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JOINT COMMITTEE ON PUBLIC WORKS

Reference: Tactical unmanned aerial vehicle facilities project, Enoggera, Queensland

THURSDAY, 29 JUNE 2006

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JOINT STATUTORY COMMITTEE ON

PUBLIC WORKS

Thursday, 29 June 2006

Members: Mrs Moylan *(Chair)*, Mr Brendan O'Connor *(Deputy Chair)*, Senators Forshaw, Parry and Troeth and Mr Forrest, Mr Jenkins, Mr Ripoll and Mr Wakelin

Members in attendance: Senators Parry and Troeth and Mr Jenkins, Mrs Moylan and Mr Ripoll

Terms of reference for the inquiry:

To inquire into and report on:

Tactical unmanned aerial vehicle facilities project, Enoggera, Queensland

WITNESSES

Committee met at 9.39 am

Evidence was taken in camera but was later taken in public—

[10.32 am]

CHAIR (Mrs Moylan)—I declare open this public hearing of the Joint Parliamentary Standing Committee on Public Works into the redevelopment of the tactical unmanned aerial vehicle facilities project at Gallipoli Barracks in Enoggera, Queensland. This project was referred to the committee on 29 March 2006 for consideration and report to the parliament in accordance with section 17(3) of the Public Works Committee Act 1969, which says:

> (3) In considering and reporting on a public work, the Committee shall have regard to -
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> (a) the stated purpose of the work and its suitability for that purpose;
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> (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.

This morning the committee received a confidential briefing on project costs from the Department of Defence, and inspected the site of the proposed works. I thank Defence and particularly Colonel Grice for facilitating that inspection, and those on the base who have been responsible for making the arrangements.

[10.34 am]

GRICE, Colonel William Alfred, Acting Director General, Infrastructure Asset Development Branch, Department of Defence

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

BROWN, Wing Commander Michael William John, Project Director, Joint Project 129, Defence Materiel Organisation

SAUNDERS, Mr Raymond John, Senior Project Manager, GHD Pty Ltd

WHEELDON, Mr Gregory David, Partner, Mandikos Wheeldon Architects

Witnesses were then sworn or affirmed—

CHAIR—I welcome the witnesses. The committee has received a statement of evidence from the Department of Defence and this will be made available in a volume of submissions for this inquiry and will also be available on the committee's website. Are there any corrections or alterations you would like to make to your submission?

Col. Grice—We would like to make one change to paragraph 8 of the statement of evidence. In paragraph 8 we notified that the expected completion date was October 2007. The Brisbane construction market is very busy at the moment and we anticipate some delays in procuring some materials and possibly some of the key trades that would be in the project. Based on the advice of our project managers and design consultants, we would like to amend paragraph 8 so that it reads:

Subject to parliamentary clearance of this project, construction will commence in late 2006 with completion by early 2008.

CHAIR—Thank you. Would you like to make an opening statement?

Col. Grice—Thanks, Madam Chair. This proposal seeks approval for the tactical unmanned aerial vehicle facilities project, or TUAV, at Gallipoli Barracks for the Department of Defence. The Department of Defence is acquiring a TUAV system for local area surveillance that will enhance the Australian Defence Force's aerial surveillance capabilities. A new regiment, the 20th Surveillance and Target Acquisition Regiment, will operate the TUAV system and will be based at the Gallipoli Barracks, Enoggera. The facilities to support the regiment and capability maintenance, storage and training requirements are the subject of this proposal.

The program of works includes the reuse of existing facilities with selected refurbishment. New purpose-built facilities will be constructed to support the specialist TUAV maintenance and training requirements. This option provides the best value for money solution for the Commonwealth and assists Defence to make best utilisation of the existing facilities at Gallipoli

Barracks. The budget for this project is $17.45 million and this includes professional design and management fees and charges, construction, furniture, fittings and equipment together with appropriate allowances for contingency and escalation. This project was foreshadowed as part of the 2006-07 defence budget. Subject to parliamentary clearance, it is intended to commence works in late 2006, with the works being complete by early 2008.

With the permission of the committee I would like to invite Wing Commander Michael Brown to provide a short presentation to explain what exactly the TUAV system involves and what is included in the system.

