGUSON**—I guess that was the point I was coming to. What you really mean in the submission is that it may not be cost effective but you may still go ahead with the sale.

**Brig. Kelly**—We are coming under that pressure, both internal and external, to make it the primary decision factor.

**Senator FERGUSON**—Who makes that final decision?

**Brig. Kelly**—Essentially it would be left to the project team and to people like me who would have to release Defence contingency measures if we were going to pay more for a more greenhouse friendly, perhaps less cost-effective—from our point of view—solution. But I trust that, increasingly, these considerations will be taken into account up front and will be supplemented up front rather than trying to find funds later.

**Senator FERGUSON**—Do the confidential costings that have been given to us, and the costings that are in your submission, include solar energy and solar hot water systems, and geothermal airconditioning systems? Or has it not been determined yet whether they are going to be cost effective?

**Mr Wiltshire**—The costs at the moment are just based on straight commercial systems.

**Senator FERGUSON**—Without solar?

**Mr Wiltshire**—Without solar.

**Senator FERGUSON**—Do you know what additional costs there would be if you went to geothermal systems and solar energy and hot water systems?

**Mr Wiltshire**—No, we have not calculated that.

**Senator FERGUSON**—How are we going to determine whether or not this is going to be cost effective if you have not gone into it?

**Brig. Kelly**—It is part of the value management. It is common for us to approach the broad estimates for a project in a commercial manner, but we would have to do more value analysis during the design process. We would be looking for solutions that do not actually increase our capital cost but nevertheless minimise our operating costs.

**Senator FERGUSON**—Are you putting this in and telling us that you are going to use solar energy for hot water systems, and other energy and geothermal airconditioning if they are cost effective? If we have a cost analysis which does not include any costs whatsoever of what it would cost to put those things in, how will you know whether it is cost effective and how will we know whether we are going to get the energy systems which are more greenhouse friendly? Or is it put there just because it sounds very good in your submission, that you are going to look at things that are cost effective? Obviously, nobody has looked.

**Brig. Kelly**—Essentially, I think that is true. We have brought the project to a point where it is conceptual only, where we have broad costs and a broad idea of the way ahead. There is a lot of work to be done yet. I am assured by people who are advising us that we need to get better in this area and that smarter ways, with reduced levels of greenhouse gas emissions, do not necessarily cost more.



**Senator FERGUSON**—It may be possible that your up-front costs might be slightly more, but your ongoing costs might be less.

**Brig. Kelly**—That is the intention. We are looking for a balance—a business case decision—on when it is worth investing extra money. If the payback period is 50 years, then it is not worth investing extra money. If the payback period is three years, then it is worth investing extra money.

**Senator FERGUSON**—Is it possible for you to provide us with a ballpark figure—not a dead accurate figure—of what it would cost, on top of these cost estimates that you have given us, to use solar energy in hot water systems and geothermal airconditioning systems?

**Brig. Kelly**—I anticipate that we could do that based on past experience.

**Senator FERGUSON**—Why do you need significantly higher security and protection for the new armed reconnaissance helicopter than for the current Kiowa helicopters? I would have thought that you needed significant measures for protection and security for all of your equipment.

**Col. Jones**—I will answer that question, if I may. The Kiowa helicopter is a very rudimentary helicopter. We acquired it in 1970, and in 1971-72 that fleet was introduced into service. We have since upgraded certain systems on it, but essentially it is a simple, commercial jet ranger helicopter, which is painted green. The additions to it are that we have made it compatible with having night vision goggles on the inside of the aircraft and it has military radios fitted to it. The armed reconnaissance helicopter is a very different beast. Depending on the aircraft, it comes with a 20- or 30-millimetre cannon, rockets, missile systems, software and self-protection systems that can detect radar and laser threats, for example. The armament and the avionics that provide that sort of sophistication have to be protected as national defence assets, and that drives the upgrade in security. We had to incrementally upgrade the security that is provided at Oakey with the acquisition of Black Hawk, because it comes with some self-protection systems as well. But, again, the armed reconnaissance helicopter is a next generation leap beyond that.

**Senator FERGUSON**—What are the new security measures that you are going to put in place?

**Mr Sheppard**—Basically, it will be a fence within a fence. They will be isolated from the other ones when they are stored.

**Senator FERGUSON**—‘They’ meaning the new helicopters will be isolated from other equipment when they are stored?

**Mr Sheppard**—They will be isolated from the other helicopters.

**Senator FERGUSON**—Do we have any plans or costings of how you are going to put that security in place?

**Mr Sheppard**—We have not gone into detailed design, so we do not have any firm proposals.

**Senator FERGUSON**—But there is going to be a cost, isn't there?

**Mr Sheppard**—We have those costs. They are all there in the infrastructure costs.

**Senator FERGUSON**—Is it a bit of a rough guess as to what it might cost?

**Mr Sheppard**—Fencing is fairly well known.

**Senator FERGUSON**—Fencing is fairly well known but we do not know what you are going to put in. There is no description of any security measures. All we are being asked to approve is costs for new security measures without knowing what they are going to be.

**Mr Wiltshire**—The provision that we have in the cost plan at the moment for additional security works under the general works is \$228,000.

**Senator FERGUSON**—That is for the new security measures?

**Mr Wiltshire**—Yes.

**Senator FERGUSON**—And that consists basically of fencing—

**Mr Wiltshire**—Yes.

**Senator FERGUSON**—and electronic surveillance?

**Mr Wiltshire**—Fencing and access gates of a similar nature to the category A fences surrounding the working area of the base now.

**Senator FERGUSON**—No electronic surveillance?

**Mr Wiltshire**—No. The base, as we understand it, has a 24-hour active patrol.

**Senator FERGUSON**—Do you know where you are going to put these new helicopters?

**Col. Jones**—I specifically mentioned the armaments. The armaments are a thing we must guard at all times and so what has been scoped and costed with regard to where we train the technicians to maintain the armaments is in fact a secure building—a building that basically can be properly secured to prevent unauthorised access to it. The aircraft themselves minus the armaments will be accommodated in hanger C1, which is the main hangar for the aviation support group workshop.

**Senator FERGUSON**—I just asked whether there is going to be any electronic surveillance. I am reminded of your submission, which says it:

... requires high levels of base physical security including full wire enclosures/compounds, security guards including dog patrols, and remote sensor systems.

Isn't that electronic surveillance?

**Mr Wiltshire**—There is another component, as Colonel Jones just mentioned. The actual armaments of the aircraft are stored in a secure armoury facility, which has remote sensing built in.

**Senator FERGUSON**—The armaments are actually stored separately from the helicopters, so they will be taken from there to this area, where there is a remote sensor system?

**Col. Jones**—That is correct. Our particular job with armaments is to train pilots to fire them and to train technicians to maintain them. The live armaments will normally be in a maintenance training facility, which will be a secure facility. Occasionally, of the order of four times per year, we will deploy from here to Shoalwater Bay to conduct live firing and at that stage those weapons will be fitted to the aircraft for that purpose. In the normal course of events, we provide security here by dog patrols. Out of hours, we have full-time guard dog patrols, with military police, that guard the main hangar and the area inside the restricted access area fence.

**Senator FERGUSON**—So, in layman's terms, would it be fair to assume you are not so concerned about the aircraft themselves but you are very concerned about the bits and pieces that go with them?

**Col. Jones**—Yes, that is correct.

**Brig. Kelly**—I am advised that the final threat assessment of the security risk will be based on which aircraft we get. If, as a result of that threat assessment, security over and above what has been estimated for is required, then the Air 87 project will provide additional funds.

**Senator FERGUSON**—Thank you.

**CHAIR**—I want to follow on from Senator Ferguson's question about environmental impact, both from the point of view of Environment Australia and from the point of view of the Australian Greenhouse Office. How do you propose to monitor and ensure, once decisions are made about environmental measures, that your project manager takes these issues into account? If they do not, is there some penalty that is going to be applied?

**Brig. Kelly**—The base has an operating environmental management plan and we will develop an environmental management plan for construction. In fact, the managing contractor, once commissioned, will be required to develop such a plan and provide it to our project consultant for approval on our behalf. The managing contract has to certify that and is audited in execution of that plan by our project consultant, so the project consultant can require work to be stopped, et cetera, if the managing contractor or its subcontractors are not complying.

