COMMONWEALTH OF AUSTRALIA

JOINT PARLIAMENTARY COMMITTEE

on

PUBLIC WORKS

Reference: Development of facilities for 5 Aviation Regiment at RAAF Base Townsville, Queensland

TOWNSVILLE

Thursday, 24 October 1996

OFFICIAL HANSARD REPORT

CANBERRA

WITNESSES

JOINT COMMITTEE ON PUBLIC WORKS

(Subcommittee)

Development of facilities for 5 Aviation Regiment at RAAF Base Townsville, Queensland

TOWNSVILLE

Thursday, 24 October 1996

Present

Mr Andrew (Chair)

Mr Richard Evans

Mr Forrest

Mr Hatton

Mr Hollis

The subcommittee met at 9.00 p.m.

Mr Neil Andrew took the chair.

CHAIR—I declare open this public hearing into the proposed development of facilities for 5 Aviation Regiment at RAAF Base Townsville, Queensland. This project was referred to the Public Works Committee for consideration and report to parliament by the House of Representatives on 21 August 1996. In accordance with subsection 17(3) of the Public Works Committee Act 1969, in considering and reporting on a public work, the committee should 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.

Yesterday afternoon, the committee inspected facilities at 5 Aviation Regiment and the sites proposed for various components of this reference. Today the committee will hear evidence from the Department of Defence and the Townsville City Council. I now call representatives from the Department of Defence who will be sworn in by the assistant secretary.

CHAPMAN, Mr Timothy Christopher Cady, Senior Engineer, Gutteridge, Haskins and Davey Pty Ltd, 216 Northbourne Avenue, Braddon, Australian Capital Territory
FRASER, Lieutenant Colonel Anthony Peter, Commanding Officer, 5th Aviation Regiment, RAAF Base Townsville, Townsville, Queensland

HINTON, Dr Bruce Roy William, Head of Corrosion Control Group, Defence Science and Technology Organisation, Aeronautical and Maritime Research Laboratory, 561 Lorimer Street, Fishermans Bend, Victoria

McCANN, Brigadier Raymond Leslie, Director General Accommodation and Works—Army, Facilities and Property Division, Department of Defence, Campbell Park Offices, Canberra, Australian Capital Territory

MELLOR, Brigadier William Julian Andrew, Commander, Aviation Support Group, Australian Defence Force, Oakey Airfield, Oakey, Queensland

STRACHAN, Lieutenant Colonel Olga Nina, Project Director, Facilities and Property Division, Campbell Park Offices, Canberra, Australian Capital Territory

CHAIR—The committee has received a submission from the Department of Defence dated August 1996. Do you wish to make any amendments, Brigadier McCann?

Brig. McCann—Yes, Mr Chairman.

CHAIR—Would you like to read out the amendments so that they can be incorporated in the transcript of evidence.

Brig. McCann—I wish to amend the submission by rewriting a number of paragraphs. First, replace paragraph 10 with the following paragraph:

10.Under Restructuring the Australian Army, 5 Avn Regt will continue to be based at RAAF Base Townsville to provide helicopter support to land force units relocated in northern Australia.

Second, replace paragraph 15 with the following:

15.The occurrence of corrosion in the Black Hawk is identified during routine maintenance activities and corrective action taken when appropriate. Over recent years, the total number of hours spent on deeper level maintenance, referred to as an R3 service, has increased. In 1992, the average R3 service required 50 manhours of corrosion maintenance per helicopter. By 1995, the average time required for corrosion maintenance on a R3 service had increased to 230 manhours. In 1995, the additional labour cost for corrosion related maintenance only, for four Black Hawks, was $1.5 million.

Third, replace paragraph 64 with the following:

64: This proposal is related to the following three extant studies/projects: .Restructuring the Australian Army;
. Air 87, which is investigating the replacement(s) for the Iroquois and Kiowa helicopters; and
. Air 130, which is examining the procurement of additional Chinook helicopters.

Next, replace paragraph 65 with the following:

65.Restructuring the Australian Army retains 5 Avn Regt air mobility and lift roles and its basing in Townsville. The disposition of the replacement Iroquois and Kiowa helicopters purchased under AIR 87 is yet to be determined. .

The final amendment is to replace paragraph 66 with the following:

66.Under Air 130, two additional Chinooks will be based at 5 Avn Regt. Preliminary master planning has allowed for the expansion of the shelter and dehumidification facilities should this option prevail. Funding for the additional facilities will be sought from AIR 130.

Thank you, Mr Chairman.

CHAIR—Thank you, Brigadier. It is proposed that the amended submission be received, taken as read and incorporated in the transcript of evidence. Do members have any objection? There being no objection, it is so ordered.

The document read as follows—

CHAIR—Would a representative of the Department of Defence now care to read the summary statement.

Brig. McCann—Mr Chairman, this proposal seeks approval for the construction of additional facilities at 5th Aviation Regiment. The regiment provides both air mobility and battlefield support to army units. Its main customer is 3rd Brigade, located at Lavarack Barracks in Townsville, which provides a rapid deployment force capability for the Australian Defence Force through air mobile and air portable operations. Under the Restructuring the Army proposal, 5 Aviation Regiment will continue to be based at RAAF Base Townsville to provide helicopter support to land force units located in northern Australia.

Since the introduction of the Black Hawk, unexpected corrosion has been identified in the helicopters located at 5 Aviation Regiment. The level of corrosion is such that maintenance costs associated with corrosion are expected to exceed sustainable funding levels. In addition, the capacity to operate the helicopters through to life of type is diminished. To ensure that the Black Hawk can be operated through life of type, the Department of Defence has instigated a corrosion control program.

To support the corrosion control program, it is proposed to construct a number of additional facilities at 5 Aviation Regiment. These facilities will reduce corrosion caused by operation and storage of the helicopters in the humid, salt laden atmospheric conditions and include helicopter environmental protection shelters, a helicopter wash facility and dehumidification equipment for Black Hawk and Chinook helicopters. Degradation of the helicopters from high temperatures and ultraviolet radiation will also be reduced.

The existing 5 Aviation Regiment transport compound and some technical workshop facilities are inappropriately located remote from the 5 Aviation Regiment precinct. The facilities are inadequate and their locations present an ongoing cost to unit efficiency. The works proposed include the construction of a purpose built transport compound and workshop complex for vehicle maintenance and general engineering. Other ancillary works to correct existing deficiencies at 5 Aviation Regiment include the relocation of the small arms repair section and the refurbishment of the gunship helicopter arming point known as ordnance loading apron No. 6.

Subject to parliamentary approval, works are planned to commence in March 1997 with construction to be completed by December 1998. The preliminary estimate for the proposed construction works is $19.1 million at December 1995 prices. The outturn cost is $21.332 million. Thank you, Mr Chairman.

CHAIR—We will now proceed to questions. Brigadier McCann, I am not insensitive to both the sentiments of the army and particularly of 5th Aviation Regiment to the questions that I must now ask. But I feel I would be failing in my duty if I did not lead by asking you whether the proposal is in any way linked to the recent tragic Black

Hawk accident.

Brig. McCann—The answer is no. We commenced development of the 5 Aviation Regiment proposal over 12 months ago as part of the corrosion control plan. This proposal predates the accident and is not linked in any way with the Black Hawk crash.

CHAIR—I trust that you will understand, sir, if I take this one step further. Are you indicating then to this inquiry that there is no link between the corrosion on Black Hawks and that tragic accident?

Brig. McCann—Mr Chairman, the public hearings for the Black Hawk board of inquiry are still in progress. It would be inappropriate for me to discuss matters that are still before the board. I would reiterate that this proposal predates the accident. We believe it is not linked in any way with the Black Hawk crash.

CHAIR—If Black Hawks have this tendency to corrosion that has emerged over recent years, was it an army error to locate them at Townsville in the first place?

Brig. McCann—The helicopters were located at Townsville primarily to meet an operational requirement. The helicopters support the RDF—the 3rd Brigade—which is located here in Townsville. We did consider a number of alternative locations when we looked at this particular proposal, but the original decision was based primarily on operational requirements. It was also based on the fact that we had been operating Iroquois helicopters out of RAAF Base Townsville for many years—in fact, dating back to the 1970s. There had been no extraordinary corrosion problems over all those years with the Iroquois helicopters.

I might add that, to a large extent, the Australian Army's experience at the time of the introduction of the Black Hawks was based on experience with the Iroquois helicopters. Those helicopters are a much earlier technology and a much more robust aircraft. The new high performance Black Hawk helicopter is constructed of high strength, lightweight alloys. As with any high performance machinery, they require greater care and attention than the more robust Iroquois helicopter.

CHAIR—Nonetheless, Brigadier McCann, we are talking about shelters for 20 helicopters at a cost of approximately $10 million. That is the reason the Public Works Committee is here. I have to say as a layman that I could build an awful lot of carports for my Falcon or garages for a Rolls Royce for considerably less money. Would we be making better use of public resources if we located the Black Hawks—since obviously you do not need an air strip for an helicopter—15 kilometres inland and they serviced the people at Lavarack from a slightly inland site?

Brig. McCann—Mr Chairman, we did consider that option as part of this proposal. I would say that a carport for my Holden Commodore and your Mercedes Benz—

CHAIR—Falcon.

Brig. McCann—is probably of a smaller nature than a Black Hawk shelter. These shelters, apart from being quite large—the Black Hawk is quite a large aircraft—do have certain features to allow for security, fire detection and protection and for some work to be undertaken in the shelters. The work also involves the provision of facilities to supply dehumidified air to also assist in the corrosion control program.

Having said that, we did consider options away from RAAF Base Townsville. We looked at Oakey in the Darling Downs of south-east Queensland and at Macrossan, which is a present Defence property on the way to Charters Towers. We also considered Lavarack Barracks where the 3rd Brigade is presently located. The difficulties with these options primarily related to the additional cost of new investment, plus the fact that we would be leaving behind some very good facilities on the RAAF base that would be under-utilised.

We believe that to move the helicopters to another location would cost in the order of $80 million in capital investment. It would also drive a very large increase in operating costs. The helicopters are here to support the 3rd Brigade, and that was important to our considerations. It was not possible to locate the helicopters at Lavarack Barracks primarily because of noise limitations with urban encroachment right up to the barracks boundary. In fact, some new urban development exists right across from the front of the barracks.

CHAIR—There will be a number of questions that members will want to ask because of the evidence that we saw yesterday in the tour of 5 Aviation Regiment. But what strikes me is that this cannot be extraordinary to Australia. I mean, we are not the only people operating Black Hawks beside the sea, I would imagine. It would not take much imagination, even for a layman like me, to envisage a number of helicopters maybe even Black Hawks being located on maritime vessels which would mean they would be in a perpetual sea atmosphere. Can you comment on that; in other words, was the Black Hawk a wise choice given the susceptibility it has shown; and are other countries dealing with this in any other way that indicates the wisdom or otherwise of this proposal?