A PowerPoint presentation was then given—

Wing Cmdr Brown—In December 2005, Senator Hill announced that Boeing Australia had been selected as the preferred tenderer for joint project 129. Boeing Australia had teamed with Israel Aircraft Industries to provide the I-View 250 aerial vehicle and the system. As you can see, the air vehicle is not a large vehicle; it is a propeller driven vehicle. The dimensions are up on the screen.

The air vehicle is just one element of the TUAV mission system. Each troop—and there will be two troops in the newly formed 132 UAV Battery—will consist of four air vehicles; two ground control stations, which are the brains of the operation; two ground data terminals, which maintain the link between the ground station and the air vehicle; a launcher; a set of automatic take-off and landing equipment; four remote video terminals, which enable the picture to be presented to soldiers in the field; plus the support system to maintain this asset.

The facilities will be an integrated contractor and Defence maintained capability, with Defence maintaining the operational level, and, wherever practical, the support maintenance will be carried out by Boeing Australia. The plan is for the facilities to be coshared. As you see in that picture, it is more than just the air vehicle that will be repaired in these facilities. As well as that, there is quite a large support element, which is broken into two areas. Some elements of the capability that will need to be held in the Army Q store but also, wherever possible, we are getting the contractor to maintain, support and repair all the supply aspects. So the Army just needs to go to the contractor's facility and they will do all the support arrangements.

The training will also be conducted within the facilities. There are a number of levels of training. Computer based training will help the operators and the maintainers to understand the basics of the system. As well as that, a simulator will be provided which will have high-fidelity training, which will replicate all the elements the mission commander and the payload commander see in the real system.

Boeing Australia are committed to support this capability through the life and are actually investing their own funds to provide a system integration laboratory. This laboratory will enable the Australian Defence Force to update and continue to maintain the system through its life here in the Brisbane area. It will transfer the skills required and help Australian industry maintain this capability.

A video was then shown—

Wing Cmdr Brown—The UAV shown can be launched two ways: by a catapult or from a runway. It can operate out to 150 kilometres. It has a number of different cameras on board. This picture shows the ground control station. This picture shows the imagery that would come back to the ground control station. It also has electric optics so it can actually see at night or in poor visibility. The feature of the I-View is its tactical manoeuvrability. It comes in under a parafoil and not a parachute, so it can be steered and guided into an area less than the size of a soccer field. The air vehicle shown is still under power at this point in this picture. That will all be done automatically; there will be no person in the loop. That concludes my presentation.

CHAIR—Thank you very much. We will move to questions. At paragraph 15 of your submission, you talk about the options to provide facilities to support the introduction of the new TUAV capability and the establishment of the 20th Surveillance and Target Acquisition Regiment. For the public record, would you run through the options you looked at and why you chose the option you did.

Col. Grice—The first decision was for this capability to be based at Gallipoli Barracks. The decision was made because this capability is to support and provide intelligence information to the commander of the Deployable Joint Force Headquarters. The 131 Surveillance and Target Acquisition Battery is already in this role, so the decision was made to co-locate this and form a new regiment so that we could leverage off the existing systems and procedures that were in place. That is why the aircraft and the regiment will be based in Enoggera.

Within Enoggera, we looked at options for where the new facilities for the TUAV and the STA regiment could be located. The first option that was considered was to construct new facilities on greenfield sites adjacent to the existing 131 STA Battery lines, which we toured this morning. We proceeded to about a 15 per cent design solution for that option, but it became cost prohibitive. At the same time, 25/49 Battalion of the Royal Queensland Regiment was going through a role change, which resulted in the reduction of regular military personnel employed with that battalion. This gave us an opportunity to use the facilities which had been sized for a larger 25/49 to accommodate the 20th STA Regiment and reduce the amount of new construction that was required. The reduced-size 25/49 Battalion would then move over into the existing 131 Div Loc Battery lines.

That turned out to be a more cost-effective solution for the Commonwealth and the Department of Defence. The cost estimate for the greenfield site was of the order of $30 million. The current project is $17.45 million and provides us a better fit for those units in the existing facilities and provides maximum reuse of facilities that, although a little bit tired, are still structurally sound and with minimal refurbishment could be used for a further 20- to 25-year period.

CHAIR—Mr Ripoll has further questions on the co-location issue.

Mr RIPOLL—Could you explain to the committee the reasoning behind not co-locating the facilities for the TUAVs and the actual launch area for the TUAVs? Also, do you know where they will be?

