COMMONWEALTH OF AUSTRALIA

JOINT PARLIAMENTARY COMMITTEE

on

PUBLIC WORKS

Reference: East Coast Armament Complex, Point Wilson, Victoria

CANBERRA

Thursday, 26 March 1998

OFFICIAL HANSARD REPORT

CANBERRA

JOINT COMMITTEE ON PUBLIC WORKS

Members:

Mr Tuckey (Chair)

Senator Calvert	Mr Richard Evans
Senator Ferguson	Mr Forrest
Senator Murphy	Mr Ted Grace
	Mr Hatton
	Mr Hollis

WITNESSES

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Present

Mr Tuckey (Chair)

Senator Calvert	Mr Richard Evans
Senator Ferguson	Mr Forrest
Senator Murphy	Mr Ted Grace
	Mr Hatton
	Mr Hollis

The committee met at 8.34 a.m.

Mr Tuckey took the chair.

CHAIR—Thank you, gentlemen. I would like to reopen this hearing, which continues the earlier hearing conducted in Geelong on 13 February into the East Coast Armament Complex, by calling representatives from the Department of Defence to provide further information in relation to the committee's examination of the ECAC proposal. The committee would like to explore in greater detail the question of the location of this facility and other associated matters.

I just pointed out to the secretary that this statement sounds a little heavy-handed, but apparently these are the formal words. I wish to remind the Defence representatives who all appeared at the previous hearing in Geelong that they are still under oath and that any deliberate misleading of the committee may constitute a contempt of the parliament.

[8.35 a.m.]

ADAMS, Captain Malcolm David, Superintendent of Armament Logistics, c/- RAN Armament Depot, The Northern Road, Kingswood, New South Wales 2750

COX, Commodore Timothy Harvey, Director-General, Maritime Development, Department of Defence, Russell Offices, (B-4-05A), Canberra, Australian Capital Territory 2600

FERRARIS, Mr Diego Felice, Project Director, Department of Defence, Campbell Park Offices (CP3-3-23), Canberra, Australian Capital Territory 2600

KELLY, Brigadier Garry Ross, Director-General Project Delivery, Department of Defence, Campbell Park Offices (CP3-3-03), Canberra, Australian Capital Territory 2600

YOUNG, Mr Steven Bruce, Project Manager, Department of Defence, c/- Gutteridge Haskins and Davey Pty Ltd, 380 Lonsdale Street, Melbourne, Victoria 3000

CHAIR—Prior to proceeding, because you have received correspondence from us raising the fundamental issues, during our hearings in Geelong Mr Hollis raised the question of alternative sites and, I think, expressed a view common to all members of the committee that, considering the location of the east coast naval activities in Sydney, and considering the fact—and hopefully we never do—that if Australia was in a conflict at some time in the future, we would find ourselves conducting our activities to the north of Australia, we find it difficult, from an operational point of view, to consider a site such as Point Wilson so far south of the base for east coast naval activity and so far south in the context of a conflict to our north.

We thought, therefore, before the matter is concluded, that we really did need to pursue other opportunities on the east coast closer to Sydney and further north than Point Wilson. We have asked you, therefore, to give us further evidence in that regard. Cost, of course, is always a matter of concern, but cost benefit is of greater concern because without a benefit in the military sense we are in awful trouble. That is fundamentally why we have asked you to come back, based on the evidence received to date. Brigadier Kelly, would you now like to proceed?

Brig. Kelly—Thank you. The committee asked for additional information on the basis that, when we last met, I described how the quite lengthy process to look at potential sites for an ECAC had ended up with a short list of three, they being Jervis Bay, Eden and Point Wilson. Point Wilson was eventually selected as the preferred site. Basically, Point Wilson was chosen because, from a number of points of view, it was the only workable site.

The short answer to your questions is that Point Wilson is the lowest capital cost to

provide both the import-export function and the navy retail supply. Jervis Bay was basically excluded on the basis of overwhelming public objections to construction of an ECAC in Jervis Bay, and overwhelming environmental disadvantages. Eden was basically excluded on the basis that it was not workable from the point of view of safeguarding and would have also had considerable environmental considerations.

The final question related to the use of lighters. The response there was that the use of larger lighters would still not enable us to perform the commercial import-export function which will be undertaken at Point Wilson. They are the basic responses to the questions that were asked. Perhaps you would like to indicate areas of specific detail that you would like us to go into.

CHAIR—Mr Hollis, would you like to pursue the matter?

Mr HOLLIS—No, not at the moment. What did you say there about Eden again? Did you say it was unprotected?

Brig. Kelly—Eden was examined from the point of view of five different sites, and only one was workable after the other four were excluded on the basis of maritime and engineering considerations. The site that was workable from those points of view was unworkable from the point of view of an import-export wharf because of the 1,000-tonne NEQ safeguarding distances and, even from the navy retail point of view, it was basically unworkable because it would have required the relocation of the Harris Daishowa woodchip facility or the development of an understanding with them that would enable us to work in concert in the same area. The safeguarding arcs for a potential facility in that area would also impact on the development area proposed by the Bega council, and there were also considerations in terms of the environment.

Mr HOLLIS—So you have caved in to greenies. I accept what you say about Jervis Bay: coming from that area, I know the campaign that would have been waged there. Without wanting to appear rude or disrespectful, I think that what has happened is that navy has accepted that the ideal location would have been Jervis Bay. There is absolutely no question about that. It had everything going for it—close proximity to Sydney, resources, even facilities such as the University of Wollongong. The greenies staged a show, and so it caved in; and that is understandable. Now navy or Defence has decided that they cannot muck around with this any longer: they got a site that everyone said was okay, and that was the site that they went for. The local member is not here, and so I can say that you could do anything with that site and it would improve it. For many areas, that is justifiable.