Brig. McCann—If I could address basing the helicopters at sea on ships. The maritime version of the Black Hawk, the Seahawk helicopter, is of a different build standard and is marinised at a much greater cost than the Black Hawk to guard against that sort of corrosion. Certainly, the American army operates many Black Hawks in continental USA and also in Hawaii. I visited Hawaii recently. None of the Black Hawks in the 25th infantry battalion are under cover but the circumstances are different. While Hawaii is a small island, the army air base is situated a few kilometres inland at a couple of hundred feet elevation. It is protected by the surrounding topography. At the time of purchase there were many Black Hawk helicopters operating in continental US, but we were probably not aware that the particular environmental conditions here in Queensland

would be fairly different from that experienced by the Americans. At that time, there would also not have been much data with a new helicopter such as the Black Hawk, particularly on its operating experience.

CHAIR—If we were to buy a new generation of Black Hawks, would they be more corrosion proof than the ones that we have already acquired?

Brig. McCann—We would certainly build on the experience we have gained with the Black Hawk. As part of the acquisition strategy, we would carefully look at corrosion issues—along with a whole range of other issues, I might add. We would ensure that the project teams involved with the acquisition of any new aircraft or even with the modification of existing aircraft would be made more aware of the importance of corrosion and its significant impact on the through life operating costs of the aircraft. We would ensure that the Defence Science and Technology Organisation was involved with the project teams so that corrosion prevention and control issues are covered early in the various stages of the equipment acquisition strategy.

CHAIR—I am sure other committee members have questions. Mr Forrest, if you would like to carry on with questions.

Mr FORREST—I have a series of questions on different subjects but just to follow that theme a little further. I notice that the expected life of these craft is 2015. I am wondering if that period of time is consistent with what was expected at purchase or whether this corrosive problem has had any implications on its service capability?

Brig. McCann—With the life of the aircraft at the moment—this may not be answering the question exactly—the improved corrosion control plan will allow the aircraft to be operated through to that planned life of type but, more importantly than just operated through to life of type, be affordable. The work you would have seen yesterday is very labour intensive. We are just as interested in reducing the costs of the corrosion as in ensuring the sustainability of the aircraft to life of type. I mentioned earlier the 1995 experience that corrosion control work on four helicopters had cost us $1.5 million in labour costs.

Mr FORREST—The proposal all-up plans to spend in excess of $20 million. How does that relate to the capital value of the total asset that we are trying to preserve?

Brig. McCann—Each Black Hawk helicopter is worth approximately $24 million. Only part of the proposal relates to shelters for the helicopters. The other work involves relocation of the transport compound and construction of new workshops. The element involved with protecting the helicopters is only of the order of $11 million. A single Black Hawk is valued at about $24 million. We would expect that we would get our money back on the shelters in about two years, based on the corrosion costs we were experiencing in 1995. The Black Hawk fleet is valued at about $792 million.

Mr FORREST—Well, that is not a bad investment. How is that $24 million capital value of an individual aircraft determined; is that the new purchase price?

Brig. McCann—At the moment the Department of Defence is required to value its assets in the same way as all government departments with the Commonwealth's move to accrual accounting. That price is an assessment based on the initial purchase price.

Mr FORREST—I have a couple of questions about the technicalities of the washing facility. I understand that it is proposed to modify a truck wash facility. I am just wondering how that works with the large span of the rotors. Do they have to be removed to allow the craft to come through?

Mr Chapman—Mr Forrest, if I could answer that question. The truck wash would normally have a bar going across the top that would ride above the truck to help control the gantries that undertake the washing action along the truck. The concept that is being examined is to use the existing technology in a truck wash but to modify it by removing that top gantry. You would have noticed the droop on the helicopter rotors. The time and labour in removing those rotors is considerable. It would not be effective if we had to remove those rotors to provide that sort of wash facility. The concept being looked at is a set of gantries that run along the helicopter, underneath the higher point of the rotors as they droop. The helicopter would be sprayed without any supporting gantry across the top.

Mr FORREST—That is why I asked the question. I thought there might have been labour involved in removing rotors. Mr Chairman, I would like to talk about the cost estimate. I am aware that we have been presented the cost estimate commercial-in-confidence and I am one who would preserve the integrity of the tender process and would not want the details discussed. But it does worry me a little when I see the design plans, and in particular what seems to be an exorbitant cost to build hangars. I have built quite a few things myself, like the chairman. It worries me a little bit that, just because the tender documents have 'Department of Defence' stamped on them, we might be paying more of a premium. Are these estimates based on actual tender values of similar projects; and also how does the department ensure that its tenders pass a reasonable market test so that taxpayers can be confident they are getting value for money?

Brig. McCann—Firstly, I would reject totally any notion that there is a mark-up on the price for Defence construction work. We get very competitive prices. We have a very well established two-stage tender process, a process which meets the guidelines of the Construction Industry Development Agency. In fact, Defence is recognised as leading the way with new initiatives in construction industry tendering.

I run many capital works projects around Australia and I can assure this committee that our two-stage tendering process attracts very competitive prices. We certainly seek value for money for the taxpayers' dollar. Our whole assessment process is based on value for money.

In respect of the prices, we have not progressed at all to detailed design. The processes which get us to examination by this committee are such that we develop only outline and schematic plans. But those costs that have been given in the confidential cost estimate are based on experience with many other projects, not just defence projects but industry projects. They are not costs which I have dreamed up. We have engaged expert engineering consultant advice to prepare those costs that are included in the confidential cost estimate.

Mr FORREST—Could you explain how, once the documentation is completed to detail, the tender process will proceed; will there be individual separate contracts for smaller works to give locals an opportunity here; how does the tender process work?

Brig. McCann—With this particular project we will be using one of the more innovative forms of delivery developed by the Department of Defence, which is known as the managing contractor form of delivery. It is a variation of an industry standard known as construction management. Under this arrangement, we will engage a managing contractor who will be responsible for both the design and the construction of the various elements of the project. He will engage subcontractors under trade packages to execute that work.

There are a number of benefits with this approach. First, it does provide good opportunity for small and medium businesses in Townsville to be competitive for the trade packages. Second, it provides security of payment for the subcontractors, because the Department of Defence pays the subcontractor through a trust account. So there is protection for the subcontractor. In addition, we are provided with great flexibility in how we can actually go about designing the work, because we have an expert building manager involved in managing both the design and the construction. It certainly gives us the flexibility to value manage the solutions which you see before you. I might add that the level of detail provided to the committee is only outline information. That will be developed much further and subjected to rigorous value analysis as part of the standard development process.

Mr FORREST—I notice, quite rightly, that there is a contingency built into the estimate of eight per cent which gives a total project cost. But then there is an additional line item referred to as an outturn cost. Why is there an additional contingency on top of one that has already been allowed?

Brig. McCann—There is only one provision for contingency. For budgeting reasons, Defence allows about an eight per cent contingency for normal projects. It is there for a number of reasons. It is to take account for variations in market conditions. Also, at this stage we have only given you outline solutions. There might be some difficulty in translating that outline solution to reality. The dual purpose of contingency is to provide for market conditions and also any problems that occur during the development from the outline sketch stage.

The outturn cost is a different issue. The first figure is described as a program cost. It is set at December 1995 prices and we use that for programming purposes. But we then add an escalation factor based on our assessment of the duration of the project to produce an outturn cost. The significant factor about an outturn cost is that it becomes a cost cap. It is Defence policy that the outturn cost is not exceeded on any project. I am required to delete items from the scope of the works if I cannot contain the work within the cost cap. Alternatively, as an incentive, if we can more efficiently deliver the work and I have some savings, I am able to apply extra product within the cost cap.

Mr FORREST—So the additional line item for an outturn cost is some allowance for CPI, prolongation costs or something like that; is it?

Brig. McCann—It is basically an adjustment for indexation. It is not the CPI; it is some other index provided to us by the Department of Finance which takes account of building price indices.

Mr FORREST—Okay. I am asking these questions on behalf of my constituents. The chairman thinks I have a vendetta, now representing the client, to make up for sins perpetrated on me in the past.

CHAIR—I think for the purpose of hearing I should point out that Mr Forrest comes to the hearing as an engineer. We are very pleased to have him on the panel. While my approach to engineering has always been a pliers and wire job, he takes a much more professional view. I am grateful for that.

Mr FORREST—I just want to be satisfied on this market test. I am mindful that defence projects have additional hardening and extra precautions for fire and so forth. I note that the hangars particularly have brick walls separating them for fire purposes and so on. But I still want to be satisfied on this question that the tenders are tested against the market for more conventional building projects. At what stage would you satisfy yourselves that the tenders complied with the reasonable market test—before tenders are issued or is it assessed afterwards?

Brig. McCann—I can only reiterate what I said before. All our work is offered through a competitive tendering process. In the first stage where we seek invitations to register interest, typically 60 to 80 large building companies respond to an invitation to register interest. They are the best and biggest building companies in this country. We reduce that through a merit selection process based on well-established criteria to a short list for tendering. At the tender stage, depending on the form of delivery, we have developed a pre-tender estimate. We use independent quantity surveyors to validate that pre-tender estimate. We are then assisted in selecting the preferred tenderer by industry experts to make sure that the taxpayer does in fact get value for money.

Mr HOLLIS—If I can ask one question on this. Brigadier, by inviting people to

register an interest, are we not therefore excluding many potential tenderers who could perhaps provide a service? This is what has always worried me is that not only in defence but also in many other contracts it seems to me that there is a panel or a group of people who are invited to register interest. There might be many other people out there in the community or in the industry who would want to tender but, because they have never been invited to register an interest, they are excluded. I know the reasons for that, as you just said, you want to have the best and the brightest—or words to that effect—but it always seems to me that it is almost impossible for other firms to break into that magic circle. If the possibility to break into the circle is open, I think I would be happier. It is the difficulty of getting into that selected group who are invited to express to register an interest.

Brig. McCann—Mr Hollis, I agree that the construction industry is a are very competitive business. That suits me, of course, because I can get good prices. I would just correct a possible misinterpretation. When I said that we invite companies to register interest, that invitation to register interest is by public advertisement in the national press and in the local press for the particular job here in Townsville. The industry knows that. They know what paper we advertise in. Everyone is aware and everyone can bid. Everyone has an opportunity to bid at the invitation to register interest stage.

I am not saying it is easy. Everyone cannot get the job. In this particular case in Townsville, we are using a managing contractor form of delivery where the project will be split up into trade packages. The nature of trade packages and the magnitude of the work is such that local companies in Townsville will be competitive. Some of the big companies are not competitive for some types of work. Obviously, some small companies are not suited to undertake large jobs and in those circumstances I would be placing taxpayers' money at risk. I believe that everyone gets an opportunity to bid. We are interested in getting the best person for the job and in getting best value for money for the taxpayer.

Mr HOLLIS—Thanks, Mr Chairman.