Col. Grice—I will start off this answer, then hand over to Wing Commander Brown to provide additional information. There are two parts to the capability: the actual flying of the

aircraft and the procedures for providing the information and integrating that into the situation so the commander has the information he needs to make tactical decisions. Co-locating the equipment here at Enoggera provides the opportunity for developing those procedures. A simulator is provided within the facilities where most of the flight training for the operators of the system will be done. The actual flight of the aircraft will not be conducted at Enoggera; it will be conducted in the Shoalwater Bay training area. I will pass to Wing Commander Brown to provide a bit more information on that.

Wing Cmdr Brown—The actual flying of the air vehicle is done via the ground control station. It is predominantly a computer software driven process. The sensors on the UAV will be used by the commanders to identify, locate and track targets. All the flying training will be done in military training environments—Shoalwater Bay being the most logical element. There is a maximum of 1,200 flying hours per year; yet the simulation rate is about 5,000 hours. So the product that is actually being delivered to the war fighters is more important than the air vehicle element. The commander of the Deployable Joint Force Headquarters and his staff will be using that product. Having them co-located here actually reduces the cost and increases the effectiveness of how the product will be used.

Mr RIPOLL—Can you also explain whether there will be any loss of efficiency due to having the facilities here but the launching and deployment located in another area?

Wing Cmdr Brown—No, I do not believe there will much loss of efficiency because some of the launching and recovering element will be dedicated to training of the battery—a small amount—but the majority of times that we need to launch and recover the air vehicle will be in support of other elements of Army which may not actually come from Enoggera; they may come from Townsville or from other areas. So it is just another deployment for the 20 STA, as is currently the case with one 131 STA Battery.

Col. Grice—In fact, I would say that co-locating the STA regiment here at Enoggera with the Deployable Joint Force Headquarters will increase the training benefit because they can train with the headquarters staff and personnel that they will be with throughout the year and then deploy on exercises with them to conduct operational flying.

Mr RIPOLL—Can you explain whether there are any additional facilities needed at Shoalwater Bay training area for particular deployment or is that a stand-alone, mobile type environment?

Wing Cmdr Brown—Currently, there is a UAV runway at Shoalwater Bay and the battery will actually deploy with its own tenting and messing facilities. So the answer is no, there is no further requirement in Shoalwater Bay or other training areas. It does not require a runway to launch and recover. It can be used on a runway but, as was demonstrated in the video, it can be launched by catapult and recovered into a cleared, unprepared area.

Mr RIPOLL—Can you give us a rough idea of how many times per year the system would be deployed?

Wing Cmdr Brown—Yes, I will just check my notes. It is expected that there will be nine deployments per year which will fit into the overall Army training program.

Mr RIPOLL—You mentioned in your presentation that Boeing will set up a training installation as part of your facility. Is there a cost to Defence for Boeing to do that or is Boeing carrying the cost of that?

Col. Grice—Defence will provide space in the facility and Boeing, under its contract, will provide the installations that go into those facilities.

Mr RIPOLL—So there is no extra cost to Defence; it just has to provide some space.

Col. Grice—Yes.

Senator PARRY—I do not know whether I have missed something. Are the aircraft going to be launched and returned to Shoalwater Bay—is that correct?

Wing Cmdr Brown—The training location for actual flight hours will be Shoalwater Bay. But actual flight hours are not required for training of the operators. You heard the figures quoted: 5,000 flight hours a year on the simulators. Time spent on the simulator system exactly equates to time spent flying the aircraft because the operators are ground based and they are using the same deployable system that they would take to the field.

Senator PARRY—I understand that. I am more interested in the actual aircraft. Are they going to be housed at Shoalwater?

Wing Cmdr Brown—No, they are actually going to be housed within the new facility.

Senator PARRY—So they are transported from here to Shoalwater and then launched, retrieved and returned to Enoggera?

Wing Cmdr Brown—Yes, that is correct.

Col. Grice—The unit would deploy with all the ground support equipment that is required for an exercise. They would situate themselves, conduct their training and then return.

Senator PARRY—Thank you. That clears up a lot. That was the simple element missing in all this.