But what I think has happened now is that, as always happened, you have presented us with the two papers, and everything you are going to say and every paper you put out is going to justify the site at Geelong. Everything is going to justify that, and you are going to keep making a case. Maybe we have not got the technical expertise—

although we might well get it!—to evaluate some of the arguments that you are putting up. For instance, we have not even seen Eden or any of these other sites. I would not mind casting my eye over them. I have been to Eden many years ago, and you have got that huge bay, and I cannot for the life of me believe that you could not co-exist with the current activity there.

The only argument that sways me at all is the argument about the wharf. I know the chairman had particular worries about the money that was going to be spent on the wharf down at Geelong for six operations per year. But I was quite concerned when I saw, in one of the papers you gave us that was defending your position, that the cost of putting a wharf in at Eden was, from memory, quite prohibitive as well.

I think that you people, for all sorts of reasons, have cut your losses and have decided that it is going to go to Geelong, come hell or high water; and, no matter how many times we have you before us or how many papers we ask for or whatever, you are going to keep providing all this information that is going to justify that. It may well be that in 30 years time we all find out that we made a disastrous mistake. That is my view. As I say, that is not meant to be rude or offensive or anything, but that is the reality of the situation: we will probably end up getting it at Geelong because you are going to bamboozle us with all this information.

Brig. Kelly—If we went to Eden, we would still need to provide an import-export capability elsewhere—presumably at Point Wilson—because the safeguarding arcs for a wharf of that NEQ licence would impact on the town of Eden itself. It would be possible, with the agreement with Harris Daishowa and the Bega council, to put a navy retail facility at Eden; but the costs then become prohibitive because we would have to provide a facility in two areas and we would also, presumably, have to relocate some aspects of the Harris Daishowa operation. I am not aware that we have even approached them about this, so it is a potentially sensitive issue.

Mr HOLLIS—You might win the greenies on that. They would rather you there, I am sure, than the woodchip operation.

Brig. Kelly—They could do.

Mr HOLLIS—I am not disputing what you are saying, but I find it strange that you are saying that you would have to have an alternate import area if you went to a facility at Eden but that that was never raised when you were talking about Jervis Bay. It seems to me that the residential area of Jervis Bay is much closer, or as close: not necessarily Nowra, but the other towns of Culburra, Callala and all those sorts of places.

Brig. Kelly—My understanding is that in Jervis Bay we just get the safeguarding arc in, against the nearest community area.

Mr HOLLIS—For the life of me, I cannot see how you would get it in at Jervis

Bay and not get it in at Twofold Bay.

Brig. Kelly—I can only refer you, Mr Hollis, to the maps that we have provided with our submission, which indicate where the purple safeguarding arc for a 1,000-tonne NEQ wharf would be.

CHAIR—In that regard, I raised a question whilst we were looking at the maps as to how an overlay of the same scale of the Stirling facility, in terms of the city of Rockingham and the Kwinana industrial area, would relate. Knowing that area quite well but not knowing the Eden area well, at a glance I am struck that that problem could arise at Stirling base, and apparently it has been overcome in some way.

Brig. Kelly—I am not aware, Mr Chairman, of what the licensing is at Stirling. Perhaps one of my navy colleagues could indicate that.

Cdre Cox—I am not familiar with the actual licence NEQ of the wharf in Stirling, but it is a considerable distance from the wharf to the town of Rockingham, as you would be well aware, across the causeway. It is right up the northern end of the Garden Island facility, which is at least 10 kilometres from the city of Rockingham.

CHAIR—It is difficult to tell just from looking at a map. What then is the size of Twofold Bay? It is much smaller than Cockburn Sound.

Cdre Cox—Yes, sir.

Capt. Adams—The problem with Twofold Bay is the depth of the water and the location of where you could actually put your vessels. A number of reviews have actually gone on, and the ideal site is about 15 kilometres south of the woodchip wharf. When you actually put your arcs out—

Senator MURPHY—When you say 'south', where is that? Honeysuckle Point, or Red Point, or where?

Capt. Adams—South of the Eden lodge and Jews Head, and slightly north of East Boyd. That is the preferred area that the reviews so far have come up with, looking in that area.

CHAIR—This is Munganno Point, is it?

Cdre Cox—Just south of that.

CHAIR—Yes; I see where the wharf site is marked on the map.

Capt. Adams—When you are actually looking for a 1,000-tonne licence, you need

something like 4.4 kilometres. If you strike that arc, it takes in Eden.

CHAIR—Is that 1,000-tonne licence a commercial or a military requirement?

Capt. Adams—It is a commercial requirement.

CHAIR—Let me just stop you there, because a lot has been said about the commercial requirement. We are really talking about spending Defence money, are we not? Why is it then that, in the process, we have got to select a site that is thousands of miles away from where we might have a fight, so that we can cater for the unloading of commercial quantities of explosive—which is clearly a responsibility for state governments or whoever else provides port facilities around Australia?

Capt. Adams—There seems to be some confusion with the members of the PWC on what the navy and Commonwealth requirement is. Maybe I should reiterate that. Our requirement is that we need to import EO and we need a point to do that. Point Wilson is a dedicated facility for that. We also need a facility that we can do major ammunitioning and deammunitioning in, to allow our ships to actually go into maintenance. In conjunction with that, the Maritime Commander would like some flexibility, such that he could top up his units, other than by going to Point Wilson; and that is what the east coast flexible model is all about.

We cannot get away from importing EO, because we do not produce the EO that we require to sustain our ships in-country. You need an import facility that we are calling 'commercial' because we are using commercial ships to import it; but it is still a Defence requirement. On top of that, commercial users also have explosives in those ships and they deploy through that facility, but the operation is predominantly Defence.