Mr FORREST—Perhaps just to ask that a different way. I am comfortable with that selection process as long as the selection of any subcontracting, which is in smaller components and likely to come from this Townsville area, is not left to the main head contractor. For example, the hangars are a portal frame construction. A workshop here of a reasonable size could manufacture the steelwork for the frames, have them painted, and then delivered to site and erected. I am quite familiar with that. It is a typical farm shed—I know that we are in the cyclone category here—but a bit of extra fly bracing goes a long way. But if you choose a national contractor, he may not have those facilities here and he would make his own choice about where he subcontract his own work—

Brig. McCann—Mr Forrest, again I think you may not have totally understood what I said before. The subcontractors engaged by the managing contractor to undertake

trade package work will do exactly as you said. There is no doubt that local suppliers and builders will be very competitive at doing that sort of trade package work.

I also have limited ability to intervene. The managing contractor is meant to have pretty much absolute commercial flexibility in how he goes about the job. I cannot intervene in that. However, we are able to influence the managing contractor to some extent. When he establishes his panels of suppliers and subcontractors, I can add or subtract from the lists he has developed through his own competitive processes.

The arrangements for more traditional forms of delivery are quite different from using a managing contractor approach. I appreciate that we have a new committee, Mr Chairman. If you saw value in it, I would be happy for the Department of Defence to arrange a briefing of the new committee members on Defence policies in relation to capital facilities, to explain the various acquisition strategies which we typically pursue and also to outline the five standard forms of construction contract. It is a reasonably complex area.

We are talking about different acquisition strategies, and with those strategies we might elect to use different forms of standard contract. For the benefit of the new committee, our five standard forms of contract are: head contractor, trade contractor, design and construct contractor, document and construct contractor and managing contractor. We also have a separate form of contract—a plain English simple contract—for medium works. Typically, they are up to $6 million which is your threshold. So any tender package for work of that magnitude, we would go out using a plain English simple medium works contract.

We have a flow chart contract document for minor works—minor works are those up to $250,000. We would be happy, Mr Chairman, if you saw value in it to arrange a briefing for the new committee members, of some of the processes as well as discussion on outturn costs, contingency costs and program costs.

CHAIR—Brigadier McCann, it would be valuable. I am sure the committee would be happy on any one of its regular Thursday morning briefings to arrange an opportunity for you or for representatives of the ADF to offer such a briefing. It is not really a matter of it being a new committee. Mr Hollis has been on this committee for 12 years, and I have been on and off it in that period of time—we would also find that briefing useful.

As you will appreciate, fundamentally we are here to play a watchdog role on public expenditure. In that sense, the questions from Mr Forrest are entirely appropriate. It is a matter of being assured that what is a very expensive project for the construction of a shed—I know I am being simplistic—be pursued by the committee. What Mr Forrest and I seek to be reassured of is that, between his engineering and my wire, we could in fact be tenderers as well so that no small Australian loses out on the opportunity to participate in this expenditure of Commonwealth money.

Brig. McCann—Mr Chairman, in responding to the questions, I trust that you have not formed the view that we do not welcome examination by your committee. We see your review as a very important part of the process. We have to be sure that we have our ideas right. You make us sharpen up our footwork. Before we reach your committee, I am subjected to various internal reviews at both departmental and army level. So there are a few checks and balances in the system to ensure that, at the end of the day, we get a reasonable result for the soldier and for the taxpayer.

CHAIR—I only wanted to reassure you of the committee's role as watchdog in that context—that the german shepherd you knew of the past has not become the labrador of the new parliament. That was all.

Mr FORREST—I would certainly value a briefing like that, Mr Chairman. I am not making any assertions with my questions. I think they are questions that taxpayers expect to be asked.

Brig. McCann—I accept that totally, Mr Forrest.

Mr FORREST—I am just wondering if we could talk a bit more about the problem with the aircraft. The corrosion related maintenance of the aircraft is very labour-intensive because it involves a manual washing facility. We saw that yesterday. How is that estimated cost of maintenance broken up? There would be labour but would there also be a certain amount for material? I noticed a lot of foam out there yesterday. The cost would not just all be labour. There would be other components which that cost is built up from. Is that right?

Lt Col. Strachan—Mr Forrest, I assume you are talking about the $1.5 million in labour costs for corrosion related maintenance?

Mr FORREST—Yes.

Lt Col. Strachan—If you extrapolate that over the cost of the fleet it comes up to $22 million or something.

Mr FORREST—I am a bit confused about that. If we can just talk about how that labour cost that is currently being expended is made up; in other words, over 20 years it will be the cost of a helicopter. That is my question.

Brig. McCann—The prime costs for the corrosion control program relate to the additional work involved with the routine R1, R2 and R3 servicing and also with the requirement for regular washing. As you saw yesterday that is a labour-intensive activity. There are additional costs involved with the provision of detergents and sealants. If we are not into a structured corrosion control program, the costs associated with the deeper level maintenance, the R3 servicing, can be quite expensive. We quoted the figure that in 1995

the extra cost was $1.5 million for four helicopters. The sort of things we are talking about is the actual costs involved in detecting the corrosion, replacing damaged components, repairing and repainting—work of that nature.

Mr FORREST—What I am getting at is there will still be an ongoing element of expenditure even if the truck wash is there of some labour and also to ensure that the process was carried out. What I saw yesterday was a fairly detailed process. There was a man standing on the rotors and making sure it got in the right places and so on. With a mechanical process, there would still need to be some sort of inspection to make sure that the right places were being washed. There will still be a recurrent amount of money; is that right?

Brig. McCann—There will still be a significant cost involved with the corrosion control plan. I might add there is a very significant cost associated with the mere ownership of such an aircraft. We are talking about a sophisticated aircraft. The ownership and operation of these machines is very expensive.

Mr FORREST—But with the spending of the amount of money that is envisaged here, would it be in anticipation that you could reduce that $1.5 million? I am trying to find out what amount it could be reduced to.

Brig. McCann—There will be a cost saving associated with the automated washing process, and we can give you a figure on that. The other costs are probably a bit harder to measure. The provision of shelters will itself protect the aircraft from salt deposition as well as from ultraviolet radiation. But, apart from giving you the costs which we think we will save with a more automated washing process, some of those costs would take some time to establish using baseline costs which we have with present day experience.

The new washing facility, which this proposal will provide, will save $4,000 a week over the existing manual operation which you witnessed yesterday. But we are only talking about the washing process, $4,000 a week saving. There will be many other flow-on savings from better protection provided to aircraft components.

Mr FORREST—I understand that currently the washing is undertaken by civilian contractors.

Lt Col. Strachan—Yes Mr Forrest, contractors.

Mr FORREST—There will still be an element of civilian involvement in that new process?

Brig. McCann—The new process will be outsourced as it is at the moment.

Mr FORREST—I am pretty well done and satisfied.

CHAIR—Thank you, I will turn to my left. It is probably fair to say that Mr Evans has an interest in washing anything vehicular in that he tells me he has discovered a pelt to replace the chamois.

Mr RICHARD EVANS—I am interested in the rapid response time for the helicopters. At present you have a 30-minute response time. Will that alter if you have all these helicopters under cover?

Brig. Mellor—I am not sure what you mean by response time. Do you mean the time required to get the aircraft on line and ready to go?

Mr RICHARD EVANS—Yes. Will it change the efficiency of that if the helicopters were under cover?

Brig. Mellor—It should produce better availability of the aircraft; in other words, there will be more aircraft serviceable. But getting them on line: if you were required to get the aircraft on line in a very short order, say less than half an hour, they would not be in the shelters in the first instance and you would have some knowledge that that was coming up. Even our shortest notice to move now would permit us to keep them in the shelters and get them out in time to go to wherever we have to go.

Mr RICHARD EVANS—So there will be a reduction in efficiency in that regard then, in a general sense, unless they are already out.

Brig. Mellor—No, I don't think so.

Lt Col. Fraser—If I understand your question correctly, if we did not know we had to go flying, it takes about 30 minutes to prepare an aircraft, start it and get it off the ground. But we have degrees of notice. In any one day we forecast what the requirements are for the aircraft. We have standing requirements for numbers of aircraft that we need available so that we can prepare those aircraft. The envisaged method of operation would be to bring them out of the shelters at an appropriate time to allow us to start them and to deploy them. We can do a number of checks in the hangars themselves. For example, we can load different navigation things into the computers by using external power and without having to start up the engines.

I do not see an actual loss of efficiency other than if it was an all hands to station and deploy every aircraft for a reason of a fire or something ridiculous coming through like a tornado that had not been seen, then yes that would slow you down some time. But, realistically, it would probably only be by about five minutes. I do not see that as being a problem.

Mr RICHARD EVANS—You have identified corrosion as a problem for a number of years. Have you identified that this particular construction will in fact solve the problem or are you hoping that it will solve the problem?

Brig. McCann—We believe the corrosion control plan will address the major problems. There will always be an ongoing corrosion potential, but what we are saying is that that will be manageable.

Mr RICHARD EVANS—So it is an estimate that it will improve the problem.

Dr Hinton—If I could just add to that, Mr Evans. We have done quite a few trials at our laboratory in Melbourne. We have shown unequivocally that, if you dehumidify the air in which an area of metallic structure is corroding, the corrosion process will cease. It will stop completely. The plans are to dehumidify the shelters to below 40 per cent relative humidity. We have shown unequivocally that, at and below that level of humidity, the corrosion process will stop.

Mr RICHARD EVANS—Given that the current maintenance of washing is every 18 days or so at the moment, is that going to be the same sort of routine; is it still going to be every 18 days or will it be less or more?

Dr Hinton—It is my understanding that the 18-day cycle will probably remain. You have to understand that during normal operations the aircraft gathers a lot of soil and dirt, et cetera. I would not imagine that you could send that out even further. Perhaps the maintainers might be better placed to answer that question.

Lt Col. Fraser—Sir, I do not see any reason why we should change that at this point, given that we also continually fly them over the water. The aim of the washing process is to ensure we take all that residue off the aircraft, all the salt build-up off the aircraft.

Mr RICHARD EVANS—Has there been in the past some major occupational health and safety issues in maintaining the helicopters? I noticed yesterday that there were high winds and people were on the machines.

Lt Col. Fraser—It is a risk to them. In particular, out in the sun the complete time is one of the risks. With the occupational health and safety guidelines for us in Defence and for army, it is in our best interests to protect the individuals as much as we can. Additionally, whilst we take every step possible to ensure that they are not exposed to hazardous materials, clearly being continually sprayed with lots of foam and dealing with the wind is an occupational hazard.

Mr RICHARD EVANS—Has there been any incidence of that in the past?

Lt Col. Fraser—No, I am not aware of any.

Mr RICHARD EVANS—And with the new process, any potential risk is obviously reduced.

Lt Col. Fraser—Yes, it is.

Mr HATTON—My first question relates to a comparison between the Black Hawk and the Seahawk. I have been told by Brigadier McCann that the Seahawks are marinised at a much greater cost. What is the cost differential between a Black Hawk and a Seahawk in the first instance. Then in terms of replacement I want to go to series of questions about the utility of what we have currently being put into place, if it is approved, and looking at a Seahawk type acquisition.