**CHAIR**—The other issue is that today when we were inspecting—and I do not recall all the buildings—we saw one of the operations buildings, I think, whose foundation is actually separating. You have repaired that with a metal plate. I think it was locally known as the 'San Andreas fault'. That raises some questions about the impact on design and cost of the geology of the Oakey region. I understand that it has been factored into the estimates. Has a full geotechnical survey been undertaken? What are the latent conditions which may impact on any

proposal? Can we avoid in future having serious damage done to new buildings such as we have seen to older buildings on this site?

**Mr Wiltshire**—We have not undertaken a detailed geotechnical investigation at this stage. With Connell Wagner we have a number of people in the structures and the geotechnical section that are familiar with the area and the designs that are required for this nature of soil. We have factored in the worst-case footing designs for the buildings that we intend to construct new. We have subsequently put the costs in as a worst-case foundation design.

**CHAIR**—Do you intend doing a full geotechnical survey?

**Brig. Kelly**—I would add that most of the buildings—and there are a number of buildings that have problems with foundations, walls cracking and so on—tend to be not the really old buildings but those that were built in more recent years. I put that problem down to the method of contracting that we used, which is a design and construct approach that tends to open up the risk of low bidding. The process we use here of managing contractor, whereby we engage the managing contractor to oversee the design but we have close oversight of the process and there is complete visibility of the process, means that we are much better able to certify designs and so on as we go.

**CHAIR**—This is why I asked the question. It is very clear, if these buildings have a lot of money going into the base, that if we continue to encounter these kinds of problems with buildings in the future there will be a very big cost to the Australian government and certainly to the public of Australia if these local conditions are not taken into account. So the committee needs assurance that this will be done and that we will not be seeing these kinds of design faults in the future.

**Brig. Kelly**—It is a significant factor. It is nevertheless a well recognised problem in this area, and we will undertake full geotechnical examinations or require the managing contractor to do that and to engage the correct consultants to do that.

**CHAIR**—Thank you.

**Mrs CROSIO**—In the submission you provided to us—under ‘Reasons for adopting a proposed course of action’—in paragraph 36 you state that ‘functions will be co-located in a smaller number of larger, more efficient facilities’. However, going on to paragraph 37 you indicate:

Facilities operating costs could increase due to the increase in building area and the higher level of servicing (eg. air conditioning and information technology), ...

Could you actually explain the contradiction in those two paragraphs?

**Brig. Kelly**—As you saw during the tour, we have like or related functions carried out in all sorts of separate buildings, some of them remote from each other in demountable buildings and so on. That is quite an inefficient way of doing business, so we need to pull them together. That might impose a higher construction cost than perhaps refurbishing where they are. We find that, despite the best we can do, modern buildings often do have higher operating costs than those we

are replacing, because we tend to build them to community standard, which means airconditioning and so on which is not necessarily provided in the older buildings.

**Mrs CROSIO**—While you are touching on airconditioning, and looking at one of the areas where you told us about the water cooling systems, are we absolutely sure there is no problem with legionella in the airconditioning units around here?

**Brig. Kelly**—Legionella is only a problem with water cooling towers, and I do not believe there is any intent for such things.

**Mrs CROSIO**—So there are none in the present buildings? I thought there were some around here. I thought that in some of our inspections today we saw some.

**Brig. Kelly**—I was talking about new facilities. I am not sure if there are any existing ones. No, I have just been told there are none here.

**Mrs CROSIO**—On page 14, paragraph 45, under the heading ‘Heritage considerations’, you say:

A Cultural and Heritage Assessment was carried out for the base in April 1998. Based on this study, there are no heritage issues associated with any element of the project.

But the Australian Heritage Commission believes that there is inadequate information to determine the potential cultural heritage significance of the current proposed works. Would you like to comment on that?

**Brig. Kelly**—I think they are saying that there is inadequate information in this document for them to make a judgment. I presume they want to see primary sources, which we can do.

**Mr Sheppard**—We have already given it to them.

**Brig. Kelly**—We have given it to them. In their submission to us they only identified the requirement for us to be on the lookout for indigenous relics and have the potential for a threatened species of grass examined. We have undertaken an initial consultancy to look at that, but we need to review it in a different season.

**Mrs CROSIO**—So that is ongoing?

**Brig. Kelly**—It is.

**Mrs CROSIO**—Further on, on page 14, paragraphs 46 and 47, you mention that discussions have been held or are planned to be held with the listed organisations. Exactly what is the extent and the timing of the consultations undertaken with those organisations? Is it just, ‘Here is the project. This is what we intend to do. Thank you very much’?

**Brig. Kelly**—We have had detailed discussions and value analysis with Airservices Australia and the Bureau of Meteorology to assist in scoping the work. We have visited the Toowoomba City Council and spoken to the mayor and staff. My project team has only spoken to the CEO of

the Jondaryan Shire Council by telephone, but there have been ongoing discussions for many years with the local shire from people like our local estate staff, Colonel Jones and his predecessors. The local shire has been aware of the general intent of the proposal for many years—in fact, since about 1995 when it was originally proposed. We have visited the CEO of the Rosalie Shire Council for discussions. There has been a face-to-face visit with Environment Australia. And there has been a meeting with the Greenhouse Office in addition to those mentioned there.

**Mrs CROSIO**—In paragraphs 4.12 and 4.14 you talk about hot refuelling facilities being safer with existing facilities. I do not see anywhere in your submission mention of discussions with the Queensland fire brigade. Did you feel it was not necessary?

**Brig. Kelly**—We will hold discussions with the fire brigade if we have not already done that, in terms of their involvement. This is a little unlike most bases, in that we have more fire engines on this base than probably those within 20 kilometres of this put together.

**Mrs CROSIO**—Judging by this morning, they are very efficient.

**Brig. Kelly**—Because of the nature of the base—and they have a domestic role as well—reliance on the local fire brigade is not such an issue.

**Mrs CROSIO**—I do not mean for reliance; I mean more for information. There is no exchange of expertise necessary?

**Col. Jones**—There is an international standard on firefighting that is to be provided for different kinds of airfields and even helipads. It is a US insurance company's standard. The one that we intend to apply in this case is one that applies to helipads on the top of high-rise buildings. That is the one that is most closely applicable. There is a particular area of expertise in the Defence Estate organisation which deals with this issue. That person is resident at RAAF base Amberley, and he has provided advice to us in the preparation of the original submissions that Army made on this project. I understand that his advice has been again recently referred to by the project management staff.

**Mrs CROSIO**—Thank you. I was just looking at that regarding consultation. On page 16, paragraph 59, your report says:

The design, structure, servicing and siting of buildings is to ensure that future expansion is possible ... New mechanical plant should have spare capacity, be modular and have a multiple control approach, to ensure flexibility.

When does Defence actually envisage that the expansion of buildings will be necessary?

**Brig. Kelly**—Even if we do not envisage it, we take it into account in master planning. It is common for us to assume that anything we build might have a requirement for about a 25 per cent expansion, if that is possible. Where we have an absolute greenfield site—and the new brigade base at Darwin would be a good example—every building is capable of 25 per cent expansion, and within elements like unit lines they are capable of 25 per cent expansion. For example, if we built four hangars, we would assume that they could all be extended by 25 per cent and we could add a fifth at some other point. That is purely a master planning issue. It is

based not necessarily on a known requirement but on prudent recognition of what we might do in the future. In terms of designing for services and so on, I do not claim to be an expert—and perhaps someone else can add to this—but we design a building so that if an additional airconditioning plant has to be installed to accommodate an extension then that can be done and the ducting is suitable to accommodate an additional extension.

**Mrs CROSIO**—Can I go back to the hot refuel facility as well? Again, I refer you to your paragraphs 4.12 and 4.14. Will that proposed facility be safer than the existing facility? I would like to have that on the record. Have there been any instances of injuries at all with the existing facility? Perhaps for the record it would be good to explain hot refuelling.

**Col. Jones**—Hot refuelling means that we refuel the aircraft without them shutting down. Their engines are running. With a helicopter, of course, the rotors may be turning or they may be stopped, depending on whether they can be disengaged. Normally in the civil community you would shut aircraft down to refuel them, and that is called cold refuelling. We are required to use this technique for operational reasons. You do not want to leave an aircraft for lengthy periods of time at a known refuelling facility because it becomes vulnerable, so we must train our pilots and the people who refuel aircraft to use this technique. We have for many years been training our people in how to do this. We have done it with fuel tanker trucks and with a fire truck in close proximity.