CHAIR—What you are saying is that that ship, loaded with other explosives, has to come to your wharf anyway.

Capt. Adams—That is correct.

CHAIR—Yes. We need to understand that, because I do not think there should be any accent on a commercial need when we are talking about defending the country.

Capt. Adams—That is where the confusion is: when we say 'commercial', we are talking about a commercial vessel and not a navy vessel.

Cdre Cox—It is a Defence need, but it is provided by a commercial vessel.

CHAIR—Okay. You have mentioned the depth of water. We have 9.1 metres at Point Wilson. What is the available water depth at Eden?

Capt. Adams—I do not have those specific details at my fingertips but I have reviewed numerous reports, and my staff did an additional review only last year. All of those reports indicate that depth of water is a concern. You need sheltered waters, as well. The preferred option was in the location as stated earlier.

CHAIR—What you are really telling us is that the proposed wharf site does provide adequate depth of water but that other areas may not.

Capt. Adams—That is correct. The problem arises once you are looking at 1,000 tonnes. I should explain about that 1,000 tonne figure, because you need 1,000 tonnes for these commercial vessels. There are only about 12 in the world, and they dictate when they are actually going to deliver. The cost to Defence depends on how many commercial users, worldwide, put their EO on those ships, and you distribute the cost across all those receiving EO.

It is to our advantage that the ships come at a maximum capacity, as in the 1,000 tonnes. We could actually stipulate that they did not come with that maximum capacity, but there would be a cost. It would mean that, when they actually deliver at Australia, they would have had to offload sufficient EO so that they could come in with the NEQ that we require; but there would be a cost penalty associated with that.

CHAIR—Why would it be that a ship delivering explosives around the world would always want to come to Australia first? Are they coming from the United States, or Europe, or where?

Capt. Adams—No; I am sorry. It is not necessarily that they would come here first. I am saying that you would have to dictate where they were offloading, so that they arrived in Australia with the NEQ that enabled them to go to the licensed site.

CHAIR—By that, you are not talking about the draught of the ship, which was what started this discussion: you are talking about its ability to blow up, are you?

Capt. Adams—That is correct.

CHAIR—That is the NEQ.

Capt. Adams—Yes, that is the NEQ.

CHAIR—That, of course, goes up and down with the quantity of explosives on board.

Capt. Adams—Yes. The 1,000 tonnes is a figure that was come to in conjunction with the Australian Ordnance Council, as I understand it. We do not have empirical data to actually substantiate that they all have 1,000 tonnes or that they have 900 tonnes, but

1,000 tonnes covers the scope of operations as we have known them.

CHAIR—Is there a single shipping company that operates these 12 ships, or is there one that you deal with most?

Capt. Adams—No. There are a number of them.

CHAIR—Can you name some of these companies, or advise us?

Capt. Adams—Not off the top of my head, but we could get back to you with those details.

CHAIR—It would be interesting to have them give us some evidence on this matter. The other question I have for you, because you have drawn attention to the woodchip mill and its proximity, is this: how does that relate to the quarry at Port Wilson in terms of distance? Why is the quarry not a problem?

Brig. Kelly—The quarry is not within the yellow arc: it is not even within the purple arc, actually.

CHAIR—So it is further away.

Brig. Kelly—Yes, it is further away.

CHAIR—And the trucks that go in and out of there do not come inside that arc.

Brig. Kelly—The significant difference is that at Eden, even for a retail navy facility, the mill and the proposed industrial development in that area would be within the yellow and green arcs, where we would not like to see—

CHAIR—Yes, but the proposed industrial development is an issue that the Bega shire council would have to consider, if it were getting this other development, would it not?

Brig. Kelly—That is true.

CHAIR—That is a prospective issue. Could you remind us, firstly, of the number of navy visits you anticipate for this process of deammunitioning and reammunitioning at Point Wilson; and, secondly, of the number of containers that you expect to be unloaded per annum, on your estimates to date, by way of these ships coming in?

Cdre Cox—Our estimation at this stage says nine major ammunitioning—that is, FFGs and Anzac class—ships that we have based on the east coast predominantly—

CHAIR—Per annum?

Cdre Cox—Yes; and 24 minor. That totals 33 or 45 days of actual ammunitioning, working on the process taking about two days to do that ammunitioning. That is for the navy at Point Wilson.

Senator MURPHY—How many days, do you think?

Cdre Cox—Forty-five days of actual transfer of ammunition is our estimate.

Senator MURPHY—Is that in and out, or just in?

Cdre Cox—That would be either/or: some of those would be either deammunitioning or ammunitioning.

Senator MURPHY—I just want to understand this: you are saying that the 45 days is the total usage for the year.

Cdre Cox—That is our total estimated usage on a planned refit cycle that we have at the moment. That assumes that we do top-ups elsewhere.

CHAIR—So that is 45 days. What about your 'commercial' usage then? There is some reference to containers: is that included in the 45 days?

Capt. Adams—No, it is not. It is separate and I gave that information at a previous hearing. Historically, in 1995 we had two container ships; in 1996, three; and, in 1997, three. You are actually looking at 78 per cent military. In 1997, as an example, 78 per cent were military containers and 22 per cent, commercial.

CHAIR—And how many containers was it again?

Capt. Adams—As a percentage, 78 per cent were military containers.

CHAIR—That is what I wanted to know.

Capt. Adams—And there were 20 commercial containers across three operations.

CHAIR—So about 100?

Capt. Adams—Yes.

CHAIR—There is some evidence given here as to the cost of the jetty. The local member for Eden has informed me in conversation that there is a proposal for a wharf there—for which the federal government and the state government have each already

promised $3 million—but that they think it might cost $10 million. Why is the one that we want going to cost so much more?