Brig. Mellor—I don't know the cost differential between the two. If we can take that on notice, we will get it for you. However, they are two totally different aircraft designed for two totally different roles. It is not a matter of saying that a Seahawk could do a Black Hawk role. One is an anti-submarine helicopter that is full of electronic devices to detect submarines. The other is a troop lift helicopter that is full of space to put in soldiers.

Mr HATTON—My point there would be the marinising not the operational role.

Brig. Mellor—Sure. You could marinise a Black Hawk, and we are looking at the cost of marinising a small number of Black Hawks to put on board ships. I do not have a cost of that at the moment, but it is a fairly expensive option per aircraft.

Mr HATTON—In terms of comparing this corrosion control plan with that of a marinised aircraft, do we have any idea what the different cost effects of that would be over the life of the craft?

Brig. Mellor—No, I do not.

Lt Col. Fraser—If I can address that in principle. It is not just in the costs. Navy also do have a corrosion control plan; so they still have to carry out quite an amount of maintenance on the Seahawk and their other rotary wing aircraft that they use at sea. You cannot just marinise the aircraft and then the problem goes away. They still have a requirement to wash the aircraft and carry out regular corrosion maintenance.

Mr HATTON—There is a higher level of protection but it is not absolute at all.

Lt Col. Fraser—That is correct.

CHAIR—Can I just pick up that point, Mr Hatton, and take it one step further.

From what you said yesterday I came away with the impression that with modern alloys you have this constant balance between strength, weight and corrosion. That is, you could build them almost corrosion free—I am not sure is that is right—but then they would not nearly as efficient in flying and would be heavier all around; am I right about that?

Brig. McCann—We will get Dr Hinton to go through some points there, Mr Chairman.

CHAIR—I was responding to what I thought Mr Hatton was alluding to; that is, how much longer do we go on putting up with corrosion if there is another way around it that others have found.

Dr Hinton—You have to strike a balance between maintaining the aircraft, keeping it in a pristine condition, and operating it. It is true that, if you are having a high performance aircraft, you need to trade off something in other aspects and that is on the deterioration side. You cannot put extra layers of paint, extra layers of sealant and extra layers of marinisation and expect to maintain the same performance level. You cannot wash it every day and expect to maintain the same level of operation. It is all a fine balance. That is what the army are always trying to achieve: to operate the aircraft as it was meant to be operated and not to preserve it as a museum piece.

Mr HATTON—I would not expect it would be. Obviously with the deeper levels of maintenance that has had to be done on these helicopters, there would have been problems to this point in terms of availability of those craft. So part of the balancing act is that you need as many of those craft available to use as you can at any one time. With the amended figuring, we have gone from 50 to 230 hours in terms of R3 servicing. With this corrosion control program operating, if we fund the rest of this, would you then be expecting to get greater serviceability and availability out of your fleet?

Dr Hinton—It is a much more effective and efficient way of dealing with the corrosion problem—trying to treat it globally by dehumidification, washing and shelter—rather than individually going in, pulling apart the structure and applying huge levels of marinisation and internal protection. That is not a very efficient way of doing it and maintaining your operating requirements.

Brig. Mellor—If I could just add to that. The availability problems that have faced the Black Hawk in the past have been the result of numerous other factors, including the application of resources. The corrosion added to that. A lot of the other factors have also been reduced now, and availability is getting up towards where we would want it to be. This will ensure that the costs for maintaining that availability at the level that we want will now start to reduce, because our requirement for corrosion control in the R3 servicing, in the deeper level servicing, will reduce as a result of these actions.

Mr HATTON—I noted that there were some very specific problems with the

Black Hawk, some that were expected and others that were at a deeper level than that. After 2015 we would be looking at replacing these craft. Now that we have the experience of these corrosion problems which will be ameliorated by this program, in the tendering process for that replacement—in the construction of it—would we take particular note of the weak points that are currently identified in the Black Hawk that may have come up through the manufacturing process to directly specify those areas that are most at risk and to try to cover that for the future? We should still have a forward defence posture and, obviously, with this amount of money being spent, we are going to be in Townsville for a very long period of time.

Brig. Mellor—I would agree with all of that. The project that will look to a Black Hawk replacement, whenever that comes, will review the experience that we have had with the Black Hawk and incorporate that into what we want to replace it with.

Brig. McCann—If I could just add to that, Mr Hatton. Our previous experience had been with the Iroquois helicopters, and that experience did not indicate the corrosion potential that we were expecting. As I responded to an earlier question, with future acquisitions not just in the longer term for the Black Hawk replacement but we are looking at some other helicopters under a project called Air 87, we would be looking to use people like Dr Hinton from the Defence Science and Technology Organisation and to get them involved early in the acquisition process well before any decision is made on the type of aircraft, its specification and the detailed tendering processes. In fact, DSTO are involved in those sorts of activities right now with Air 87.

Brig. Mellor—Can I just add that: in the reintroduction of the four Chinooks and the two additional ones under Air 130, the Black Hawk experience with corrosion has been well and truly taken on board. The Chinook helicopter has a very aggressive corrosion control program.

Mr Hatton—Thank you. Am I right in terms of the figuring on the extra costs for maintenance that, for the whole of the fleet, we are virtually up for the cost of one new Black Hawk a year? That is, if four Black Hawks have cost $1.5 million in extra maintenance, if you extrapolate that to the fleet, as Lieutenant Colonel Strachan indicated, you would be up for about $22 million.

Brig. Mellor—I do not think it would work like that. I think that will depend on the number of R3 servicing done per year. We do not put the whole fleet through an R3 every year. An R3 is done only at 500 hours. Based on an 8,000-hour ROE, you will only do 16 R3s. You will do roughly half the fleet, in which case the cost will be—

Mr HATTON—So $6 million a year in extra cost over and above what you are doing with maintenance.

Brig. Mellor—Over and above what we are doing. Now, individual aircraft will

vary that figure of course because some aircraft will have more corrosion than others.

Mr HATTON—We are looking at this facility being able to chop back against all of that extra cost over and above.

Brig. Mellor—Absolutely.

Mr HATTON—Can I ask a specific question in relation to the dehumidification process. Dr Hinton indicated that was a dehumidification of the whole of the garaged area, but the notes seemed to indicate that dehumidification would be specific to different parts of the air frames—

Dr Hinton—No, the plan is to dehumidify the interior of the aircraft. The idea is that steps will be taken to reduce the corrosion on the exterior of the aircraft—the washing procedure and the regular application of corrosion prevention compounds. By dehumidifying the interior structure of the aircraft, you control and arrest the corrosion on the interior. You cannot wash the interior of the aircraft; you can wash certain local areas, if you are so inclined; but, generally, you do not wash the inside of the aircraft. The idea is not to dehumidify the shelter. It is to pump dehumidified air inside the aircraft and let it diffuse around, reduce the humidity, dry out the corrosion and stop it.

Mr HATTON—That was my misunderstanding from reading this submission. What I was interested in is that the process consists of actually pumping air through those parts of the structure that you can get at. In your testing that you have done so far, the indication is that that can actually stop that deeper corrosion.

Dr Hinton—In fact, the army has done the tests on the Black Hawks up here at Townsville. The MEA section from Oakey did the tests some years ago. They have shown that, with various configurations of ducting input into the air frame, the humidity in most parts of that air frame can be reduced to below 40 per cent relative humidity.

Mr HATTON—Can I just ask whether we have the same problem with our car and truck fleet or are they like the Iroquois because most vehicles that are standing out here near the sea are going to rapidly rust and deteriorate. The vehicle fleet that we saw looked like it was in pretty good condition.

Brig. McCann—With the vehicle fleet, we are not talking about the same high strength lightweight alloys. The road vehicles are much more robust. The experience is that components like the canvas covers on the back of the vehicles deteriorate in a more costly way to us than other components of the vehicles. We are looking at sheltering vehicles. Certainly, one of the aims is that we would like to get those vehicles with a large canvas component under cover. We would also like to get some of the more sensitive parts of some of the fleet under cover. They tend to be vehicles with workshop fitouts or electronic communications fitouts. Not here but in some of our units it also includes vehicles with electronic warfare fitouts, which need physical protection as well as

environmental protection.

CHAIR—I do not want to be leading you, Brigadier McCann, but to build on the comment Mr Hatton just made. Just as the duco on my Falcon does not fade as quickly when it is kept in a shed instead of out in the sun, the instrumentation is also better for it. It is fair to say there are savings from army's point of view in placing the Black Hawks under shelter because the avionics and expensive computers would not break down as quickly—I am just presuming on all of this—but there must be some advantages more than just the air frame in the sheltering process. That seems obvious because it applies whether it is my car, your truck or the Black Hawk.

Brig. McCann—We are talking now more in terms of damage likely to be caused by ultraviolet radiation. Do you want to add to that, Dr Hinton?

Dr Hinton—There is no doubt that the ultraviolet radiation does accelerate the degradation of the paint schemes and sealant used in the air frame.

CHAIR—I was thinking more of the computer facilities being exposed, not just the aircraft.

Dr Hinton—That is not an area of my expertise, but I would imagine that a lot of those avionics components would be rated to withstand high temperatures. A lot of the wiring would degrade over time under the heat cycles experienced by the aircraft parked in the sun.

CHAIR—That is a very expensive part of the Black Hawk, presumably.

Lt Col. Fraser—If I can help. You are quite right that every component will suffer eventually from ultraviolet radiation—from simple things like seat cushions or seat belts. Ultimately, the longer they are in the sunlight, the more that they deteriorate. They are designed for battlefield conditions but, whilst they are not actually in battle, anything would enhance their life of type.

Mr FORREST—Just as a supplementary on that point. Obviously, that aspect is really just a bonus. The primary consideration is the corrosion, because that kind of protection could be achieved with a much simpler shelter similar to what the FA18 fleet has at Tindal.

Brig. McCann—Yes, we agree, Mr Forrest. The primary consideration is the contribution which the shelters will make to the corrosion control program.

Mr FORREST—Is that why the hangars have to be more substantial than the shelters at Tindal?

Brig. McCann—We are talking about enclosing, and various measurements have been made on that. Dr Hinton could probably just describe the effect of enclosing with doors.

Dr Hinton—Yes, Mr Forrest. We have done trials at Townsville, Williamtown and Sale. The idea is to eliminate the rate at which salt is deposited on the aircraft. Sure by just parking the aircraft in a carport style structure you can reduce the salt deposition rate to a degree, but by fully enclosing the aircraft you can shut it down to almost zero. The only salt you will get in is through natural ventilation or whenever you open the door.

Mr FORREST—I am probably usurping Mr Hatton's questioning but that could be achieved by putting doors on the end of those archway structures. Why do we have to go to a substantial portal frame arrangement?

Dr Hinton—I don't know. Perhaps we could ask the engineering consultants.

Mr Chapman—There are a couple of issues associated with the siting constraints at 5 Aviation Regiment. In particular, there are some height constraints in that area for navigational aids and runway operations. Because of those height constraints and the fact that the Chinook and the Black Hawk helicopters, unlike a fixed wing aircraft which has a high point at the centre, have a high point virtually across the width of the rotor, the portal frame is a more economic way of meeting the height constraints as well as giving the appropriate clearances for the aircraft.