Some years ago, we built a small facility at one of our satellite stage fields called Brymaroo. It has a very limited firefighting capacity, which limits the extent to which we can use it. In fact, we still have to locate a fire truck with it if we intend to use it now. The limitation is the availability of water in that location for fire suppression. The advantage of putting in a substantial facility at Oakey—and we intend to put in two pads so that we can refuel ultimately with one aircraft arriving while another one is being refuelled adjacent to it—is that there is proper access to water, which enables us to put in a firefighting facility that will work. The one at Brymaroo, for example, is intended only to suppress a fire long enough for the crew to escape, and it does not provide sufficient firefighting to stop the aircraft burning. We require, and intend to end up with, a firefighting facility that will protect the multimillion dollar helicopters that we have operating on the base. It will provide a much safer environment than we have had available to us in the past.

**Mrs CROSIO**—Have you had previous mishaps?

**Col. Jones**—Not in Australia, but I have seen a hot refuelling incident in the United States at night. Fuel burst from the refuelling pipe and flashed across the engine. The guy refuelling the aircraft was covered in fuel, burst into flames and ran flaming across the tarmac. He was tackled by the instructor in the aircraft that he was refuelling and was rolled and put out. He suffered very severe injuries in the process. That is why I have a passionate view about the level of firefighting required for this sort of facility.

**Mrs CROSIO**—It is probably a mundane question, but going around in the bus today and looking at the number of personnel you have on base I noticed that there is no child-care facility here.

**Col. Jones**—There is one remaining old married quarter on the edge of the base. We drove down the road that separates the local doctor's land from our land. On that road, on our side of the land, there is an old married quarter that is used as a community house and there are regular meetings for the families and spouses who live in Oakey, but there are no dedicated childminding facilities at Oakey at present.

**Mrs CROSIO**—Is it just that there is not the need, or is it not being organised?

**Col. Jones**—I expect that question could be directed to Jondaryan Shire Council. Generally, there are facilities available in the local community, but Defence does not provide dedicated childminding facilities here at Oakey.

**Senator CALVERT**—I was going to ask some very detailed questions about hot fuel facilities, but the deputy chair has already done that. However, this being a World War II air base raises the question of whether you have an overall plan for identifying contaminated sites? If you have, have they been rehabilitated or are they going to be rehabilitated? I noticed, when we were doing a windscreen tour this morning, that you have an old car refuelling facility which you are going to turn into a car park. That just brings to mind whether you have allowed in the budget for rehabilitation of those sites or for anti-contamination procedures.

**Mr Wiltshire**—We would see testing for contamination on a site as part of the managing contractor's environmental management plan, as well as putting in place a rehabilitation process, if results are positive. The vehicle refuelling site you saw this morning is outside the scope of works. We do not intend any works in that area.

**Senator CALVERT**—I got the impression it was going to become a car park.

**Mr Wiltshire**—That was a workshop. Again, being a demolition site, once the demolition is complete they can test for contamination, but the actual refuelling site does not form part of the works.

**Col. Jones**—There are three specific areas that run through from one east-west road to the next. Working from north to south, there is a petrol station, which is currently operating and will continue to operate in the future; there is then a large former transport compound, which is essentially two sets of large carports in an area of approximately half a hectare in size; and on the very southern end, which is where I talked about the garage, there is a motor transport garage, which is an area where broken vehicles are repaired. That motor transport garage area is no longer used at all, and there are plans which are separate to this project and which will be in progress shortly to move part of that motor transport garage—the lifts, for example—to Cabarlah. The area that will become the car park is the large carport area—the old transport compound where the vehicles were parked. I understand it is within the scope of this project to rehabilitate that area to become a large parking lot.

**Brig. Kelly**—I will check whether there is a plan of the type the senator is talking about to identify and remediate any areas of contamination, and I will let you know. I would say that, in general, we assume that on an old air base or an old ammunition storage or any old World War II facility, there might be some things that have been disposed of in a manner that might be different from our practice today. If there is no record of those, we do not go looking for them,



but routinely when we are doing works like this we remediate as we go. There would be a couple of other areas on the base where I would assume that there was contamination. On the fire training area, for example, where they would have used fuel to create fires, we would assume that there is hydrocarbon contamination. As part of any redevelopment, if we were working in an area like that, we would decontaminate.

**Senator MURPHY**—The Jondaryan Shire Council letter to the committee raised three points: the location and standard of vehicular access to the proposed terminal, discussions with local government regarding requirements for additional sewerage treatment and water supply, and discussions with regard to the Corfe Road and Oakey-Kelvinhaugh roads and also to the new civil terminal. In the last sentence of point 3 in your letter to the committee you have responded:

A lease agreement for the new terminal is yet to be negotiated.

Is there a current lease for the current terminal?

**Brig. Kelly**—I do not believe there is. I may be wrong, but I believe that the department of transport and the department of civil aviation passed the terminal to Defence in about 1993, and we undertook to maintain it since then. I do not believe there is a formal arrangement, but I can check that.

**Senator MURPHY**—I just was interested about who this new terminal lease agreement was going to be negotiated with.

**Brig. Kelly**—It would be with the Jondaryan Shire Council. I was involved in the discussions in 1995, when we agreed to construct a new terminal, like for like. So we will talk closely with the council and get the council involved in the design. The location is—

**Senator MURPHY**—But they do not have a lease on the existing one?

**Brig. Kelly**—No, I do not believe so.

**Senator MURPHY**—With regard to the sewerage and water supply, you say:

Based on preliminary investigations, the services to the Base, including sewerage and water supply, appear to be adequate for the redeveloped facilities ... Once designs are developed, the Council will be consulted on any impact on services to the Base.

**Brig. Kelly**—That is as a matter of courtesy. We would have been to the council before now if this was a significant change to the use of the base. There are a few ups and downs in terms of personnel movement which will in the long term result in no great change, so we do not see a change in our requirements for water and sewerage services. Nevertheless, as we get into the detailed design we will be talking to the council to see if there are any issues. We do not anticipate that there are.

**Senator MURPHY**—I assume that there would have been some assessment on those services initially as to the capacity.

**Brig. Kelly**—The water supply, which was provided to Oakey and the base partly through a contribution from this base, would have taken future requirements into account to some extent.

**Senator MURPHY**—Finally, I understand that the new living-in accommodation is a replacement of existing living-in accommodation that falls within the noise by about 50 metres.

**Brig. Kelly**—That is correct. The decision to build new accommodation was based on a desire to get the accommodation up to current standards. If we do not address the issue, then in 20 years time we will be at a hearing similar to this one saying—as we did yesterday—‘Why didn’t we fix this 20 years ago?’

**Senator MURPHY**—I am not questioning that. I am not questioning the replacement of it.

**Brig. Kelly**—The new construction is based on a desire to collocate in a single mess and achieve economies. If we refurbish the existing three, then we will for 30 years have the inefficiencies of three. A cost assessment indicated that to refurbish the existing LIA was in fact more expensive than to build new.

**Senator MURPHY**—Is it the intention just to move it 50 metres further back from where it is?

**Mr Sheppard**—No, the intention is to make a living-in accommodation zone down in the precinct where we had the briefing this morning, down by the officers’ mess. It takes it right away from all of the airfield aprons.

**Senator MURPHY**—So there will be no noise problem in the future.

**Brig. Kelly**—To take it out of the noise zone is a legislative requirement.

**Senator MURPHY**—I understand that.

**Brig. Kelly**—It is up to us to design the facility so that it has acoustic treatment that solves the problem. I have just been provided with additional information that indicates that we are working on an average of \$69,000 per room for new construction. To refurbish old construction—to fix the OH&S and the noise issues and to provide ensuite, for example—varies from \$76,000 to \$100,000 and even up to \$140,000 per room, which is much more expensive than building new.

**Mrs CROSIO**—Per room?

**Brig. Kelly**—Yes.

**Mrs CROSIO**—It is not a Taj Mahal.

**Brig. Kelly**—That is the cost of building ensuite bathrooms external to the building—onto the side of a building, for example. It is just not cost effective to do it. Given that it is smart to build new rather than to refurbish, given that it is smart to collocate so that we only have one

mess forever, rather than three, and given that we are taking some of them out of the noise zone, the plan to put them all together with them being primarily new and some refurbished is a smart one.