Mr Young—The major reason for that is the breakwater that would be required for military explosives, to provide a stable platform.

CHAIR—Oh yes; and yet we do not need one of those at Point Wilson, although we have already been told that crane activity would be severely limited there because of the wind.

Mr Young—The 1993 basis for the report had a wharf structure of about $12 million for the Twofold Bay option, so it is—

CHAIR—Compared to $20-odd million for Point Wilson?

Mr Young—No. The wharf structure at Twofold Bay you are comparing against about $10 million: the estimate here included about $13 million—

CHAIR—Okay. So it is $13 million. But that does not include the breakwater.

Mr Young—No; and that was another—

CHAIR—And you are absolutely confident that they would need a breakwater but that they do not need anything like that at Point Wilson.

Mr Young—That has been studied at Point Wilson. I was not involved in the previous studies.

CHAIR—You are basically telling us that for about $13 million we can get a wharf, but that we need $22 million to patch up the one down at Point Wilson?

Mr Young—Yes.

CHAIR—I can assure you that that is the figure. At the moment with Point Wilson, as I understand it, the actual storage facility for the ammunition or explosives or whatever else is still going to be somewhere out near Penrith: is that correct? And then there is Newington; in fact, I found that all a little confusing. I know it was not specific to Point Wilson; but, in the current process of getting in to Sydney Harbour, I understand that we truck from somewhere near Penrith and barge from Newington. Can you tell me a bit about those two facilities: what they are, how large they are and what their real estate situation is?

Capt. Adams—The defence area at Orchard Hills is three—

CHAIR—Orchard Hills is where it all starts, is it?

Capt. Adams—Yes, that is correct. What we have there is storage of our conventional ammunition and guided weapons. That is at the armour facility. As well as that they have a RAAF component that does missile maintenance, and the third component is the RAN missile maintenance establishment. We take the weapons and conventional ammunition by truck from there to the Newington site. The Newington site used to be our wholesale storage for conventional ammunition. That closed as of December 1996 in anticipation that we were going to have an ECAC, and we have distributed ammunition to other facilities. We use the wharf at Newington to onload to barges. We then take that out into Sydney Harbour and we ammunition the ships. The government has decreed that that is to be shut by December 1999, and a facility such as ECAC needs to be in place and operational.

CHAIR—What area of land is there at Newington?

Capt. Adams—At Newington we do not own the land. We have sold that to the state government for the Olympics committee.

CHAIR—So that has been sold?

Capt. Adams—We are leasing back an area to be able to inspect and break down ammunition before we send it back to the facility and also transfer it onto the wharf.

CHAIR—Consequently, not only do the navy ships have to travel down to Point Wilson; my understanding is that the facilities we are constructing there on land are sufficient to store the ammunition that is being taken off a ship and then replace it, but it is not perceived as a full-time storage operation. In other words, Orchard Hills will be retained and you will unload your containers, et cetera and truck them all the way up to Orchard Hills. They will stay there until such time as you have reason to put them on a ship, and then you will truck them back to Point Wilson.

Capt. Adams—That is rather simplifying it.

CHAIR—It sounds pretty complex to me, but we can carry on from there.

Capt. Adams—Firstly, the storage facilities we have put at Point Wilson are for three outfits of EO. The length of time that you would leave the EO there would depend on requirements, and it would depend on what maintenance needed to be done to the ammunition and, in particular, the guided weapons. In addition, I believe the facilities at Orchard Hills have a life of up to 2015, but we are also looking at commercialising storage, maintenance and distribution of ammunition. At the moment that is being looked at and will be CSP market tested within the next 12 months to 15 months.

CHAIR—I would like to analyse what you have just told me. It is not necessary that on all occasions the ammunition taken off a ship will remain at Port Wilson. There will be occasions, due to the length of the refit or the need for some servicing of guided missiles, that they would still be, while that ship with the ammunition is trucked back to Orchard Hills.

Capt. Adams—That is correct. Because of the direction of the government, they asked us to look at that facility and see whether we could come up with more economical means of supplying our ships. We cut down the infrastructure within Point Wilson—it was only storage of three outfits. We conduct no maintenance there whatsoever, and we had made conscious decisions that that maintenance would be done elsewhere.

Mr HOLLIS—I am getting increasingly confused with all this transportation of ammunition because part of the argument that you have used here against Twofold Bay is the purple arc. Is that right?

Capt. Adams—Yes.

Mr HOLLIS—Yet for years and years we have had all this ammunition at Newington in the middle of the Sydney suburban network. There is no purple arc there. We are trucking it through Sydney. There is no purple arc around the truck going around. We are taking it down to Parramatta River. There is no purple arc there. Now you are telling us that, even if we get Point Wilson or Twofold Bay with its purple arc, we are still going to be trundling all that ammunition through the Sydney suburban network to and from somewhere at the foot of the Blue Mountains.

It seems to me that you are just using these purple arcs. I know it is a NATO thing, but it seems to me that the purple arc comes into existence when you want to prove a point. We hear nothing about it. I do not see what is more dangerous than putting ammunition—there might be more of it in a place here—on a truck and trundling it through the Sydney suburban network. If we are going to spend all this money at Point Wilson, why do we not have that as the centre area for our ammunition and stop trundling it through the streets of Australian cities? It is crazy what we are doing. I bet when the newspapers get hold of this, they will think it is crazy too.

Capt.Adams—You have made a number of points, and I think we need to address one at a time. Firstly, purple arcs are relevant to all explosive facilities.

Mr HOLLIS—But not on trucks.

Capt. Adams—No, that is correct. Once again, there are reasons for that as well. The purple arcs at Newington do and did exist. In fact, we have a public risk waiver so that we can operate the wharf to transfer the ammunition onto the lighters and take it out into Sydney Harbour. There lies one problem: the public risk waiver.