Mr HATTON—This is more a comment than a question. I am interested in your design philosophy on page 8 which states:

. the provision of austere and utilitarian facilities of efficient design suitable for the harsh climate.

This indicates some difference between army and air force in terms of design philosophies.

Brig. McCann—There is certainly no difference in design philosophy. What we have here is a different type of facility. We are referring to the air force's chain of bare bases across northern Australia—the Weipa, Derby and Learmonth bases. They are not manned bases; they are only occupied in a contingent situation.

Mr HATTON—In terms of the utility of these facilities, in moving the vehicle fleet will we also achieve savings because you are going to move part of that vehicle fleet under carports and so on?

Brig. McCann—There will certainly be savings associated with gains in unit efficiency and some minor manpower saving. What we are particularly interested in is improving the operational efficiency of the 5th Aviation Regiment. It is a very difficult job trying to manage an organisation like the 5th Aviation Regiment. It is a high-tech end

of the business associated with the maintenance and operation of the helicopters. The vehicle fleet is significant in itself. There are over 200 vehicles with the 5th Aviation Regiment. The present arrangements are dysfunctional. We have vehicles and workshops and servicing facilities separated by distances of a kilometre or more. Bringing those elements together will obviously make a substantial contribution to unit efficiency.

Mr HATTON—And also to the security of those assets.

Brig. McCann—There will be an improvement in both security and control from the unit's point of view. The earlier Black Hawk facilities were developed at a time when the air force still operated the helicopter fleet. The air force operates quite differently from an army unit. The air force develops and generates its capability from the air base itself. The air base is an integral part of air force capability, but that is not the case with the army. The army in a contingency situation lives and fights in the field. The modus operandi of the air force is such that they have different requirements for facilities on an air base than the army would. In fact, we do not have many army units on air bases around the country.

Mr HATTON—Just a couple more questions, Mr Chair. You also state on page 8:

. utilisation of readily available and durable materials that combine long life with minimum maintenance.

I know that is referring to the packaging for the Black Hawks and so on. But effectively would you see that the garaging to be provided would bring the Black Hawks under that kind of definition which they would not fit under at the moment? You are not only making cost savings but also rejigging those Black Hawks so that they have less maintenance and a longer life because they have been brought under that shelter.

Brig. McCann—Sorry, could you repeat the question?

Mr HATTON—I know that was difficult to understand. What I was doing was making an analogy with your design philosophy. That design philosophy in terms of the building is to use materials so that you have minimum maintenance costs and also an extension of life. In other words, I was making an analogy with the Black Hawks and bringing them under that design philosophy where they have not met that.

Brig. McCann—The difference, of course, is that we are talking about low-tech building structures—in fact, one of the committee members described them as tin sheds—and at the other end of the spectrum we are talking about very high technology equipment. So we are not making like with like comparisons.

Mr HATTON—I was just doing that in terms of the maintenance and life of type. My last question relates to the washing facilities. Given that you are still working on this,

is the design for that being done by the RAAF or by someone else?

Mr Chapman—As far as the washing facility is concerned, there are a number of companies out in industry that provide washing facilities. We have sought advice from them on whether or not this capability can be provided. As part of developing this concept, we will be seeking further advice from industry on how best to achieve it.

Mr HATTON—So it is a combination of the two. That is why you indicated it would be outsourced rather than done within the RAAF.

Mr Chapman—The outsourcing is an issue of who does the washing as opposed to who develops the concept for actually providing the washing facility. Perhaps that is better directed to the Brigadier.

Brig. McCann—To answer your question, Mr Hatton, we are talking about a government owned facility operated by a commercial contractor. We are only contracting out the labour component.

Mr HATTON—Can we make any money out of this facility, if it works, in terms of selling the idea to overseas forces?

Brig. McCann—We will just have to wait and see. There might be some potential for that. As part of tendering for that component of the work, we believe that would be something that is best left with the industry to exploit.

Mr HATTON—In other forces, is there any automation in the washing or is it all still done by hand?

Mr Chapman—In examining the options available, air forces around the world traditionally wash their aircraft. In some cases it is done by hand; in other cases robotic devices are used for some of the larger commercial aircraft; and there are also low-tech solutions where they simply drive the aircraft through a shower, a birdbath. So it is a requirement worldwide; it just varies in degrees.

Mr HATTON—Thanks, Mr Chair.

Mr HOLLIS—Brigadier, the helicopters have now been there now for something like 10 years. I have listened carefully to all the stories about the washing of them. But what would happen if we did nothing, if we just let the status quo prevail there; what would be the result?

Brig. Mellor—We would spend more and more money on corrosion control and that would sooner or later impact on availability of aircraft or we would need to get more money to spend on corrosion control. The cost of supporting the fleet would just continue

to rise.

Mr HOLLIS—So escalating cost of corrosion control.

Brig. Mellor—When you say if we did nothing, are you talking about not even doing the corrosion control program that we have got now?

Mr HOLLIS—If the status quo prevailed. We saw examples yesterday of corrosion that had been identified. The question was asked, 'What do you do?' Sometimes you replace a part, sometimes you can repair it. We also saw the washing going on in a high wind area. Why can't we just continue like that?

Brig. Mellor—The cost of supporting that would just continue to increase.

Mr HOLLIS—We hear that the helicopters cost around $24 million each. They are sitting out there and they have obviously been sitting there in a similar position for the past 10 years. Has there ever been any incidence, like at Albatross a few years ago, of sabotage against the helicopters?

Brig. Mellor—The aircraft have only been here for seven years actually on the ground.

Mr HOLLIS—What is three years between friends.

Brig. Mellor—But I am not aware of any attempts to sabotage. The aircraft are guarded on a nightly basis by RAAF police dogs.

Mr HOLLIS—And obviously security will be enhanced with the new facility.

Brig. Mellor—Yes.

Mr HOLLIS—What about the fire controls there. Will there be sprinklers?

Mr Chapman—Mr Hollis, there will not be sprinklers provided to the shelters. The shelters are for individual aircraft and are separated by fire rated walls with fire detection to allow early response by the fire services on the airfield.

Mr HOLLIS—So apart from early detection in that new proposal, isn't there any fire control—no sprinklers, foam or anything?

Mr Chapman—There are no sprinklers or foam provided. It has been shown that foam and water often provide more damage to the aircraft and have high maintenance costs associated with those systems. Once you do have an aircraft fire, that aircraft is generally lost. Your prime task is to make sure that you save any other assets in the area.

Because of that defence policy on fire protection, with high strategic assets such as the Black Hawk, you ensure that you protect all the other assets and you provide a system of early detection so that get an immediate fire response.

Mr HOLLIS—Are you happy with that, Colonel Fraser?

Lt Col. Fraser—Yes, sir, I would be. There is a 24-hour on-call fire response on the base for air operations anyway. I think the detection system, provided it works as advertised, would be sufficient.

Mr HOLLIS—You think it will be sufficient. If there was a fire there, and I take note of what you said, it would be restricted to the one area but within that area there is a facility worth $24 million. It would seem to me that you are saying, 'Okay, we write that one off and make sure the one next-door does not go up.

Lt Col. Fraser—I would refer to the Brigadier for army standards.

Brig. McCann—The principle is that of asset protection based on compartmentation. It is something which Defence applies over and above Building Code of Australia requirements. The Building Code of Australia is more concerned with people safety aspects. When we start to consider high value and strategic assets, the circumstances are examined on a case by case basis.

With the Black Hawks, we will be relying on detection, response and compartmentation. You need to be aware that any fire suppression system would be corrosive. We have the difficulties associated with accidental or unintentional activation of some of those systems, you would certainly cause a lot of damage. That needs to be compared against the fire risk level. The probabilities of a fire giving the consequences of loss are such that that low probability does not outweigh the risk associated with unintentional discharge of fire systems.

Defence is confident that the principle of compartmentation, with one helicopter per shelter and with each separated by fire walls, will provide an adequate level of protection when you assess that against the fire risk level. One thing not mentioned before, in addition to detection devices, there will also be close circuit TV installed in all the shelters. We will minimise the activities undertaken in the shelter. For example, we will not allow certain types of maintenance functions to be performed in those shelters. We are not talking about the maintenance functions which you saw carried out in the aircraft hangars. We will certainly not allow any fuelling activity to take place in those shelters. They are purely there as a shelter and not as a maintenance hangar.

Mr HOLLIS—I hope you are right. It just seems to me that being prepared to write off $24 million for one piece of sensitive equipment is a big risk. I have no more questions, Mr Chairman.

CHAIR—I would just like an indication as to how many additional questions there are. We can either break now or complete our interview with Defence.

Mr FORREST—I would like to get on to some other aspects of the project.

CHAIR—That being the case, we might break for morning tea and return. I would not want members of the panel to feel that was a licence to run all day. However, we do not want to unnecessarily compress the opportunity to question Defence. We will take adjourn for 15 minutes.

Short adjournment

[10.55 a.m.]

CHAIR—I reconvene the hearing and welcome once again the witnesses from the Department of Defence. I turn to Mr Forrest for questioning.

Mr FORREST—Given that the advent of the need for these shelters is a new innovation, how does that fit in with the overall master plan for the future of the base?

Brig. McCann—I will start off in answer and then I will ask Mr Chapman to elaborate. We are obviously working very close with the air force on this project. The air force controls the base. We have been obliged to comply with the air force master plan. The siting work done to date has taken account of RAAF master planning requirements. Tim, could you go on a bit further?

Mr Chapman—Just to add to that, Mr Forrest. The sites within the 5 Aviation precinct are consistent with the requirements for 5 Aviation Regiment. They fall inside the master plan zone for 5 Aviation and are also consistent with other requirements in the airfield for runways, et cetera.

Mr FORREST—What about the height of the hangars? There are already some constraints on location from the runway, wind directions and all that sort of thing.

Mr Chapman—As shown in the proposal, the hangars meet those siting constraints as far as heights are concerned for navigational aids and runway clearance requirements.

Mr FORREST—What about underground obstacles and stuff because that is where the big money can be spent? Given that these hangars were not planned, are you confident that the fire service locations, underground cables and those sort of things will not cause a problem?

Mr Chapman—In the engineering services for the project, there have been some site investigations to ensure that we have considered those aspects. The hangars,

positioned where they are on the existing apron area, are consistent with the stormwater drainage requirements. There is no or very little additional work required to make sure that drainage, et cetera, is catered for. There are no power services being disturbed by the works.

Mr FORREST—In the cost estimate, there are two line items for site services, one in regard to the helicopter facilities and the other in regard to the transport compound, which are substantial. What are they for?

Mr Chapman—Are you referring to the confidential cost estimate?

Mr FORREST—Yes, item 1.4 and item 2.3.

Mr Chapman—The site services referred to under the helicopter facilities would in general be the provision of a new substation to service those facilities on the existing ring main for the area, the requirement to tie in with the existing stormwater service and the provision of general power to the shelter themselves.