Mr JENKINS—Can you clarify the number of TUAVs that will be based at Enoggera? Paragraph 6 of the submission states:

The system will consist of four air-vehicles fitted with sensor payloads ...

We are actually purchasing more than that, so I am a little confused.

Wing Cmdr Brown—The requirement to meet the mission that the Army is after per troop is four air vehicles per troop. There are two troops in 132 UAV Battery, so that is a total of eight. The Department of Defence as part of the project approval directed that the acquisition cost should cover any attrition air vehicles and, as such, the project will procure another four air

vehicles that will be kept in storage here at Enoggera. So the total procurement of aerial vehicles under JP 129 is 12.

Mr JENKINS—So everything to do with the 12 will be able to be done as a result of this refit and the new buildings?

Col. Grice—That is correct. The workshop area includes a workshop area for the aircraft allocated to the troops as well as a storage area for the attrition aircraft in their storage containers.

Mr JENKINS—So they are broken down, are they? I think what we have to get our heads around is that this is a roadshow sort of thing: you have got everything packaged together and off you go—to deploy, set up and off it goes. So that is why here is suitable. Madam Chair, there was a page in that presentation that showed all of the equipment that went together with that. That is probably something that we should put in our report because I think it explains it very well.

Col. Grice—Would you like that slide put back up?

Mr JENKINS—No, I am just saying that I think that explained it very well. It is not just the vehicles themselves; this is a full package or a system that has to be deployed. That helps us to understand. I have a question about store and racking at the refit for, I think, the 24/49th—I get the numbers mixed up. Did I get close?

Col. Grice—It is 25/49 Battalion.

Mr JENKINS—I was close! I am interested in advances in store logistics and everything. What are we actually talking about? I noted that terminology like 'caging' is used. I can see, just from walking around, that obviously you have to have stores put in containers that then can be part of the deployment. But when we talk about new racking and stuff, how high-tech are we going given the advances that have been made in logistics and stores handling?

Col. Grice—I will start the answer to this question and then I will pass to Greg Wheeldon. That existing Q store over there was built to cope with 131 Division Locating Battery and its requirements. We are replacing that now with a reserve infantry battalion, which has a different requirement. It is more a requirement for stores that it deploys when it goes on camps and things like that, as well as for additional weapons because the unit is larger. Currently, 25/49 uses a pallet based system to store these items so that they are readily available to be loaded on a truck and taken away. The current Q store over there is not configured for that. It is not so much the high-tech that we are putting in; we are reconfiguring the racking so that they can use a similar system and have a small forklift to move pallets around to put them on the back of trucks.

Mr Wheeldon—Just to expand on that a little bit, the storage systems that we are putting in place are not ultra high-tech in that they are not computer-driven, unmanned retrieval systems that you see in some of the very large warehousing. The type of storage they require there is really storage shelving and pallet racking. Obviously, they will use handling units such as forklifts and other lifting devices so that there are no OH&S issues for them in handling their equipment. The day-to-day stores they store are fairly mundane, so to speak—tents, cooking

gear, messing gear and things like that that they use when they go on exercises. So, to answer your question, it is not ultra high-tech because that is simply not required, but we are using very up-to-date racking systems which give us space efficiencies and involve using handling equipment which covers all of the OH&S issues.

Mr JENKINS—You are gutting the warehouse and putting in a new system.

Col. Grice—Yes.

Mr JENKINS—Getting back to the prime contractor's input, one of the buildings, Q26, is highlighted in the submission as one they will use. I take it that the money that is being spent on Q26 is to provide a base building for the prime contractor to then fit out. Is that correct?

Col. Grice—That is correct. We will be rectifying OH&S issues and that type of thing and making sure it is in sound condition for them to operate their warehouse storage out of. One part of it will be modified as a battery store.

Mr JENKINS—What is the prime contractor's input into some of these simulators and things like that? They are providing them—again, is it that you provide a base space and they fit it?

Wing Cmdr Brown—That is correct. We have the size that they require, and under the contract Boeing will provide the simulator.

Senator TROETH—I gather from your description that you will be supplying some buildings with new airconditioning plants. Could you give us some details of what sort of airconditioning system is being proposed?

Mr Saunders—The airconditioning systems in the new buildings are up-to-date split systems, generally. You have an element outside and the fan coil units inside. Where we have some old-fashioned window rattlers in existing buildings they are being taken out and replaced by high energy efficient split systems.