As to the second point on the storage, there have been studies conducted, particularly at the facilities at Kingswood, as to their viability. The outcomes of those studies are decreed, particularly because of the missile maintenance that goes on there. It is cost prohibitive to relocate those facilities elsewhere, and when we procure our new generation of weapons we would be looking at the through life costs and how we are going to maintain them. Certainly for the generation of missiles that we have at the moment we need to maintain them at Kingswood. To relocate the missile maintenance facility from Kingswood, you would be looking at a down time of anything up to 12 months to relocate that capability, set it to work and have it operational again.

Senator MURPHY—What is the current maintenance cycle?

Capt. Adams—It depends on the weapon. For torpedos, a certification life can be four to six years.

Mr HOLLIS—We will not need those on the Collins anyway because the things will not work. It would save a whole lot of money.

Mr FORREST—How old are the standard missiles?

Capt. Adams—I think the standard missiles are two years old.

Senator MURPHY—Do you have those on a rotational system? They would not all come up every two years.

Cdre Cox—They come up on motor life, and when the motor life expires in the missile we have to return it to ensure that the motor is maintained so that it can be used later on.

Senator MURPHY—I was only asking the question to try to understand, in terms of your transport requirements, how often you would be trucking stuff from Point Wilson up to Orchard Hills. How regularly would that occur?

Capt. Adams—I could not give you a specific time, but I think the other thing that you need to appreciate is that our guided weapons are like meccano sets. You have tactical weapons that have warheads. Those same weapons can be reconfigured and have telemetry heads that we use for practice firings. In actual fact, you look at the components within the weapons, their certification life, and you bring them back to refigure them so that you have tactical weapons, practice weapons, and the certification requirements within the weapons are addressed in that maintenance cycle. That is what dictates the return of the weapons in general.

Senator MURPHY—When you are doing it now, I assume you bring your weapons from around the country at different times if they have to come back to Orchard

Hills. There must be some record of how regularly you do that. Is it once a month? Is it once every two months or three months or six months? Is it once every two years or what?

Capt. Adams—I do not have the specific figures. We are ammunitioning ships, I would suggest, two to three times within a fortnight. So there are movements.

Senator MURPHY—Could we expect that two to three times a fortnight you would be trucking stuff from Point Wilson to Orchard Hills?

Capt. Adams—No, that is where it comes back to this confusion of what our requirement is.

Senator MURPHY—That is what I am trying to understand.

Capt. Adams—The Point Wilson facility is for major ammunitionings, and that is restricted to nine occurrences in a year. That is major ammunitioning. That is when your ship is going to be refitted or when it is coming out of refit or when you have a contingency situation.

Senator MURPHY—Yes, but isn't that to do with the nine, and the 24 or 45 days a year is the total use per annum? That is actually onloading and offloading at the wharf. Is that right?

Capt. Adams—There are two components to that. There are major ammunitionings and deammunitionings. That is when you take the whole outfit off or you put the whole outfit on. In addition to that, there are top-ups. As a ship goes out and it does exercises and it fires ammunition, you need to top that up. That is why we are looking at a more flexible model so that we can do that somewhere else other than Point Wilson.

CHAIR—And you use a barge or something.

Capt. Adams—A barge is an option.

CHAIR—But otherwise you might like to come alongside a wharf and do it.

Capt. Adams—Yes. At the moment our priority is looking at wharves. We will look at barges when we resolve or run into problems with the wharves.

CHAIR—Where will that wharf be?

Capt. Adams—At the moment we are looking at Port Kembla. We conducted a trial on 14 February. The trial was successful overall. It has numerous limitations in the capacity and what you can actually do there.

CHAIR—Is that physical capacity of lifting or the capacity of how much explosive you can have there at any one time?

Capt. Adams—It is handling explosives and it is the arc that it protrudes. You need to control the operation and you need to have no-one there other than people directly involved in the operation. We use berth No. 6. The trial overall as a concept was very successful, and I have an appointment on 6 April with Port Kembla to go into further negotiations with them. We are looking at other options within that board.

CHAIR—One of the thoughts that has passed through my mind as all of this has been happening—and I delivered the report on *Albatross* to the parliament yesterday—is that we are building ammunition storage at *Albatross*. Does that have any long-term future or even short-term future as Orchard Hills or major storage in conjunction with Port Kembla?

Capt. Adams—It is a retail facility and it is primarily to cater for harpoon missiles.

CHAIR—I understand what it is for. I am asking whether it has a long-term future considering that it is already a storage of ammunition.

Capt. Adams—As a retail outlet, yes.

CHAIR—Would you now define a little more specifically a retail outlet? Do you also have wholesale outlets? What is Orchard Hills?

Capt. Adams—We class that as a wholesale outlet, and that is what we are putting into the commercial support program assessment—wholesale storage.

Mr FORREST—Mr Chairman, can we come back to Mr Hollis's question. His question about road transport has not been answered yet.

CHAIR—I want to come back to that too. What Mr Hollis and I are concerned about—if I can use the term danger assessment—is what work has been done considering the number of movements we are going to have back and forward from Point Wilson to Orchard Hills in this process of trucks going up and down the road. There could be no more vulnerable point in the whole process than a truck driving along the road in terms of its ability to be involved in a crash none of its own responsibility. What assessment have you done of those problems?

Capt. Adams—For a start, transport of ammunition is dictated by very, very strict rules. There are 16 references used in this document in conjunction with this to come up with the complex operating environment that we are forced to operate under.

Mr HOLLIS—If one driver falls asleep, they all go out the window, do they?

Capt. Adams—That has also been looked at.

Mr HOLLIS—Your drivers do not go to sleep?