**Senator MURPHY**—Is that taking account of increased numbers? Are you replacing existing accommodation in terms of capacity?

**Brig. Kelly**—I cannot answer that.

**Senator MURPHY**—Is there the same capacity or additional capacity? You are going to get a net increase of about 100.

**Mr Sheppard**—The requirement is based on the student population. So, whether or not you have more people come in, more workers, it is based on basically student numbers.

**Brig. Kelly**—I am advised that the number of rooms will be fewer than are currently here, but I will advise you formally of the exact numbers.

**CHAIR**—Thank you.

**Senator FERGUSON**—I have a question following on from some questions that Senator Calvert asked in relation to the Singaporean contingent that is here. Is your planning of requirements for facilities for this base for the future and is the current work that is being done on the upgrade based on the Singaporeans being here for the long term? If the Singaporeans decided to leave after the end of their 15-year lease would you have a surplus to requirements?

**Col. Jones**—This requires us to see inside the minds of the Singaporeans.

**Senator FERGUSON**—True, but you must base your future requirements on the fact that either, yes, they will be here or, no, they will not be here.

**Col. Jones**—The master plan presumes that if we have a requirement to further expand we will do that to the east of where we currently are. We presume that if there is a requirement for the Singaporeans to expand they will do it to the west. They are the westernmost facility on the airfield at the moment, and there is space available for them to do that there.

**Senator FERGUSON**—If the Singaporeans expand, do they have to provide the cost for the expansion or do we?

**Col. Jones**—They do. They paid in toto for the facilities that they currently occupy.

**Brig. Kelly**—They actually contributed 100 per cent of the costs and also our overheads, because we delivered it on their behalf, but involving their key staff and users in our normal project control group meetings.

**Senator FERGUSON**—So the only normal operational facilities they use are things like your control tower, your fire station—all of the other things that you have to have anyway. So if the Singaporeans up and leave, it has not cost us anything?

**Brig. Kelly**—Correct. We will have a windfall gain in facilities.

**Senator FERGUSON**—Thank you. We do not do that that often, do we?

**CHAIR**—Thank you very much for your appearance today.

[2.30 p.m.]

**MORSON, Mr Claude, Senior Engineering Adviser, Australian Greenhouse Office**

**SHANNON, Ms Jacquie, Manager, Government Operations Team, Australian Greenhouse Office**

**CHAIR**—I welcome Ms Shannon and Mr Morson and thank you for your appearance today. The committee has received a submission from the Australian Greenhouse Office. The submission will be made available in a volume of submissions on the inquiry and is also available on the committee's web site. Do you wish to propose any amendments to your submission?

**Ms Shannon**—No, there are no amendments to the submission.

**CHAIR**—I now invite you to make a brief statement to your submission, and then we will have questions.

**Ms Shannon**—Thank you very much. The AGO thanks the committee for the opportunity to comment on the statement of evidence for the redevelopment of the Army Aviation Centre at Oakey. We are also pleased to be able to represent the Australian Greenhouse Office submission relating to this project. If the committee permits, we would like to speak to a limited number of overhead slides.

*Overhead transparencies were then shown—*

**Ms Shannon**—The Australian Greenhouse Office is the lead Commonwealth agency on greenhouse matters. My team is responsible for the implementation of energy policy relating to the Commonwealth's own operations. That policy is encapsulated in the measures for improving energy efficiency in Commonwealth operations. The documents are available to all agencies and are freely available to the public on government web sites. The measures are contained in the copies of *Energy use in Commonwealth operations* reports that I would like to place before the committee—in fact, we have left some over here.

Among the measures that the Government Operations Team has responsibility for, there are two that are relevant to the parliamentary Public Works Committee. I draw the committee's attention to slide 2, which describes the AGO's responsibility to assess and report on proposed major construction projects and to ensure certification by suitably qualified persons that buildings will meet required energy standards. In implementing its responsibilities, the AGO's interests are in forming processes and cooperatively achieving joint beneficial outcomes.

The committee may ask, 'How significant to the Australian government's energy efficiency in greenhouse gas abatement outcomes is redevelopment such as the one proposed at Oakey?' I would like to make the committee aware of the trends that have emerged over the past three years of mandatory energy reporting by Commonwealth agencies. There are over 110 such agencies that have regularly reported. This slide shows the trends. The combined height of all

the bars represents energy usage by all Commonwealth department agencies, including the Department of Defence. So that is taking it to the top of the yellow bar across each for the three years. We are pleased to see a declining trend in overall energy use between 1997 and 1998 and between 1999 and 2000. You will see there is a change in gradation downwards.

The purple bars represent the target of 2.5 million gigajoules of energy that was set for Defence establishments, and the red bars represent the amount by which the Department of Defence exceeds its target in each of the three years. We urge some caution in the interpretation of these statistics. The purple and red bars combined represent energy usage for all Defence establishments—that is, its bases, such as Oakey. Defence also reports energy usage in other categories, and in 1999-2000 the total usage attributed to Defence non-operational activities amounted to 48 per cent of the total Commonwealth load. The most significant agency in terms of energy consumption that is second to Defence is the CSIRO. It only reported nine per cent of the total Commonwealth usage. So you can see the difference between the Defence contribution and that of other agencies.

The committee may also note the increasing trend in the Defence usage. There are, however, valid operational reasons for this. The recent activity associated with East Timor is one of the reasons that comes to mind. Bearing in mind the impact that Defence has on the energy efficiency and its potential for greenhouse gas reductions, it is fair to say that a project such as the Oakey redevelopment presents a tremendous opportunity for improving energy efficiency in the Commonwealth and for placing Defence in an advantageous position as well. This project alone could make as much difference as the combined efforts of a dozen or more of our smaller agencies.

We turn our attention to the statement of evidence presented by the Department of Defence in respect of this project. The redevelopment involves significant capital expenditure. The redevelopment also comprises a range of building works, including new buildings and the refurbishment and reuse of existing facilities. In its statement, the department makes reference to certain objectives—and I refer the committee to slide 4—that repeat some of the statements made in respect of energy efficiency. We note, for example, that operating costs, including energy costs, could increase, but these would be mitigated by energy efficient design. Defence refers to the use of life cycle costing analysis and energy metering and monitoring systems. Defence also states that energy efficiency is a key objective and that projects would include an analysis of energy delivery and consumption. Defence also undertakes to take cognisance of a range of factors, including energy efficient lighting and controls, geothermal airconditioning systems and the use of renewable energy sources, such as solar systems.

The AGO is heartened by the reference to specific measures that may be considered in this project. In addition, the AGO believes that energy efficiency and the principles of environmentally sustainable development should be planned for at the very start of the project, and the proposal for Oakey would be considerably improved by doing that.

I refer to the fifth slide. This summarises some of the actions that could be undertaken to ensure that energy and environmental efficiency were properly addressed in the Oakey redevelopment. These actions include appointment of an expert energy adviser to assist the development team with energy and environmental issues—I note the comments from Defence earlier today that they intend to make this appointment, and I commend the initiative, although

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development of agreed energy targets for the design and operation of major facilities on the base would also assist—together with periodic assessment of the project progressed by the energy adviser and sign-off of the energy performance for each project at handover stage. In support of these recommendations the AGO, during recent meetings with Defence, has offered to work closely with Defence on these issues. The AGO has provided assistance to Defence in another project, the DSTO Rationalisation Project in Victoria, and these actions are being pursued by the managing contractor of that project. We are also keen to assess the outcomes of that particular project.

While the Defence statement of evidence spoke of certain measures, it stopped short of informing us of how those measures would be put in place. I am pleased to report to the committee that Defence has responded to our submission in a very positive way. Defence has taken note of our suggestions, and the AGO looks forward to working more closely with the department on this and on other major works projects.

**CHAIR**—Thank you very much. I suppose that was the question I was going to ask: given that, after your letter to our committee, Defence responded and made a commitment to further develop guidelines to appoint an expert energy adviser to set out energy efficiency targets, to seek the assistance of the Greenhouse Office and also to audit the process and sign off, are you satisfied that there is cooperation developing and that those arrangements will be adhered to?