Senator TROETH—You are satisfied that the airconditioning you are putting in is the highest grade of energy efficiency you can use?

Mr Saunders—Absolutely.

Col. Grice—There are no cooling towers; there is nothing like that.

Senator TROETH—With the buildings you are going to demolish, such as building Q27, will there be any requirement for the removal of any hazardous material, if it is there? How will you deal with that?

Mr Wheeldon—The only building which is really being demolished in this project is Q27. That is a steel portal frame storage building. There is no interior fit-out to it. It is a fairly low-grade building in that sense. It is mainly steel, concrete and metal cladding. To our knowledge there are no hazardous materials in there. The only hazardous material we have discovered on site is, as we have said, some asbestos sheeting, which is in the O area—the existing 131 area—

and that is being assessed and audited by a specialist company to give us a report on how to contain it and remove it and certify that the area is free of asbestos when it is completed.

Senator PARRY—Page 10 of the submission indicates that the proposal aligns with the draft master plan for the barracks. I raised the issue earlier of forward planning and the need to demolish buildings that appear, even though they are aged, still serviceable and in good use. Does the master planning now take into account this new plan and further projections so that we are not going to approve buildings today and in 10 years time come back and look at demolition again?

Col. Grice—Yes, that is correct. The draft master plan does include these facilities and units remaining in their locations and there is no plan to demolish any of these in the future.

Senator PARRY—We understand the scope, and we covered the reason for that particular site in the confidential hearing. Without going into the cost, because that was part of the confidential briefing, apart from the new building Q112, a lot of the costs relate to non-TUAV considerations. If you go to page 7, items (d), (e), (f) and (g) I have attributed to TUAV. The remaining items are not. On page 8—correct me if I am wrong—items (i) and (j) are directly attributed to TUAV. Is item (k) partly or totally to do with the new unmanned vehicle facility?

Col. Grice—Totally, and item (h) is as well.

Senator PARRY—I see; that is 'housing of the launchers'.

Col. Grice—Item (c) on page 7, the vehicle workshop, will be used to maintain the regiment's vehicles, which include the TUAV support vehicles.

Senator PARRY—So that is partial; that is not total. What would be the percentage? I gather there would be a minimal number of vehicles, so the existing vehicle load in there would be fairly high.

Col. Grice—The new regiment will comprise the new TUAV troops as well as the new headquarters, which is also required to generate the capability, as well as the target acquisition radar battery. I think we could say that, apart from the radar battery vehicles, all other vehicles in the regiment are related to the production of the capability and the intelligence that comes from the TUAV, so it is a high proportion of the vehicles.

Senator PARRY—We have got to get a breakdown because we have been semi-incorrectly referring to this only as the tactical unmanned aerial vehicle facilities project when, in fact, it is a lot more extensive than that, so we have to clearly articulate that in the report. I have identified only item (d) on page 9—and correct me if I am wrong.

Col. Grice—All of the items on page 9 are required for the relocation of the 25th/49th Battalion out of this area so that it can be occupied by the STA regiment.

Senator PARRY—So it is as a result of that?

Col. Grice—Correct. It is that relocation which has generated a saving of the order of $13 million.

Senator PARRY—So without going ahead with the tactical unmanned vehicle project, none of this would have occurred?

Col. Grice—That is probably correct.

Mr JENKINS—I would like to ask about the provision of workstations, in particular the size of them.

Col. Grice—The office proportions will be provided in accordance with Defence's office accommodation standards. I will pass that on to Greg Wheeldon, who will provide a response.

Mr Wheeldon—The Defence standard manual for office accommodation provides for standard workstations for troops and other support personnel working in that area. They range from a standard 1,800 by 1,800 workstation with a laminate finish, standard office gas-lift chairs—as we have got here—computer terminals et cetera. It is a standard fit-out. There is nothing excessive in the fit-out.

Mr JENKINS—The submission mentions it is open plan for flexibility.

Mr Wheeldon—Correct. That is one of the reasons that we have got workstations that are demountable and relocatable. You can reconfigure those spaces so that if in a couple of years time you get 'churn', where your operational requirements change within the building and you need to reconfigure a work space, you can do that quite easily. Using workstation technology these days, you can reconfigure to a new shape, change the numbers and change the configuration to suit your new operational requirements. The new TUAV facilities are in a steel, clear-span, portal frame building, so with those office areas you could take out all of the internal partitioning and reconfigure and redesign rooms and shift them around to suit a new operational requirement. In terms of the building being future proofed, churn in the future will be quite easy, with a minimal cost.