Brig. McCann—Mr Forrest, if I could just add to that. The confidential cost estimate which you have is only an outline. We obviously have much more detailed analysis of the costs. But noting that you have only got the broad outline, the costs for the helicopters facilities relate to the water supply, power supplies and environmental protection. The helicopter wash is located beside a wetland which has some environmental sensitivities associated with it. The site services with the transport complex relate to water supply, power supply, sewerage and, again, some environmental measures because there is a vehicle washing point associated with that facility.

Mr FORREST—Just in regard to any underground obstacles, you are confident there will be no major need for cost increases because something is there that was not known about?

Mr Chapman—We are confident that we have considered all the issues on the site and that we have built an appropriate allowance into the cost estimates for the project.

Mr FORREST—Okay. I was interested in a question from one of my colleagues down the other end. He did not mention the word ‘patent’ but the idea that there is a potential for us to own our own expertise. This truck wash modification will obviously involve a substantial design modification. Who will own that? I am conscious of a comment that came out of Darwin that the ordnance storage facilities up there were patented by someone outside the defence forces. I would be interested to know whether we would own it if this is new technology designed by us. Is that possible?

Brig. McCann—If I can just answer that. The question of intellectual property rights, as far as Defence is concerned, we would generally be happy that the designer or

the developer would have those intellectual property rights. We will not be designing the things in-house. That will be contracted out to appropriate consultants.

But in respect of intellectual property rights, we would obviously like to have access to the benefits given under any of those rights. There are other defence industry mechanisms in place which look at the potential for exploiting new technologies through overseas sales. There is a defence industry development division within Defence that looks at those sorts of things. If we believe there is a significant potential with this facility, we will pass that information on to our own departmental defence industry staff.

Mr FORREST—I have a burning question in relation to the ordnance loading apron. I am interested in the diagram on the wall where the ordnance loading apron is pointing straight at the ordnance storage. I probably have not understood the details of the plan. Could you just explain to me how that all works?

Mr Chapman—Mr Forrest, if I perhaps address that issue. The ordnance loading apron, although indicated on the plan there as a shaded area, has specific points on it for arming the aircraft. Those aircraft are orientated in a specific direction, a safe direction, with the revetments in front of them. It is shown as an area purely for licensing and planning purposes.

Mr FORREST—That is just schematic. The directions will be—

Mr Chapman—Yes, it is purely schematic. You will recall from the site visit yesterday the fact that the revetments were at an angle to the directions shown there. The aircraft are pointed towards those revetments when they are armed.

Mr FORREST—Those revetments that I saw yesterday looked not very substantial. I am just wondering whether they are adequate, compared with the ordnance revetments we have seen for FA18 aircraft. I know the munitions for the FA18 are much more powerful but these look fairly tiny.

Mr Chapman—Those revetments are purely to interrupt an accidental firing of a rocket that is used on the Iroquois gunships. They have degraded over time and they are certainly due for replacement. They are adequate for current purposes but they do need replacement before they deteriorate further.

Lt Col. Fraser—If I can stress that they are adequate for our current operations. They do not pose a safety hazard in their current condition. But they are deteriorating and do need replacement. They are adequate for the operation of our UH-1H gunship that we currently use when we operate from Townsville. At other times we take the Iroquois away from the actual base location for the arming of those weapons.

Mr FORREST—There is no allowance in the current project to do that work in

upgrading those revetments?

Brig. McCann—Yes, that is included in that cost of the work. It is described as ordnance loading areas.

Mr FORREST—That is probably what I have not understood. Could you just run us through the design?

Brig. McCann—I mentioned earlier that we have more detailed analysis of all the costs. The costs of the ordnance loading points have been included in the cost of the proposal. The design of the facility will take account of siting, master plan considerations and safety distances. There will be a requirement to have a siting board of suitably qualified officers certify the final location. Other authorities in Defence will review the design of the particular revetments. I would add that we are talking only about helicopter gunships; we are certainly not talking about major weapon systems which would be contained on some of the air force aircraft that you have just referred to.

Mr FORREST—I am looking in the submission at the plan for the OLA 6 layout, which is figure 10.

Brig. McCann—We are only into schematics. I mentioned before that we have not started detailed design. I am not permitted to expend taxpayers' money on detailed design of these facilities until your committee reviews the proposal and decides whether or not it is expedient for us to proceed.

Mr FORREST—I am not after a detailed design. I am just confused about whether the works shown on figure 10 are all new or whether they are part of what we saw yesterday.

Mr Chapman—If I may answer that, Mr Forrest. The existing surface and revetments have been included for refurbishment. As indicated in that drawing, it means laying down some flexible pavement to give a better operating surface for manoeuvring the helicopters and also refurbishing the revetments.

Mr FORREST—Okay.

CHAIR—You may recall, Mr Forrest, that reference was made yesterday to the greater capacity we will have to actually slide helicopters into the area because of the paved area being provided, compared with the difficulty experienced now with helicopter movement.

Lt Col. Fraser—That is correct.

Mr HATTON—This is a related question. With the existing OLA 6 and the fact it

has a gravel area, that would obviously have caused problems in terms of occupational health and safety. Has there been anyone injured as a result of those helicopters using those gravelled areas or has there been damage to craft?

Lt Col. Fraser—There has not been anyone injured but it does restrict our operations, particularly if we get some inclement weather. It is gravel and it is soft. We have to tow the aircraft into that area using a tractor and then for the last part actually push the aircraft into the final location close to those mounds or what we call stop butts so that, if the weapon was to be accidentally discharged, it would actually hit the mound and not interfere with anything else. Paving it would enable us to tow it all the way in and tow it back out, should we need to. Although, once we have them armed, we start the aircraft and fly the aircraft away at some later stage. It allows us to have the aircraft configured for firing operations and at the ready state. Then, with the pilots and crews ready to take off at a moment's notice, they can move to the aircraft quickly and deploy.

CHAIR—Do you have other questions, Mr Forrest?

Mr FORREST—I am not a stupid person but I am still confused about the direction of the revetments and the way it all works. To me it seems as though the helicopters are pointing across the runway. I do not have a plan that is comprehensive enough. I want someone to explain to me how the operation works when the aircraft are being loaded with ordnance, which way they point and how that fits in with the location of the runway and everything else on the plan.

Lt Col. Fraser—Mr Chairman, with your leave, I might show Mr Forrest where it is on the photograph.

CHAIR—By all means.

Lt Col. Fraser—As we saw yesterday, the current OLA area is in this location. The base has several ordnance loading areas, some for different types of aircraft. This one is a helicopter ordnance loading area or ordnance loading apron. We simply move the aircraft in quite close—perhaps five to 10 metres—to the mound. The aircraft manoeuvre in there, then the ammunition is brought over to be loaded onto those weapons.

The mound is of such height and size that, if the weapon was accidentally fired, it would stop the round from travelling any distance. So when it is pointed and located in the right location, it cannot physically go outside the extremities of that mound if it were to be fired. It will fire into the mound and be absorbed into the mound. So the mini-gun that is on the helicopter and/or the rocket will fire into the mound and be absorbed into the mound. It cannot physically fire in this particular area where you are concerned. They are orientated in this direction across towards the civil terminal, which would be a greater concern, but it physically cannot fire across there when we move them into the right location for the arming.

Mr FORREST—Looking at what I saw yesterday, I would not be confident of that. They do not seem substantial at all.

Lt Col. Fraser—Yesterday, we did not walk right up to them. You are right, it is not substantial but it is sufficient for the current weapons that we use. There is quite a fair depth to that mound. We did not actually go and have a look sideways on to see how deep the mound is, but it is sufficient for the mini-gun and for the 2.75 inch rockets we use off the UH-1H gunship. But it is deteriorating. That is why we have asked for it to be upgraded for future operations.

Mr FORREST—They had a concrete vertical surface it. If you are talking about bullets, wouldn't there be a risk with the ricochet of bullets?

Lt Col. Fraser—There are other mechanisms. It is not the only mechanism. We also have steel traps on the ends of the guns so that, if it were to fire, it would first of all would be into the steel trap and then perhaps off the steel trap. But if in the rare circumstance where you were taking the trap off with the ammunition loaded on it and it was accidentally fired whilst the crew were starting or for some other reason, some failure, then that mound would take that round. The ricochet would not be of great concern.

Mr FORREST—That is with bullets. What about with the rocket?

Lt Col. Fraser—With the rocket, the same would happen. It would impact into the mound or into the wall. It would either destroy itself into the wall, crunch into the wall, or detonate on the wall.

CHAIR—At least we can be confident, Mr Forrest, that when the defence forces do anything, they do it like a belt and braces job. If I were doing it, you would have a great deal to be concerned about. But in the case of the defence force, nothing is left to chance.

Mr FORREST—It is all right. You have been on this committee a lot longer than I have. I am developing that confidence. On the bigger map then, could you just show me the direction of that angle?

Lt Col. Fraser—This is the 5 Aviation Regiment area and this is the tarmac area. Then oriented almost north-south is the areas of the OLA.

Mr FORREST—Right, so out to sea, basically.

Lt Col. Fraser—It is across the back of the runway environment. I do not have the exact direction, but it is in about that arc there.

Mr FORREST—I am developing the confidence you speak of, Mr Chair.

Lt Col. Fraser—We have strict rules and guidelines that are reviewed. If it was unsafe, we would be prohibited from using it.

Mr FORREST—Just one more question relating to the way the modified truck wash will work. I would imagine that the perspex windscreens of the aircraft would be sustainable to scratching which would affect vision. Are there precautions being taken so that any mechanical washing does not cause deterioration of the windscreens?

Mr Chapman—If I can take that question. There is no intention to provide a mechanical wash associated with the helicopter wash facility, because there are areas on the Black Hawk, such as the windscreens and other protrusions, that are susceptible to that type of action and could be damaged. The helicopter wash is primarily aimed at getting foam and water onto areas to provide a cleaning action through controlled high pressure in certain areas on the helicopter. There will be no mechanical brushing provided from an automatic system.

Mr FORREST—Getting back to the environment where the aircraft is stored to be dried, that is not airconditioned air, it is dehumidified air at ambient temperature; is that right?

Mr Chapman—The environment inside the shelter will not be controlled in any manner other than through natural ventilation. The dehumidified air will be provided to the internal compartments of the helicopter through flexible ducting. You will get some leakage from the helicopter which will obviously affect the internal environment of the shelter but to a limited degree.

Mr FORREST—So other than air vents for exit of air, there is not any additional insulation or anything needed for the shed; is that right?

Mr Chapman—No.

Mr FORREST—For personnel working in there, would it be comfortable; what sort of environment is it going to be for anybody who is in there?

Mr Chapman—The concept of the design is to maximise the use of natural ventilation such that you do get some air flow through there but still provide good levels of protection against the salt laden air and the prevailing winds. Personnel working in there would be on a limited basis. The Brigadier may wish to address this question later. But they would obviously be out of the direct heat of the sun, which is one of the prime concerns, that they would currently experience on the apron area.

Mr FORREST—They would probably feel cooler because you have moving air

but it would still be ambient.