Capt. Adams—No, I did not say that. I said that it has been looked at. There are rules for the drivers as well. There are certain distances that they can travel and restrictions on how long they can operate.

CHAIR—Are you proposing to table that document?

Capt. Adams—I could do that.

Senator MURPHY—I understand they are the rules that would apply to your drivers, and you might say that they will apply if you commercialise the transport of which you are looking at. But you have no capacity when you commercialise the transport of weapons to monitor what a commercial operator might do. The transport world is a fairly competitive world. That would cause me some worry.

Capt. Adams—Senator Murphy, I appreciate that comment and I appreciate your concern. It is certainly a concern of Defence but it has been looked at in a different forum. It has been looked at in the forum that is assessing the commercialisation of that operation. I do not think that is relevant to our case today.

Senator MURPHY—What is relevant is how many times trucks are going to go up and down the road from Point Wilson to Orchard Hills, whether they go under Defence direction or in Defence transport or commercial transport. I do not think we have had an answer yet as to how regularly those trucks will go.

Capt. Adams—For Point Wilson we are aiming to do major ammunitionings. As we stated earlier, that is nine ammunitionings. You are looking at nine events with a number of trucks. As well as that, you are looking at the top-ups, and each top-up will require trucks to move to whatever location we are actually going to do the top-up on, and I think we stated that as—

Senator MURPHY—Twenty-four.

Capt. Adams—Yes. Twenty-four is the figure that was given to us by Maritime Command. So you are looking at those occasions and the number of trucks. I think that the point that you need to appreciate is that trucks run up and down the roads, and have been running up and down the roads, for numerous years. That is exactly how we get our ammunition from Orchard Hills to Western Australia—by truck, predominantly—and we

have never had a major incident that I am aware of.

Mr Young—I have another point on the commission of inquiry. It actually studied quite extensively the road transport risk as part of the inquiry into the establishment of ECAC, and it is well documented in one of the volumes of their report. If you wanted to have a look at that—

CHAIR—I think that the purpose of having these inquiries is to assemble all the evidence relative to all matters and, if it is relevant, I think that it should be delivered. You might comment, nevertheless, in terms of this importation of explosives and the remark you have just made about the relationship in all of this—and we are now talking about the initial importation, not the transfer which is clearly got to be done on the east coast. Does the west coast get half of that initial importation and, if so, in all of this, if your problem is to house a 1,000-tonne NEQ—and you are of the belief that that is covered at *Stirling*—and if it is a 50-50 arrangement, isn't it one of the practicalities for your 1,000-tonne NEQ to unload in Western Australia and truck the east coast requirement across? If that does not increase the risk factor in tonnes, or hundredweights, of explosive material-

Cdre Cox—I think that there are two things that I will have to take on notice there. You would have to look at the draft and the size of these ships to go alongside the wharf in *Stirling*. We have not looked at that and the Parmelia Channel. I am uncertain of the answer to that.

CHAIR—I think that the Parmelia Channel would be the least of your worries. You have bloody great bulk carriers going in there.

Cdre Cox—But we would have to look at that wharf, and I am not sure whether it is licensed for the size, but we will find out.

CHAIR—These are all issues that should be addressed. There is a clear and proper concern in this committee about protecting the public in all of this and in one regard, if everything were concentrated in one area, it clearly would reduce that risk. We accept that it has been done fairly safely over the years but, as history proves, one bang is sufficient. So there are all these options that might address some of these matters.

Capt. Adams—Going to one point has addressed that. Navy's preference at this time is that Point Wilson will be that one point. We actually have Point Wilson as an importation point now. How you actually manage breaking that EO up and distributing it will be assessed under this commercial support arrangement and people will put bids on the table as to how they will manage that. That will not change Defence's requirement to need an importation point, and Point Wilson is that point at this time.

CHAIR—But it is totally divorced from your actual operational facilities. You

have got one in Sydney and one in *Stirling*.

Capt. Adams—Yes.

Mr Young—The other point is that Point Wilson brings in all ADF's requirements and that includes army, air force and navy. So it comes in—

CHAIR—It is just about as far away from the fight as you could get.

Mr HOLLIS—Where are they all coming in now? You are saying Point Wilson is going to bring it all in.

Mr Young—It does now. It all comes through Point Wilson at the moment.

Mr HOLLIS—So that is even army equipment, air force equipment?

Mr Young—EO—the explosives—all comes through Point Wilson at the moment.

Mr HOLLIS—I thought that the defence forces were getting much more integrated. It seems to me that each arm of the Defence Force has got these huge storage facilities for ammunition. This committee, some years ago, approved $70 or $80 million for backup there at Singleton, and then there are other—

I remember on that committee they were saying how they were going to have one centre. Defence was going to have one centre for all the defence equipment and it was going to be shunted all over Australia from that one defence centre. It seems to me that each arm of Defence is having its own little headquarters. Each of them then is sticking equipment on the road and it is a matter of the army taking stuff somewhere, the air force probably taking stuff somewhere else, and the navy taking stuff up and down. You are all passing one another. Why don't we just have one centre?

Capt. Adams—In actual fact—

Mr HOLLIS—You are going to tell me that we do?

Capt. Adams—As of 2 February this year, there has been a triservice organisation set up—Defence Logistics Organisation—under Captain Malpress. He is now responsible for the management of all ADF EO matters—storage, handling, distribution, maintenance, et cetera.

Mr HOLLIS—So is he going to close down Myambat, or something like that, and move it all to Point Wilson?

Capt. Adams—I could not comment on that and I do not wish to.

Mr HOLLIS—No, that is quite important. If you are looking at what the future of all this storage of ammunition is, perhaps we are being a little bit premature considering this because there might be some big plan in a year's time. What if we bring down this report and then six months later this guy you have just mentioned comes up with a report to rejig the whole ammunition supply line throughout Australia?