Mr JENKINS—Do any of the regiments have mascots?

Col. Grice—No.

CHAIR—I am mindful of the time. I was wondering about some of the questions about energy conservation that went beyond the confidential briefings but did occur in the confidential briefings. Would you elaborate on that topic a little more than you have done in your presentation and submission so that the committee can include that in its final report?

The other issue concerns construction techniques and whether a geological survey has been done. I note that at point 40.47 of your submission you talk about using a structural design that will provide control of cracking of concrete, so I wonder whether you have had a problem with cracking of concrete and whether there is some geological reason why you need to take particular care with footings.

Col. Grice—I will pass to Greg Wheeldon on that and then, if you like, I will give you a response on the ESD aspect.

Mr JENKINS—I suggest that, if Colonel Grice is happy, we should incorporate his answer from the earlier confidential evidence.

CHAIR—Yes. Thank you very much for that suggestion, Mr Jenkins.

Col. Grice—I am happy for that to happen.

The answer read as follows—

Col. Grice—Defence is committed to ecologically sustainable development. The new facilities include a range of practical, environmentally sustainable design initiatives to both minimise and measure water and energy consumption. Key environmentally sustainable design initiatives that are included in the new facilities include energy efficient lighting utilising high-efficiency T5 fluorescent lighting, motion sensor light switching for amenities and meeting rooms and the specification of a building management system for each building which will control office area lighting to shut down outside standard work hours.

We are installing energy meters on all major energy sources in the new buildings and linking them with the building management system. We are installing water meters on all major water sources and controlling the airconditioning systems with zone management systems that also have the capability to control energy uses by zone or on an individual room basis. We are also using floating set-point control of airconditioning systems and time-of-day control of boiling water units and refrigerated drinking units in the ablution areas. We have specified water efficient fittings, including triple-A rated taps on toilets and showers. The building facade has been designed with shading for the occupants to minimise energy usage. The main workshop has high levels of natural light.

Within the refurbished buildings, which are the bulk of this project, implementing ESD initiatives is very difficult and involves a capital expense that will not be recouped in reduced operating cost for the life of the building. That is a fact of life, because we are doing a minimal refurbishment. The project did consider ESD measures, including the replacement of light fittings and installing a building management system into each of the refurbished buildings. However, we did not adopt these, because the whole-of-life cost analysis did not demonstrate value for money. But in all the projects of refurbishing the amenities portions of these buildings we are putting in water-efficient fittings.

There is no formal green star rating proposed for the new facilities. The green star system as it currently exists is only applied to office accommodation. Although the new building Q112 does contain a portion of office accommodation, due to the other functional constraints on the design we have not been able to pursue a green star rating for that building. It is largely workshops and technical support areas. But, to compensate, the project has adopted a series of practical ESD initiatives, which I have just mentioned.

CHAIR—Colonel Grice, you may also wish to send the committee information on the footings and the cracking of concrete rather than giving a long answer now, but perhaps you could give us a short answer now.

Mr Wheeldon—To answer your question directly: yes, there has been an extensive geological report done. We have found that there are no major problems in the area. I will explain the issue there. You have to understand that these are very large buildings, and over large areas you always get some sort of cracking. We are putting in place a structural system which will

minimise that but which will also allow the workshop space not to have any joints in the concrete, because if you have joints you get a slight change in the level of the floor. These aircraft are quite high-tech aircraft and the equipment used to support, maintain and run them is quite high tech. If there are cracking joints, where you make a specific joint to take care of a crack in the floor, that may affect some of the operability of their equipment. So what we had tried to do is give them a large-span concrete slab in those areas. To do that, we will use post-tension concrete slabs, which minimises cracking. That is the only reason. We have found no major structural problem.

CHAIR—Thank you. As there are no further questions, I would like to thank you and all the witnesses who have appeared before the committee today and those who have assisted in our inspections earlier this morning in the private briefing.

Resolved (on motion by **Senator Troeth**):

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 the public hearing this day.

Committee adjourned at 11.12 am