**Ms Shannon**—I will take the generic side, and Claude might want to follow up with some detailed comments. Certainly we have had very productive meetings with the Department of Defence in anticipation of that letter being prepared, and it was an extremely worthwhile and productive meeting. We have every confidence that Defence is committed to ongoing consultation and negotiation about this process. Not being aware of the content of the letter, it was very heartening when we heard that they said they were going to appoint an adviser to oversee the work. Claude may have some more detailed comments to make.

**CHAIR**—Did you receive a copy of their response to your submission?

**Mr Morson**—Yes, we did.

**CHAIR**—So they have actually outlined a number of issues, all the things you have raised in your submission and here today?

**Mr Morson**—Yes. My colleague Ms Shannon made reference to the DSTO project. That project is one of the few projects currently under way or recently completed in the Commonwealth that are using the specialist services in the way that was described. The other projects include those that were referred to the committee, and I believe ABS Belconnen may have been one of those. We are across those projects to gauge the degree to which that particular service has been taken up. Our involvement with DSTO was to provide Defence with guidance on how this particular service could be taken up and to assist Defence in procuring the service. Certainly, we see Defence as being a leader amongst Commonwealth agencies in doing this. As we have said, we are very encouraged by this. We see Defence as having very much a leadership role, which is commensurate with the pre-eminent position it has in the Commonwealth in terms of potential energy efficiency.

**CHAIR**—Do you see that there is an opportunity to apply energy efficient methods and still work within budget? Have you got down to that level of detail yet?

**Mr Morson**—Yes, we believe that that is the case. Certainly from the point of view of a project such as Oakey there is overwhelming pressure on the project delivery side to deliver the project according to the agreed budget. However, there is also the operational side, which occurs some time after the project is delivered. We have developed procedures that can result in trade-offs of one to the other where there may be offsets. One particular procedure is energy performance contracting. It is something that we would certainly raise with the Department of Defence as a possible way of overcoming some of the issues involved in the capital cost versus operational costs quandary.

**Senator FERGUSON**—With all of these projects there is always an enormous pressure for Defence to finalise the projects within a capped budget. You might have heard me asking the question earlier: if it is not cost-effective, do you expect to proceed or to find out whether or not it is cost-effective? Do you really expect Defence to put in solar energy and geothermal airconditioning if in fact it proves to be not cost effective within this project?

**Ms Shannon**—I cannot answer the question, obviously, because I am not part of Defence. In the discussions that we have had with Defence to date, the clarity for us around those cost-effectiveness decisions has been the extent to which a decision may impact on their operational activity. Clearly, that is a very fair and reasonable boundary. If the activities of the Department of Defence were to be affected by making a decision and they could not fully operate within their requirements, then that sounds to be a fair limit. We hope that they would take into consideration, within the bounds that they have available to them, all of the requirements that would be needed to minimise energy use and optimise greenhouse gas abatement.

In some instances those costs can be more up front, but in other areas you can make savings. If planning is sensible and takes into account ways of reducing costs by getting good lighting, natural ventilation, capturing other opportunities and good insulation so you minimise your demands on airconditioning, then the infrastructure costs could be managed accordingly. They are the types of judgments that need to be made when you are making cost-effective decisions within the parameters that they have.

**Senator FERGUSON**—Were you surprised to hear that they had not actually included in their cost estimates the cost of solar energy or geothermal airconditioning as opposed to conventional sorts of energy?

**Ms Shannon**—Our understanding of the process is that at this point the budget is brought to the people who are implementing the intention to develop the project. It appears to me that the consideration of the up-front costs that you are making reference to should be made at the early budgeting stage. That would allow a greater degree of capacity at this point in the process that Defence is engaged in. We would be exploring that as an alternative as well in terms of our discussion with Defence.

**Senator FERGUSON**—It appears that there ought to be a formula that depends on the amount of energy that is used and where the facilities are located—for example, it will cost \$X more to put solar energy and geothermal airconditioning in place; if you put it in, 10 years down



the track these are the other savings that you could expect—so that Defence would know whether or not over the long term they were going to get a more efficient and cost-effective way of producing energy. There must be some way that they can say, ‘It is going to cost you \$X thousand more to put it in alternative forms of energy up front, but these are the guaranteed savings further down the track.’ I do not know whether that is possible or not; I just simply do not have that knowledge. But, if we are going to ask them to put something in when it is not cost-effective in the initial stages, there has to be a reason or a way in which they can recoup that money later.

**Mr Morson**—Defence pointed to the use of life cycle costing techniques applied to aspects of the project. Again, I certainly do not wish to speak for Defence, but it may be valid to consider those types of systems in a life cycle approach. It may be something Defence would consider and we would certainly be in a position to assist them with that. Certainly the techniques do exist in terms of life cycle costing of alternatives.

**Senator FERGUSON**—So it is possible to get figures for what the additional cost may be and what the future savings might be. Is there a formula to calculate that?

**Mr Morson**—It is an exercise that can be undertaken by a service provider such as an energy adviser.

**Senator FERGUSON**—Thank you very much.

**Senator MURPHY**—In the data you presented to us you indicated that Defence is in escalation, if you like, compared with the national trend of decline. Were you comparing like with like? I noticed in the summary of energy end use table on page 9 of this report that climate controlled stores, Defence operations and passenger vehicles are counted. You also say that it is apparent from the table that Defence operations account for just under 60 per cent of Commonwealth energy use. A more meaningful picture of the data in table 1 is presented in table 2 as it does not include the Defence operations category. So when we look at Defence establishments what does it take into account?

**Mr Morson**—The energy usage by Defence reported in that whole of government energy report is broken up into three categories. First, we have the total energy usage, which includes operational energy usage, such as the fuel that may be used in Black Hawk helicopters. However, for the purpose of energy efficiency in the Commonwealth, operational usage is reported once but then not considered in terms of energy efficiency—and I think the reasons are quite obvious. Then we have the remaining energy usage, which is further broken down into usage by establishments, which is for the bases that Defence operates and other usage. ‘Other usage’ includes categories such as vehicles, stores and, most importantly, non-base buildings such as those that are found in Canberra.

**Senator MURPHY**—When you compare and say that Defence is on the increase and is not doing very well at this at all, are you comparing apples with apples in drawing that conclusion?

**Mr Morson**—Yes. In each case we looked at the usage by Defence for establishments, and we chose that because there is a particular target that applies to this sort of operation. So we chose that element of usage against which a target was available.

**Senator MURPHY**—And against which a comparison can be measured?

**Mr Morson**—Yes.

**Senator MURPHY**—With another agency?

**Mr Morson**—No. In the case of Defence, the target is one that has been agreed with Defence, and Defence stands alone against that particular target for establishments. Other agencies report against common targets because their types of operations also are common to each other.

**Senator MURPHY**—I am not going to argue for Defence if they have agreed with the target.

**Mr Morson**—I guess the point is that there is no like agency against which it can be compared.

**Senator MURPHY**—Yes.

**Senator CALVERT**—It is curious that in the report, when it compares the use of passenger vehicles by different agencies, Defence comes up pretty well. In fact, its average is about 10.2 litres per 100 kilometres. When you look at other agencies like Immigration, it is 11.7. For the Department of Health and Aged Care it is 12.5. Does that mean they have heavier feet, or is it a fact that Defence are more economical drivers?

**Mr Morson**—It may also be that Defence is more diligent in correctly reporting its fuel usage. One of the problems in gauging the energy usage by vehicles is the mechanism by which information about fuel usage versus kilometres travelled is gathered. It is a problem that is being addressed.

**Senator CALVERT**—Are you surprised by the variations in those figures? You have the National Science and Technology Centre, Questacon, at 16.3 litres per 100 kilometres, but another agency is down at 9.7. Why do these vary so much? A car can only use so much fuel. There must be some pretty lead-footed drivers around.

**Mr Morson**—I think the reason lies in the accuracy of the particular data.

**Senator CALVERT**—If the data are not accurate, what is the use of them?

**Mr Morson**—That is a very good point.

**Senator CALVERT**—It must have cost a lot of money to do this, and yet you get variations between the National Museum, at 9.4, and the National Maritime Museum, at 16.4. They must be driving V-8s, are they?

**Mr Morson**—It certainly highlights to us that the procedures for defining energy usage in vehicles need to be improved. That is something that is being addressed.