Mr Chapman—The other thing is that they could supplement that air with fans, I would imagine.

Brig. McCann—If I can just add to that, Mr Forrest: many of the activities which would be undertaken inside the shelters are those activities which are undertaken out on the open tarmac area at the moment. During the walk around yesterday, you would have noted that the conditions inside the large maintenance hangars were quite reasonable.

Mr FORREST—I am satisfied for the moment.

Mr HATTON—This question is about the future and what happens when the Iroquois have to be replaced. Will it be necessary for us to come back and look at another proposal to build further garaging for the Iroquois? Although they have been extremely good so far, the expectation based on what has been indicated this morning is that the replacement craft will probably consist of the new types of alloys and so on and would therefore be subject to similar problems as the Black Hawks. Has there been any thought given to the future prospects for the Iroquois?

Brig. Mellor—There certainly has. Air 87 is the project that will hopefully see the replacement of the Kiowa and the Iroquois. One hopes that that aircraft will be of a similar sort of modern technology to the Black Hawk. The locations for those aircraft will be determined as part of the project. But it is anticipated that the aircraft will be located at Darwin, Oakey and Townsville but over at the 162 recce squadron facility over at Lavarack Barracks. That 162 recce squadron was moved to new facilities last year and, as part of that project, consideration was given to the shelters there so that they could accommodate an Air 87 type aircraft. I would not anticipate there being any requirement for additional facilities here in Townsville as a result of the Air 87 project.

Brig. McCann—If I could just add to that. Oakey is a very benign environment. It is well inland. In fact, its location was selected in World War II as an aircraft depot because of the benign environmental conditions experienced there. The shelters built at the Lavarack Barracks army base in Townsville, this committee looked at that proposal only a couple of years ago. If we have the opportunity tomorrow afternoon, we will be showing you the aircraft shelters built for the existing Kiowa helicopters. Even though Lavarack Barracks is only a few kilometres away, there is a substantial drop-off in corrosion levels between RAAF base Garbutt and Lavarack.

Mr HATTON—But based on the evidence this morning, we are looking at not moving the Black Hawks down to Lavarack because of the noise problems associated with that and I imagine that the replacement for the Iroquois helicopter will not be dead quiet.

Brig. McCann—We are talking about two different helicopters being replaced.

The Kiowa helicopter is a small, light observation helicopter. It is certainly nowhere near as large as the Black Hawk and the Iroquois.

Mr HATTON—So we are looking at less helicopters on this base then. At the moment, as far as the army can see, we will not be coming back for any of these types of facilities unless there is a requirement to place more helicopters similar to the Black Hawk here?

Brig. McCann—We would only say that the type of aircraft, the numbers and the disposition of those aircraft is yet to be finalised under Air 87. We would not like to say that we are not going to come back ever. What I am saying is that, based on our judgment at this time, there would be a limited prospect that we would come back asking for sheltering. But I would not rule that out until we had all the information to hand.

Mr HATTON—Thank you, Mr Chairman.

CHAIR—I was just going to add to your comment, Mr Hatton. What we probably need to bear in mind in this hearing is that what we are looking at is an asset for the army. Just as I would reassure Brigadier McCann that, when I replace my Falcon with another Australian built car, I do not propose to build another carport. The proposal is not when the Black Hawks are replaced; the proposal is to continue to use this facility. I think that is very important. I assume that the facility is large enough to take something that is larger than the Black Hawk, should that be the replacement.

Brig. McCann—The facilities proposed will have a life of 50 years and obviously they are going to be there well after the Black Hawk has gone—and well after I have gone, hopefully. They will certainly continue to be used in that capacity. We are making a judgment here that, with newer technology, an equivalent replacement capability should be provided through a smaller machine. The best examples of new technology reducing the space requirements of facilities are in the communications area. Today with the new technology we only require about a tenth of the space inside the old 1960s communications facilities.

CHAIR—Brigadier McCann, while you have said that we are only looking at the investment of one Black Hawk in the total proposal of workshops and hangars, isn't it also true—once again, I feel I am almost leading Defence with this comment—that we are talking about a substantial asset with something like $0.75 billion dollars tied up in helicopters, and that every year we tack on to the service life of a Black Hawk represents a major saving in outlay for a replacement chopper.

Brig. McCann—I would certainly agree with that, Mr Chairman.

Mr RICHARD EVANS—What does this project mean to Townsville?

Brig. McCann—We have that information, Mr Evans. The Centre for Applied Economic Research and Analysis from James Cook University has estimated the following economic and employment benefits to the region: additional gross output of $34.8 million; a contribution to gross state product of $16.9 million; a contribution to wages and salaries of $9.1 million; and full-time and part-time employment of 328 people during construction.

Mr RICHARD EVANS—Is the 328 in Townsville?

Brig. McCann—That would be for people working in Townsville—whether all those people came from Townsville would depend on who won what contract. I mentioned earlier that we believe the managing contractor method of delivery of this project will give local firms the opportunity to be competitive for the trade package and supply subcontracts.

There will be ongoing work once the facility is constructed for locally based contractors to be involved with the maintenance and upkeep of the facilities. Most of our building maintenance contracts are executed by local contractors. We would expect that some locally based firms will be involved in the design and development as well as the construction of the facility. In fact, our consultants at the moment—Gutteridge, Haskins and Davey—have an office in Townsville, and Townsville based GH&D staff are assisting us with the proposal right now.

Mr RICHARD EVANS—So the bulk of the funding would in fact be spent in and near Townsville.

Brig. McCann—Certainly, the trade contract and supply packages would be. The managing contractor would most likely be a national company, but the managing contractor only gets a management fee. So the bulk of the money would be spent in Townsville.

CHAIR—Are there any other questions from committee members? If not, can I just ask Defence to comment for a moment on what is more than the Black Hawk briefing. We have had a certain focus on Black Hawks, which is no doubt understandable. There is a fascination with such a remarkable aircraft. But also a quarter of the construction cost is tied up in the provision of new servicing and coverage facilities for vehicular transport. I was rather persuaded yesterday, I confess—without pre-empting the outcome of this inquiry—in the safety factors in relocating the maintenance work for your transport arm. I wondered whether you would care to make that sort of comment for the *Hansard* record. It would help to give a more comprehensive view of what we are about today.

Brig. McCann—Certainly in the aircraft maintenance hangars, some functions performed in those hangars would be better and more safely performed elsewhere. For

example, we have a general engineering section located beside one of the major maintenance hangars. That was really a temporary arrangement which was necessary to accommodate the newly arrived Chinook helicopters.

As the committee would have seen yesterday, equipment waiting for repair is stored in the open adjacent to the aircraft hangar, impinging on aircraft operating clearances and promoting the deterioration of equipment from exposure to weathering. Also, from an efficiency point of view, that function is best located near the unit Q store which is over half a kilometre away.

In addition, some weapon repair work is undertaken in one of the aircraft maintenance hangars. That function is more efficiently, safely and better performed out of that hangar and adjacent to the unit Q store, where the unit's weapons are stored in a properly constructed armoury facility. Physical security is another consideration for the relocation of that function. There are certainly considerations of separating different types of tools and equipment. Where there is the potential for foreign object damage in aircraft, the principle is that only aircraft maintenance functions should be performed in that area.

CHAIR—If there are no other questions, I thank the Defence witnesses for appearing at this stage. We will, of course, recall them after we have heard from the Townsville City Council.

[11.30 a.m.]

BUNNELL, Councillor Ann, Deputy Mayor, Townsville City Council, Walker Street, Townsville, Queensland

CHAIR—I welcome Councillor Bunnell from the Townsville City Council. Do you have any comments to make on the capacity in which you appear?

Councillor Bunnell—The reason I am here this morning is that I am the chair of the planning and development committee.

CHAIR—The committee has received a submission from the Townsville City Council dated 10 October 1996. Do you wish to propose any amendments to that submission?

Councillor Bunnell—There are no amendments.

CHAIR—It is proposed that the submission be received, taken as read and incorporated in the transcript of evidence. Do members have any objection? There being no objection, it is so ordered.

The document read as follows—

CHAIR—Do you wish to make a short statement before the committee proceeds to questions?

Councillor Bunnell—I would like to take this opportunity, Mr Chair, to formally welcome all to Townsville. Our community, both publicly and privately, continues to express indeed sadness and extend a heartfelt sympathy to the family and friends and the members of the defence force following the Black Hawk tragedy. We feel it is necessary to put this on record. The defence force is the lifeblood of our city. We feel a sense of family and community loss over this tragedy. I am happy to answer any questions.

CHAIR—Thank you, Councillor Bunnell and thank you for that comment. Are there questions from members of the committee to the council?

Mr RICHARD EVANS—Councillor, you heard the response from the Brigadier regarding the benefits to Townsville. Could you give us a personal point of view about the benefits of this particular project to Townsville?

Councillor Bunnell—Yes. My council has in the past and will in the future act to promote and protect this major national defence and civil aviation asset at Garbutt. The council has recognised the major and national significance of the Townsville aerodrome facilities to both the defence force and the civil aviation by zoning the land 'special purposes defence and civil aviation'.

The defence force spends a large amount of money in our community. They are probably our biggest economic source within the community. Wherever possible, they buy locally. I think that is reflected in Brigadier McCann's comment that this project will be divided into smaller projects to allow our local people the opportunity to tender. We see this as very positive and a continuing practice of the defence force in our city.

Mr RICHARD EVANS—Would your local businesses and contractors be able to complete the project or would there have to be labour imported?

Councillor Bunnell—I am not sure I cannot speak for the contractors but I do have faith that they can meet some of the requirements. I believe that has already begun in offices set up here with our regular development community. They are participating already in aspects of this project. I am fully confident that our community can handle some of the project and, of course, they will import experience and technology where necessary.

CHAIR—Councillor Bunnell, your comments this morning are more timely than you may know, because the Public Works Committee has come from an inquiry in Darwin where there were a minority I suspect—but, nonetheless, some people who suggested in evidence on the *Hansard* that they did not want Darwin to become another Townsville. I would have to say that what you have said to us is what we had suspected; that is

Townsville has been grossly misrepresented in that comment and that Townsville is very pleased to see the ADF here. I do not want to put words into your mouth but I want to give you the opportunity to comment on that.

Councillor Bunnell—I reject whatever comment was made about Townsville. I have been on Townsville City Council since 1988. There is very broad support within the community. We recognise that the defence force have been very valuable members of our community. They are on every community board that you can imagine. They are not only an economic source—I would hate to give you the impression that we think of them only as an economic source—they bring a great diversity to our community.

They make excellent citizens. They integrate very well within our community. My own daughter is married to a member of the defence force, and Angelo Licciardello, my adviser, has a relative in the defence force. That is a common factor throughout our community. They are very welcome here. I am not quite sure why that group in Darwin would suggest that we are disadvantaged by having the defence force here. On the contrary, our life is enriched by them.

CHAIR—You will be pleased to know that my deputy chairman, Mr Hollis, challenged that view in Darwin. It was not left.

Councillor Bunnell—Thank you, sir. I certainly reject that view.