Capt. Adams—I do not believe that that will impact on Point Wilson. That has been discussed, and it is part of the reason I am still involved in this project, even though I am now running ship logistics. Navy's requirement is that we need a major point for ammunitioning and deammunitioning of ammunition. It was looked at initially as an ADF requirement and it was identified that it was primarily a navy requirement to have Point Wilson for the three components I have mentioned earlier.

Mr HOLLIS—That is not just empire building by navy, is it?

Capt. Adams—Not at all.

Mr HOLLIS—Everyone is arguing for his own little ammunition dump. I do not see why you have all got to have your own little ammunition dump.

Cdre Cox—To answer it from my perspective as an operator, in an ideal world we would like another facility the same as *Stirling* on the east coast. We require a facility as close as we can get it to our operating base for ammunitioning and deammunitioning. *Stirling* is ideal because we have ships there and they come out of the water in Western Australia and do maintenance periods predominantly on the slipway in Western Australia. It is not possible on the east coast, and we are going to be driven out of Sydney.

If you go and look at Honolulu and the facilities in Hawaii, the ammunition depot is within three miles of Pearl Harbour. It is about a 20-minute run in the ship.If you go and look at San Diego, the ammunitioning is done going in and out of the harbour at large military facilities. That is the ideal way of doing it, having it as close to your operating base as humanly possible.

In our case on the east coast, we cannot do that. Jervis Bay would, from our perspective, have been ideal. It is no longer possible, so we have taken what is for us, I think, the only—

Mr HOLLIS—Twofold Bay is a lot closer, though.

Cdre Cox—Twofold is, but there are a number of limitations.

Senator MURPHY—What if those limitations were not there?

Cdre Cox—If they were not there, I guess that we would be happy to go to

Twofold Bay.

CHAIR—Commodore Cox, just on that point in our original evidence and, as I said, it was introduced by Mr Hollis, I think that you requested to give us your priorities, and your evidence was that your priority was Jervis Bay, and your second priority was Eden, and they had problems. In that evidence, whilst Jervis Bay was referred to as having the environmental questions which we all understand, at that stage no evidence was given as to why Eden would not have sufficed. That is one of the reasons we are pursuing this issue. At this stage of the game, we are looking at how you might have to deal with the woodchip mill. Even when I look at your map, the 1,000-tonne NEQ really only impinges on a small proportion of the Eden town site.

Cdre Cox—It does, and no-one would dispute that. There are some significant facilities down in that part of Eden. You are almost up where the main commercial centre starts. If you could satisfy the woodchip mill, then the navy could go there. The problem is that you do not have a staging facility, or any storage facilities there, so there would be an infrastructure cost for that.

CHAIR—Again, I would not be able to establish the topography of the area. The only thing that is very obvious is there is a huge amount of vacant land adjacent to this wharf site. I do not know that we would want to be contemplating the woodchip mill's relocation, but part of the Point Wilson proposal is the expenditure of many millions of dollars buying additional land.

Cdre Cox—Yes.

CHAIR—In your view, how does that offset against doing, for instance, a deal with the woodchip mill? I presume that deal would be some evacuation during—what deal would you do? Would they just say, 'We will take the risk,' or would they say, 'Well, we will clear our workers for the period you are unloading a 1,000-tonne NEQ vessel'?

Cdre Cox—I really do not know what sort of deal we would have to do. I think the 1,000—

Senator MURPHY—How long does it take to—

Cdre Cox—How long did it take to—

CHAIR—We get up to 30 containers an hour, Shayne.

Senator MURPHY—That is an issue for the navy.

Cdre Cox—Deammunitioning and ammunitioning are driven primarily by standard missiles. The DDGs and FFGs both carry 38 if they have got a full outfit. You just divide

it at four an hour, which is about the best we can do, taking them on and off because of the arrangement of the launcher. So that dictates how long it takes to ammunition.

There are considerations of weather, rain et cetera, but normally speaking it is about a day and a half's evolution for ammunitioning and deammunitioning a major ship. They will quote eight hours at you which, from my personal experience, never happens, because something always goes wrong. There are time delays. It is normally a day and a bit. On a really good day, you can do it in a day. I guess you would be asking them to evacuate for a day or take the risk for the day.

I have only one experience with negotiating deals for ammunitional risks. That was done in Gladstone for Tandem Thrust, where they were willing to accept American ships alongside a commercial facility there with the risk and the company just kept working. The Americans had to take out a large insurance policy for $1 million for the duration of the time the ships were alongside it in Gladstone, if I recall correctly. We had a PRW for it as well.

Senator MURPHY—The other thing is we know that Bega council and the state government, with some funding from the Commonwealth government, are proposing another wharf facility there that is for industrial purposes. I would be interested to know why or whether or not there has been any investigation into the possible integration for all of that, and what outcomes there have been, if there have been any discussions with Bega shire council. You may have already dealt with this at the previous hearing, which I was not at, so I apologise for asking the question.

Brig. Kelly—We have not had any recent discussions with them. Before the parliamentary hearing at Point Wilson, we had a letter from the Bega council offering to discuss these issues. We referred them to Captain Malpress, who was referred to before, to talk about the top-up option, but we have never gone back and looked at the ECAC option as such.

Senator MURPHY—We are looking at a use of 45 days. If I understood what Commodore Cox said earlier about you do have some commercial use at other facilities—

Cdre Cox—We are still looking at that. There are some limitations on that of transferring the pipeline from one city to another. It is as basic as that. As opposed to carting it through the outskirts of Sydney, we are now carting it through to Port Kembla. In my view, that is a serious limitation—if not now, my guess is it will be in due course. Nobody wants an ammunition depot.