**Senator CALVERT**—So in the future we will see more accurate information in these?

**Mr Morson**—Correct.

**Senator CALVERT**—And therefore we should be able to get better results.

**Mr Morson**—And I would like to point out to the committee that the current report is the report that was tabled last year. The current report is in preparation; we apologise for not having it available for the committee. The current report also highlights the difficulties in obtaining the data for vehicles and measures that have been taken to overcome those difficulties.

**Senator MURPHY**—If I can just ask something, if you want to make an assessment of whether or not Defence or any other agency is constructing energy efficient accommodation, for instance, do you do any assessment of that?

**Mr Morson**—Yes, we do. The policy describes the usual classes of buildings, such as commercial buildings, and requires agencies to consider the energy targets that apply to those types of buildings for each climatic zone.

**Senator MURPHY**—And do you do that in the private sector as well as the public sector?

**Mr Morson**—Currently in the private sector there may not be a wide scale application of this. However, there are changes to the Building Code of Australia which will see a greater emphasis on this approach. Those changes are also in preparation, and we expect those to be available to the wider community in the next one year or two years.

**Senator MURPHY**—And likewise, in terms of construction of office buildings and administration buildings, do you have comparisons between agencies just in specific areas?

**Mr Morson**—We have details of some office buildings that we are personally aware of, or cases where we may have been involved. We certainly do not have an exhaustive list of these.

**Senator MURPHY**—Do you have standards for them?

**Mr Morson**—There are standards for the energy targets that should be applied to buildings. The Property Council of Australia publishes those. We generally recommend to agencies that those standards be considered when the assessment of buildings takes place.

**Mr MURPHY**—Have you provided those to Defence?

**Mr Morson**—In the case of DSTO, we undertook an exercise to provide those to Defence, yes. In this case we do not have the specific information required to do so, but I believe that this approach would be consistent with our further involvement with Defence.

**CHAIR**—Given that greenhouse gas has become a global issue, do we have ways of measuring ourselves against what is happening elsewhere in the world in terms of energy efficiency in a project such as this? If I recall correctly, you said that there was nothing really

currently in Australia to compare with, but do we have overseas examples that might be comparable?

**Mr Morson**—Yes, we do. It is a top down approach to the issue of information. The Greenhouse Office has undertaken extensive studies to quantify emissions by sectors, including building sectors, and that covers the built environment broadly. There are overseas studies that we draw from—from Europe, the US and Canada—where similar performance indicators have been developed, and we attempt to apply those studies to the Australian situation, bearing in mind that there are differences, for example, in climatic conditions. On a more focused level, there are specific performance characteristics of buildings that we use, and I made mention of the targets that are available through one organisation in particular, and that is the Property Council of Australia.

**CHAIR**—We will conclude there, but I expect that we will be hearing a lot more from you in relation to public buildings in the future, as energy efficiency is obviously going to be a major issue for Australia and globally. Thank you very much for appearing before the committee.

[2.58 p.m.]

**TAYLOR, Mr Peter Maxwell, Mayor, Jondaryan Shire Council**

**CHAIR**—Mr Taylor, on behalf of the committee I welcome you to this hearing. Do you have any comments to make about the capacity in which you appear?

**Mr Taylor**—I am the Mayor of Jondaryan Shire Council, where these facilities are located.

**CHAIR**— The committee has received a submission from the Jondaryan Shire Council, which will be made available in a volume of submissions for the inquiry and also on the committee's web site. Do you wish to propose any amendment to your submission?

**Mr Taylor**—I have not particularly got amendments as such, but if you will allow me I will give an overview of it. There are some points that were not included in the original submission.

**CHAIR**—I invite you to make a short statement in support of your submission.

**Mr Taylor**—Thank you very much for the welcome and for the opportunity to address the standing committee. I also extend a welcome to all of you to Jondaryan Shire Council's area. I hope you have a fruitful time here. We have turned on pretty good weather, if you come from Victoria. The reason I said what I did in terms of the submission is that we had only 14 days from receipt of the invitation to put something in writing to you. Our council meetings are that time apart, so it was quite difficult to respond in that time and consult with my council. Even the arrangements for today gave us pretty limited time.

Overall, we certainly welcome the Army Aviation Centre to our area, as we do the Singaporean Air Force. I think they are an important part of the regional economy. Only a small percentage of the 1,200 or so people who work here actually live here, but we are certainly very encouraging of people living and working locally—in fact, we would like to see more of the people who actually work here live in our area. I know that Toowoomba is just down the road and that it is quite an attractive city, but we are also making a big attempt to correct any lack of amenities to encourage people to live here. One of the major things that was done, with the support of the Department of Defence, was to put in a more than adequate water supply to this base. There was a \$6.8 million program to build a water pipeline from Toowoomba to Oakey, and we had the support of Defence to do that. That has allowed the Singaporeans to establish this base with some certainty in terms of the water supply and has allowed it to expand.

In our submission to you we were inquiring about what the requirements of the place were in this proposal for an increased water supply, and about the matter of sewerage. Our water supply is more than adequate to cater to the expansion. Certainly there would be some technical connection details that we would need to work through, but I am sure that they can be resolved. I draw to the attention of the committee that the capacity of the existing sewerage works is at 100 per cent. There has been an expansion in the number of people who live here, with the Singaporeans and the expansion of this facility. I am informed that there will not be very many more people living here, but the sewerage works is at 100 per cent capacity so any small increase in the number of people or any significant rainfall events will lead to overloading of our sewerage works. The sewerage works is an old one; we are planning forward for its

expansion and, in fact, for the reuse of the sewerage water on agricultural land. Another use that is being considered at the moment is for a golf course. I would just draw that to your attention because we would certainly need to have discussions about that.

The significant matter that we raised is in relation to roads and infrastructure leading to the civil aviation terminal. I noted the brigadier's comments about the civil terminal and the fact that there is no written agreement. I was personally involved in reaching agreement with Defence where, when they did relocate the existing civil terminal on what is a joint military-civil facility, a provision be made for this civil aviation terminal to be in a more appropriate location from the point of view of Defence, obviously, but also from the point of view of the civil community so that they could make better use of it. We will, of course, need to reach some lease agreements for civil access to the terminal, and who will maintain it and how it will be maintained will need to be discussed. I would hope that a small shire like mine would be able to afford the ongoing costs of the lease, of course. To give the committee members some understanding, we have just adopted a budget that is \$12.8 million in total, and so when we come to the provision of the maintenance of major facilities obviously it can be a burden—not that the base have been a burden at this point, but they do not pay any rates. As you would be aware, Commonwealth facilities do not pay rates.

We have not really been involved in the ongoing developments. If this were a major civil expansion, obviously the developers would be asked to lodge a development application, and EISs and the like would be prepared. Our shire area is providing a major industry—and I call it an industry in broad terms—for the region and for Australia. We appreciate the support that Defence give us already on some of the roads, and that is in the submission that Defence have made. They have made a contribution to Corfe Road at the front of the base, but if the civil terminal is to be located to the east of the entrances then there is an unmade section of Corfe Road that is not even a gravel section currently. A lot of the existing personnel who live and work at this base now use that section, and we regularly receive letters of complaint about the status of that road. I believe that there is increasing traffic on the Oakey-Kelvinhaugh roads, which are further to the east and are the connection for a lot of the workers who come and go from here. I request that the committee consider those roads, even though they are not mentioned in the submission. The submission from Defence was saying, 'They are not our part; that is not our role; they are state roads or local roads or something else.'

I believe this will increasingly become an issue for this base, and obviously I am as interested as Defence are in having an ongoing, good relationship with the surrounding civil community. There will be some increasing impacts in terms of increasing traffic—noise and smell. Those things are not taken into account in the way that they would be with, say, an expansion of the Oakey abattoir, a large Japanese owned abattoir in town which is planning a doubling of capacity. It is a major expansion. They employ currently probably half as many people as this base does. They take into account all of those impacts, yet some of those have not been considered here. That is not to say that there aren't any issues we cannot work through. I think there are. The civil terminal is a significant new piece of infrastructure that I have been personally involved in negotiating with Defence, and I am very happy that it is, hopefully, going to be approved by your committee. All of the infrastructure that is required for that new civil terminal to operate I hope will be provided by Defence and the Commonwealth. Thank you very much.