CHAIR—I do not have any questions specifically related to the project or the engineering of it. You have made it quite clear that Townsville welcomes not only the retention of the Black Hawk fleet but also the additional expenditure. Do any other members have questions that they wish to ask?

Mr FORREST—Just following on that, you would not be aware then of any complaints about aircraft noise, however minor?

Councillor Bunnell—The only complaint I know of, and it is a very rarely, is that the army conduct manoeuvres over our city. We have a large parking station that they find very attractive to shed their paratroopers onto as some sort of exercise. That was done very regularly—I am not sure how often. I live right in the city; so I am probably one of the most affected members of our community. We welcome that. Occasionally, we curse the noise but they are careful about the hour they do this. It certainly could not be considered to be too intrusive.

There was just recently after the Black Hawk tragedy a comment in the paper about the noise of the helicopters. To my knowledge, that is the only complaint. Many of us felt that was very inappropriate coming shortly after that tragedy. That is the only written complaint I know, sir. I have been on council and, believe me, they ring me about many other things.

CHAIR—You could be excused for observing that your son-in-law was, as it were, heaven sent or landed in your backyard.

Mr FORREST—Does council have the responsibility—I assume it is the same in Queensland as it is in other parts of Australia—for environmental control or monitoring?

Councillor Bunnell—Yes.

Mr FORREST—I notice there are some wetlands adjacent to the site out there. Is council actively involved in any monitoring of the welfare of that wetland?

Councillor Bunnell—We are currently undergoing a natural assets register, and our primary focus is on wetlands. We are hoping to have a greater understanding of the wetlands and how we can best protect them. We also have a conservation strategy with the focus on wetlands. We are very happy with the environmental aspects of this project and have no concern in that. I am not sure if that has answered your question; I am not sure what you mean by 'monitoring the wetlands'.

Part of that area is in our town common and that is under the management of Townsville City Council and the Department of Environment and Heritage. We are hoping to improve that area, but you may or may not know that we have just undergone six failed wet seasons. Our water situation is critical. That area does look very poorly, but it is more from the lack of water than from any other factor. I believe the department of environment does monitor the area around there.

Mr FORREST—I am just talking about consultation with the defence force out there and with the people on the site. Is there regular discussion and liaison type consultation? That is the kind of thing that I would consider to be appropriate.

Councillor Bunnell—It is also a state responsibility, Mr Forrest, in that it comes under their jurisdiction. But we are very heavily involved.

Mr RICHARD EVANS—Councillor, you heard in evidence from the Brigadier that one of the reasons why this project is going ahead is that the relocation of the helicopter regiment to Lavarack Barracks would be pretty much impossible due to the encroachment of urban build-up and the noise situation. Is that a position that you would support?

Councillor Bunnell—Yes, I would support that. Lavarack is surrounded by a residential area. We have had representations from the defence force at their concern of the encroachment of residential area. This has been attended to in the area around Garbutt because, under our strategic plan, we have zoned that industrial area around there to prevent residential encroachment in that area.

Mr RICHARD EVANS—That was my next question. Because you do want the ADF in Townsville are you actively looking to the future in your planning processes?

Councillor Bunnell—We certainly are. We have zoned that area special purposes, and the area around it is zoned industrial land so that it cannot be built up in a residential way. We are also doing a development control plan of the area of Garbutt. We are almost through the research work on that and we have a report that is available for viewing.

CHAIR—Councillor, can I just indicate that, in response to your opening remarks, the Commonwealth would want to recognise the degree to which the Townsville family has been supportive of Defence following the Black Hawk disaster. We as a committee laid a wreath yesterday, recognising the way we feel about it. We all know that what has happened will leave scars that can never be removed from Defence's point of view. We hope that, from the point of view of those officers present, at least the knowledge that not only the Townsville community but also the Australia-wide community share something of their loss will make it easier to bear. Thank you for your sympathetic remarks.

Councillor Bunnell—Thank you, sir. May I make one comment?

CHAIR—Yes, you may.

Councillor Bunnell—I have worked a lot with Lieutenant Colonel Olga Strachan on this and other projects. Could I congratulate her and her staff. She is one of the best developers that I have had the pleasure of working with. She is very organised. It is a great compliment to the defence force that they have such a front-line person.

CHAIR—Thank you, Councillor Bunnell, I appreciate that. We appreciate the welcome you have extended to us here and the facilities you have made available.

Brig. McCann—I would thank council for their comments regarding Lieutenant Colonel Strachan. I could only confirm those comments.

Councillor Bunnell—Thank you.

[11.43 a.m.]

CHAPMAN, Mr Timothy Christopher Cady, Senior Engineer, Gutteridge, Haskins and Davey Pty Ltd, 216 Northbourne Avenue, Braddon, Australian Capital Territory

FRASER, Lieutenant Colonel Anthony Peter, Commanding Officer, 5th Aviation Regiment, RAAF Base Townsville, Townsville, Queensland

HINTON, Dr Bruce Roy William, Head of Corrosion Control Group, Defence Science and Technology Organisation, Aeronautical and Maritime Research Laboratory, 561 Lorimer Street, Fishermans Bend, Victoria

McCANN, Brigadier Raymond Leslie, Director General Accommodation and Works—Army, Facilities and Property Division, Department of Defence, Campbell Park Offices, Canberra, Australian Capital Territory

MELLOR, Brigadier William Julian Andrew, Commander, Aviation Support Group, Australian Defence Force, Oakey Airfield, Oakey, Queensland

STRACHAN, Lieutenant Colonel Olga Nina, Project Director, Facilities and Property Division, Campbell Park Offices, Canberra, Australian Capital Territory

CHAIR—I will now recall the witnesses from the Department of Defence. Brigadier McCann, you may be wondering what it is Councillor Bunnell has that makes those interviews relatively short and his so extended. Nonetheless, I welcome you once again. There really has been little controversy following the evidence you presented to this committee. But if you wish to make any comments at all, you are welcome to do so.

Brig. McCann—Thanks, Mr Chairman. I would like to start off by thanking Townsville City Council for their support, not only on this proposal but also on the many other proposals that we have had in the past and are in the process of developing for the future. The army sees itself as part of the community. It certainly helps the army to have a supportive local authority. From my point of view, our working relationships with the Townsville City Council have been excellent.

I would also like to put on the public record our thanks to the council for the use of the facility and for assisting us with some of the administrative and catering arrangements. That has been excellent.

In respect of council's comment on the wetland adjacent to the air base, the air force has a professionally qualified environmental officer who monitors the output into the wetland. That is done in consultation with the Queensland Department of Environment and Heritage.

Also, I would thank council for their comments regarding Lieutenant Colonel

Strachan. I could only confirm those comments.

We did undertake to come back to the committee with some details on the Seahawk marinisation program. Is it appropriate for me to address that now?

CHAIR—Yes, most decidedly.

Brig. McCann—We did say that we would try to establish the cost premium for marinisation. I regret that we have been unable to provide that particular cost premium. We had difficulty because it is impossible to make a like with like comparison. The Black Hawk and the Seahawk are just so different in terms of the capability they provide. They might look the same, but that is where the similarity ends.

The Seahawk has a significant avionics fit and different rotor systems for ship operation and for anti-submarine warfare; whereas the Black Hawk is a utility helicopter designed for troop movement around the battlefield. The Seahawk marinisation program cannot be retrofitted to the Black Hawk as it primarily involves the preparation, coating and sealing of air frame structural components at the time of assembly.

In addition, the navy use an ongoing aggressive washing program and apply corrosion prevention compounds very similar to the army's current program with the Black Hawks. Of note, navy also hangar their Seahawks at all times on ship and whilst based at the Nowra Naval Air Station. Navy experience in corrosion prevention with the Seahawks has been exploited by us in the development of army's corrosion control program for the Black Hawk.

CHAIR—Thank you, Brigadier McCann. Are there any other comments sought from other committee members?

Mr FORREST—Just a point of clarification: you referred to an 'aggressive' washing program, what does that terminology mean?

Brig. McCann—Their washing program is a daily practice compared with an 18-day cycle for the Black Hawk.

Mr FORREST—Right.

Brig. McCann—I have one other issue. Mr Chairman, we see this proposal as so important that we are very keen to deliver the work as quickly as possible. This is not only for the prevention of further corrosion problems in the Black Hawk but to assist 5 Aviation Regiment in their day-to-day activities. In that regard, the transport compound is significant because it will assist 5 Aviation Regiment to undertake what is a very difficult job more efficiently. Hopefully, we will life easier for them as well as safer and more secure.

With that in mind, I would intend to write to the committee seeking their agreement to proceed with registration of interest and requests for tender for the roles of project consultant and managing contractor for the works prior to the expediency motion for the project. Subject to the passing of any expediency motion, we would plan to commence work early in the new year. To meet these dates, we would need to undertake the registration of interest process in November, with requests for tender in December. Of course, we would not enter into any contract without prior parliamentary approval of this proposal. We would only seek to advertise registrations of interest and requests for tender. I will pass to the secretariat a letter to that effect.

CHAIR—Thank you, Brigadier McCann. As you are aware, the committee meets every parliamentary sitting Thursday and will, at an appropriate time and without delay, consider your request.

Brig. McCann—Finally, Mr Chairman, would it be possible for the Commanding Officer of 5th Aviation Regiment to make a statement?

CHAIR—Certainly.

Lt Col. Fraser—I would just like to take the opportunity, first of all, to thank you and your committee for the wreath that you laid yesterday, which you have mentioned previously, on behalf of not only the officers and soldiers of the 5th Aviation Regiment but also the Special Air Service Regiment. Together, both regiments are serving through the tragedy to continue with our standby and our readiness to Australia in however they require us.

Can I also thank the councillor for her words and the community—and indeed all of Australia but in particular the Townsville community. Their support for the regiment has been outstanding. The letters, faxes and the local community raising money for a memorial which they will also establish has been second to none. It has been a great strength to us to continue to serve on. I would just like to take the opportunity to thank you for that.

CHAIR—Thank you, Lieutenant Colonel Fraser. I know Brigadier Mellor was discussing this with me. We appreciate the supportive role you have exercised, particularly in terms of the defence families under your control.

Mr HATTON—I would just like to commend Brigadier McCann and his staff for bringing together a number of different projects here for us to look at as one specific project. They could have done some of this work under minor works or medium works and not brought them to the notice of the committee. But I think bringing all of this together is a very sensible way of presenting the work that has to be done so that it can be seen as an unified whole.

CHAIR—If there are no other questions or comments, it is proposed that the documents lodged with the committee be incorporated in the transcript of evidence. There being no objection, it is so ordered.

The documents read as follows—

CHAIR—Before closing this hearing, I would like to thank the witnesses who appeared before the committee today and those who assisted in our inspections yesterday afternoon. Once again I thank the Townsville City Council for making this venue available for the public hearing. I would also thank my committee members, *Hansard* staff and the secretariat for all of their support.

Motion (by **Mr Hollis**) agreed to:

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

Subcommittee adjourned at 11.52 a.m.