**Senator FERGUSON**—I come from a town which is significantly smaller than yours and a council area with a similar rates revenue. What have you done specifically in Oakey to try to attract personnel from this Defence place to come and live in Oakey, rather than go to Toowoomba? You are suffering the same fate that many other areas out there are suffering: the attraction of the larger regional centre with more facilities tends to override a lot of the benefits from living in a town the size of yours, which I am well aware of. What has your shire done to try to attract people into Oakey rather than have them go to Toowoomba?

**Mr Taylor**—We identified some years ago, through a survey conducted by the council, the shortcomings in terms of the amenity or lifestyle of the town. Number one was water. We were dependent at that time on a ground water supply, which is of very poor quality and is diminishing. Really, a washing machine or a dishwasher lasted a year or two and then had to be replaced. Hot water systems were replaced annually almost. With the support of a state government subsidy and Toowoomba city council arrangements we were able to put a pipeline in place—costing \$6.8 million. We were able to get support from Defence, with an agreement. One of the other major things was the—

**Mrs CROSIO**—Did you get a contribution as well? Do you mean financial support?

**Mr Taylor**—We have a two-part tariff here. We are one of the first councils in Queensland to do that. There is an access charge and a per kilolitre charge. We negotiated a long-term arrangement with Defence—off the top of my head, it is for about 20 years—whereby there is no capital access charge but they pay the kilolitre rate for water used. In return they made a capital contribution. I have not got the details in my head. The state government at that time provided a subsidy, and we had been a pretty careful council and put some money in reserve, so we were able to afford the infrastructure. It is above the capacity that is currently here. But in industry, of course, there is quite rapid expansion in my area currently. We are just looking at 1,000 hectares of new industrial land on the eastern part of the shire surrounding Toowoomba for a regional industry area—in fact, it is one of state significance—the Charlton-Wellcamp area.

**Senator FERGUSON**—1,000 hectares.

**Mr Taylor**—1,000 hectares of large-scale industry land.

**Mrs CROSIO**—How are you going to handle that with your sewerage facilities?

**Mr Taylor**—That will not come out of here. That will be a new operation. Mind you, we are looking at regional cooperation as to how we might provide sewerage and are working with Toowoomba and the surrounding shires. The solution might be some new plant out here that would handle that and a number of other towns. We have 13 small towns in our area. I go back to your question about the other things we have done. Water was important. Another thing that was identified was a non-heated swimming pool. It is quite cold here, even in summer time. After dark it can be a bit cool with an easterly wind that blows. We have a solar heated pool. It is not yet indoors, but that is one of those things for the future. We built a new community centre some years ago, and stage 2 of that was just signed off in our budget last week to aircondition the community centre, extend the cooking and bar room facilities and catering facilities, and build a new administration centre.

Shopping was another thing that was identified—the obvious one if you come from a country town. If Myers or Grand Central are just down the road, it is somewhat attractive to go there. Education was another thing. Of course, Toowoomba has a number of private schools. We are working on those civic amenities. We have a streetscape program for the main street, which will cost us \$1 million to implement, and we do not currently have the money available for that. We have been very proactive in encouraging a developer to put in a major supermarket. We have had a couple almost over the wire. The plans have been approved, and the council has agreed to contribute to parking and some of the headworks. In this current budget, we have made a rebate of \$7,000 per allotment on headworks charges to developers to encourage them to open up new residential allotments in Oakey, in this town here. We are not applying that to the eastern part of the shire, like Croswell Hills, Glenvale and Westbrook—those areas closer to Toowoomba—because the development is going ahead.

I must acknowledge that we have a number of Army people who lived in my shire but who now live in Oakey. Given that Oakey is the town that is right on the edge of this base—or the base is on the edge of Oakey—we want a good cooperative arrangement with the base. There is a large investment by the Commonwealth here, and we want good neighbourly relationships to continue, but at times it is said in the local community, ‘Look, there is a lot of activity out there and the region has obviously got the major spin-off, but what are we getting down the main street? Where are the people doing business here?’ I acknowledge the efforts that have been made there. I have made the same statements to the Singaporeans when they came here, and they did open local bank accounts. They do buy from the main street. Not many live locally, and I understand why. It is because they came from a different environment from Australia. They are not used to the open space.

**Senator FERGUSON**—What about comparative housing prices?

**Mr Taylor**—It is much cheaper here than in Toowoomba. DHA run the housing. The officer in charge of that believes there is probably more capital growth in the city than there is out here. In answer to your question about the incentives we are offering, I think I have demonstrated that we are being pretty proactive from our side within the limited financial capacities that we have to encourage people not only to work here but to live here. That applies not just to the aviation centre but also to things like abattoirs and some major agricultural enterprises. We have to have them live locally rather than jamming the roads with traffic every day.

**Senator FERGUSON**—But in general terms you are totally supportive of what is happening here at Oakey under the new proposals?

**Mr Taylor**—We are, yes, provided we can be involved in the issues that I have raised.

**Senator FERGUSON**—With the civil aviation?

**Mr Taylor**—Yes, and sewerage for the future. It will be a major cost for us that we will not handle on our own. Likewise, those roads that I mentioned are not big in terms of Commonwealth spending, but they are fairly big when it comes to our budget and the infrastructure and the ongoing running of a civil terminal. But it is something the civilian community will get great benefit out of as well as the Army themselves.



**Mrs CROSIO**—Does your council make any financial contribution to the civil facilities—the air facilities—there now?

**Mr Taylor**—We do not formally. I think the brigadier was correct—that we have from time to time sent people out here to clean the building. I think some time back the building was painted, but there has not been a significant effort into the old civil terminal. It is not used in a big way but there is traffic that does come in here that is not able to land in Toowoomba, and it is a joint military facility. I suppose in the fullness of time we hope to see a jet service run out of here so that people who visit, like you, can fly in and out by jet. The only way regions like this will really progress is when we have an F28 type jet service—obviously not a 747; that will not happen—that can run in and out of here to Canberra, to Sydney, to Cairns or to Townsville.

**Senator MURPHY**—With regard to a civil terminal, if you got into an agreement would you impose any landing charges?

**Mr Taylor**—No, we would not. We would hope that we would reach an agreement. Councils really face a big cost when they run airports on their own in terms of the sealing and resealing of runways and the maintenance of facilities. I would be hopeful there would be no landing fees.

**Senator MURPHY**—Is Toowoomba airport privately owned?

**Mr Taylor**—It is owned and maintained by Toowoomba City Council, to my knowledge.

**Senator MURPHY**—They would have landing charges and user charges there?

**Mr Taylor**—I cannot answer on their behalf. They tried introducing charges. I am not sure whether those charges are still maintained. I should know, being a pilot myself.

**Senator MURPHY**—In the longer term, the National Competition Council might have something to do with the rates of Defence facilities—whereby they pay you some rent. It might pay to make a submission to them.

**Mr Taylor**—We do not mind how it happens. You will point out to me pretty quickly that we get financial assistance grants from the Commonwealth and that that is our share of tax, and all those arguments. But, still, it is a major facility. A lot of people come and go each day. You do not pay rates. We appreciate the support. We did get major financial support on a couple of roads from the base here last financial year. That was very good. But the place is not getting quieter; it is increasing in traffic. We are not big, in terms of our budget, yet we are making pretty big efforts to help.

**Senator MURPHY**—You said that your sewerage was at capacity. What numbers would impact on it?

**Mr Taylor**—One hundred would put it over, now. Anything will put it over, officially. It is at capacity.

**Senator MURPHY**—Have you advised Defence of that?

**Mr Taylor**—I think we may have mentioned in our submission that we would need to discuss matters of water and sewerage and the like.

**Senator MURPHY**—But you have not discussed it with them to date.

**Mr Taylor**—We have had no discussions, to my knowledge, that made contact with the town planner. I have personally had no discussion. I heard in evidence that the CEO was contacted by phone. We have staff available to discuss those matters.

[3.17 p.m.]

**JONES, Colonel Trevor Ross, Commandant, Army Aviation Training Centre, Department of Defence**

**KELLY, Brigadier Garry Ross, Director-General Capital Infrastructure, Department of Defence**

**SHEPPARD, Mr Robert Sherman, Project Director Capital Infrastructure, Department of Defence**

**WILTSHIRE, Michael, Senior Project Manager, Connell Wagner Pty Ltd; Department of Defence**

**CHAIR**—Welcome back to the table. I remind you that you are still under oath. I invite you now to make any supplementary statements in support of your submissions and, in particular, with regard to comments that have been made by those organisations that have made submissions today.

**Brig. Kelly**—As a global statement, I would say that I am very comfortable with everything that was said by Ms Shannon and Mr Morson and then by Councillor Taylor. I have no huge issues with any of those. Clearly, from the point of view of dealing with Jondaryan Shire Council, we do need to talk more closely—in particular, about sewerage—but we are in agreeance on all the other points.

On the evidence given by the Greenhouse Office, I guess you would expect me to comment on the fact that we are heading in the wrong direction. I thought I had rationalised that in my own mind, so I was disappointed to hear that Mr Morson feels that it is benchmarked and that we are actually going in the wrong direction. I would like to know more about that. If we are benchmarking bases, though, I can explain why we might be going that way. Take Lavarack Barracks, where nothing was airconditioned three years ago and where we have now built 1,000 new living-in rooms, which are all airconditioned. No matter how well we do, it is going to go in the wrong direction. I think the committee would agree that it would be most unreasonable not to do that, and we will be doing the same at RAAF Base Townsville. We will provide airconditioned transit rooms in lieu of some people sleeping in tents on a gravel hardstanding. That is not a choice.

**Senator MURPHY**—The thing for Defence is going to be to benchmark the construction of administrative facilities or accommodation facilities against standards applicable to those types of facilities.

**Brig. Kelly**—I am interested in knowing how Russell compares with Foreign Affairs in Canberra, for example. I know we have looked at some of those figures. But I would still presume that the fact that we are coming from a position of World War II facilities on many bases to modern bases would be part of that problem. I agree with all of the recommendations made by the Greenhouse Office in their submission. One point was the subject of some discussion between my staff and Greenhouse Office staff which I really do need to take up is

their recommendation that funding approval, which I presume means your approval, would be based on certification that the building will meet the required energy standards.

I see that as being a fairly difficult thing to do, given the stage at which we bring a project to you. This project requires \$6 million worth of design. How many millions of dollars do we spend before we think we have a good enough handle on it and before you would be able to certify that it will meet those requirements? I would be a bit wary of having to spend \$1 million or \$2 million to get to that point, and then come to the committee and find that the committee had valid reasons for why we should do something else. We need to get a balance there, I suppose, as to when we would come for that approval. The best thing we can do is to work closely with the Greenhouse Office. I would acknowledge that some of the other evidence that we have produced for the four hearings in this month, or in these couple of weeks, did not address that, and I think that is because we have only just become aware that the role of the Greenhouse Office is to advise. I would be particularly keen to deal with the Greenhouse Office on getting some better advice because there are plenty of consultants out there at the moment who think that we are a bit of a ripe target. I think we can do better in dealing with another organisation, like the Greenhouse Office.

**CHAIR**—I have not discussed this with the committee but I feel sure that the committee would agree and acknowledge that benchmarking energy use in new facilities is a whole new area that none of us, except those who are engaged in that area, are across in full detail. I am sure that the committee will acknowledge the practical challenges of bringing this in as an issue at this stage of a development proposal. I am sure that we can work towards better outcomes than perhaps we have had in the past, and I am sure that is recognised broadly by most of the committee.

**Brig. Kelly**—I agree that we need to benchmark and I was very pleased to hear the positive comments about our project in Melbourne for the DSTO, which we have made our first benchmark project. In fact, that is part of a trilateral agreement that we have with Canada and the US. One of the actions to come out of that agreement is that we will benchmark one of our projects for their broader interest. It is a good indication of the conflicts that we have, because that project particularly is short of money. Someone is going to have to lose some scope from the project so that we can provide the higher level of energy efficiency that is desired.

**CHAIR**—What we want to understand is that we do have an agreement that you will work closely with the Australian Greenhouse Office to produce the best possible outcomes under the circumstances. There are two other things I wish to discuss before I ask Senator Murphy to ask his questions. One relates to obvious concerns by the shire about the sewerage situation, and if this base is to undergo further development that could be a problem. I would say that there should be close consultation with the council or the shire in relation to that particular issue.

**Brig. Kelly**—I would be interested to know what our local staff know of the situation. If they are also in the dark then clearly we need to do better when talking to council.

**CHAIR**—I notice that in your submission you say you do not envisage any net increase.

**Brig. Kelly**—We do not see any significant change, but if it is that close to the line then we need to be aware. There are ways of assisting, as we have done in the past with headworks charges or maintenance charges.

**CHAIR**—Finally, can Defence envisage any development in the surrounding area that could in the future adversely affect operations at Oakey? Is there scope for future development at Oakey within the existing boundaries, or is the acquisition of further land envisaged? This again goes to the issue of sewerage and facilities.

**Brig. Kelly**—I am not aware of any plans for additional capabilities or facilities at Oakey, with the exception of the Defence Materiel Organisation, which may be moving some people here. There is no current plan that I am aware of to acquire additional land. We have acquired some land as buffers in the last couple of years but, as far as I am aware, that is the limit of the requirement.

**CHAIR**—And what about developments in the surrounding area that could adversely impact?

**Brig. Kelly**—In terms of impacting on our operations?

**CHAIR**—Yes.

**Brig. Kelly**—Colonel Jones probably has a better feel for that.

**Col. Jones**—If you will recall, I pointed out the land immediately to the south of the Commonwealth owned land. There are currently, in cooperation with the local council, development restrictions over that land. We habitually fly over that land. We would be concerned to see that land developed as housing or an industrial estate into the future.

**CHAIR**—Have you taken that issue up with the shire?

**Col. Jones**—We certainly have, over a lengthy period of years. As I said, there is good cooperation from the shire council, and they have imposed development restrictions on that land for the time being.

**Senator MURPHY**—With regard to the issue of services provided by the shire, do you have a formal agreement or arrangement for situations in which Defence activities have the potential to impact? Is there a formula within which you work to make a contribution towards the cost of either upgrading or increasing the capacity?

**Brig. Kelly**—It is done on a case by case basis. It is called a roads of access agreement. That deals with capital contributions to road construction and maintenance, and I think it also applies to use of airfields on part of the Air Force and Army aviation. It is not something that is globally applied; it is on a case by case basis.

**Senator MURPHY**—Is it possible that, if you will be concluding some discussions in that respect during the next six months, you might be able to provide us with a letter indicating the outcome of the discussions with the shire?

**Brig. Kelly**—I am not aware, or I would not have thought, that we needed to actually do any more at the moment, because there is already an agreement in place whereby Defence contributes up to 100 per cent of the maintenance of roads leading into the base, and my understanding is that the new terminal will not require access from the dirt or the gravel road.

**Senator MURPHY**—I was more interested in the sewerage.

**Brig. Kelly**—Okay, we will give you a report on that.

**Senator MURPHY**—If you would not mind, just on the sewerage. I accept the issue about the roads. Can you also tell me, in terms of the arrangement with regard to the civil terminal, what form of lease agreement is there, if there is a lease agreement?

**Brig. Kelly**—There is no lease agreement at the moment.

**Senator MURPHY**—I know there is not.

**Brig. Kelly**—You would like that in six months as well.

**Senator MURPHY**—I am thinking about what is in your letter, Brigadier.

**Brig. Kelly**—I guess this has been a fairly loose but suitable arrangement for the last six years or so. Now that we are building a new one we are going to have to work very closely with council in terms of access car parking, the actual construction and design of the facility, any desire by council or any other council to contribute to the size of it initially, measures to ensure that it is expandable in the future and exactly how it is going to be looked after. The understanding at the moment is that we will build and maintain, and council will have a lease on use.

**Senator MURPHY**—With regard to the sewerage, the other thing I did want to ask you was, when you finalise any agreement, would you inform the committee of how that agreement will be funded if funding is necessary—that is, whether it will be funded out of your existing budget for the redevelopment here or whether it is an additional amount of money that will be taken out of another budget somewhere else.

**Brig. Kelly**—I would expect that it would come out of another budget, but I will advise.

**CHAIR**—Thank you very much. Before closing may I thank all the witnesses who have appeared before the committee today, and for Defence for assisting our inspection and private briefing this morning.

Resolved (on motion by **Mrs Crosio**):

That, pursuant to the power conferred by section 2(2) of the Parliamentary Papers Act 1908, this committee authorises publication of the evidence given before it and submissions presented at public hearing this day.

**Committee adjourned at 3.29 p.m.**