Senator MURPHY—I can understand that. I guess I was looking at it like this: we may have a wharf facility that belongs to Defence—I thought I understood, and I may have misunderstood—and there is some commercial use of those facilities from time to time. I thought that was what you said earlier, that there were 72 containers or something

and so many of them were commercial. I may have misunderstood what you were saying.

Capt. Adams—That is import of ammunition or explosives. Within that cargo consignment, a component of that is for commercial use as opposed to defence use. That was the breakdown.

Senator MURPHY—I am sorry. I understand.

Capt. Adams—In answer to your question about the Bega council, as recently as last week, I followed up with the Bega council and the chairman of the council down there. He indicated that they were still wanting to move forward on that wharf but they still did not have the funding. We would be looking to be involved in negotiations with that and he has agreed that he would like to go forward with that. What we would be looking at is utilising that facility as a top-up activity.

The problem you have with putting the major facility in there is the constraints of the woodchip mill. In addition to that, you would have to put substantial infrastructure in there which was identified in the paper. From a navy perspective, we see limited advantages when we have a wharf which we are going to refurbish at Point Wilson. We have an operation and we can operate that facility to meet our requirements.

CHAIR—You have a wharf that is going to cost you $22 million to be useful for your long-term requirements. If you can build one for less than that then you also have a wharf for less money.

Capt. Adams—As I say, there are other infrastructure considerations that need to be looked at.

CHAIR—We cannot say we have got a wharf because we have not got a wharf until we spend $22 million on it. That is your evidence to us already. I think it has got to be taken in that perspective.

Senator MURPHY—Does Defence ever think about, in terms of the existing Point Wilson facility, any consideration being given to the facility at *Stirling* and anywhere else where these facilities have a principal use in the case of ammunitionings which is about 45 days per year usage. For the other, let us say, 300 days of the year, is there any consideration given to possible commercial use of that?

Cdre Cox—In the case of Stirling, no.

Senator MURPHY—Because that has additional roles?

CHAIR—There is basically no need.

Cdre Cox—The wharf is still only limited a bit by the sea that comes in there. There is a lot of fetch up and down on the wharf so there are days that it would not be suitable. Nobody really wants to use it.

Senator MURPHY—What if, for instance, a facility like this had the potential for commercial use?

CHAIR—Now we are talking about Eden.

Senator MURPHY—If there was a facility at Eden and there was a potential for it to be a combined facility that you wanted for 45 days of the year in essence to do the job you need to do, leaving, say, 300 days, could it be used without any detriment to the navy's security or Defence security et cetera? Could it be used for commercial purposes other than what you require it for?

Cdre Cox—In my opinion, yes. We would want it for more than 45 days because we would want to use it for top-ups as well in those circumstances and I would not like to forecast that. I can see no reason why not. We use commercial wharves all over the world for other things and there is no impingement on that.

CHAIR—Furthermore, because you are looking at Twofold Bay as a significant top-up facility or an ideal top-up facility, if all other things came to pass it must therefore be a preferred loading facility and unloading facility.

Capt. Adams—I do not think it is a true statement that it is ideal. It is one of the options we are looking at. In actual fact, Port Kembla is more ideal to us at this point.

Mr HOLLIS—Come. I would welcome you.

Capt. Adams—We are attempting to, Mr Hollis. We are attempting to.

CHAIR—I have got to say that one of the propositions put to me in wider discussions was the ideal suggestion of *Albatross* and Port Kembla. I make that as somebody else's view; I would not know. It continues to seem to me that Point Wilson is well down the list just because it is so remote from everything else we do.

Senator MURPHY—In terms of the Bega Shire Council proposal and what they were intending to use the wharf for, as I understand it it would not require day in and day out use. They were looking to primarily load pine logs from the facility. The only reason that they did not get around to using the Harris Daishowa wharf was because they could not get agreement from Harris Daishowa. To me, in this day and age, if there is a capacity to integrate the cost of something, then maybe that ought to be looked at.

Capt. Adams—Integrating the cost for top-up, I would accept that, but I do not

believe it is feasible to have the import facility at Eden with the information that has been provided to me. The bottom line is that we are actually looking at coalescing the import requirement as well as our major ammunitioning at a point of opportunity, as you call it, and Point Wilson is that point of opportunity for navy at this point in time.

Senator MURPHY—Did you have a look at how much infrastructure you would need to put in if you were to put the major facility at Eden?

Capt. Adams—That was done within the report.

Mr Young—That was part of the table that was provided with the—

CHAIR—There is information here regarding these matters. That information tells us that the cost would be greater at Eden, but then in the same breath the estimate for the jetty does not stand up against what other people say the jetty would cost.

Mr Young—We were just talking specifically about the jetty or the wharf structure before. The Twofold Bay option for Defence had a breakwater of $24 million included, plus $13 million for the wharf.

CHAIR—There is expert evidence that can be bought on this matter, but there is going to be evidence that comes to this committee that says you do not need the breakwater.

Mr Young—That was based on the 1993 report which—

CHAIR—Yes, I know, take a figure and double it.

Brig. Kelly—These are reports undertaken by our consultants at the time, Mr Chairman.

CHAIR—We will take it on that point as far as you are concerned, Brigadier Kelly. But the realities are that when we were standing on the wharf at Point Wilson, we were told that it had severe limitations when the wind came up and you would not be able to use it. What price did you put on that? I take Mr Hollis's point. Anyhow, we will seek evidence in this regard from people who wish to give it, but the wharf structure is just simply not going to cost as much as the restructuring or the reconditioning of Point Wilson, on evidence available from other sources.

Brig. Kelly—It is nevertheless an expensive option, even if we take out the requirement for a breakwater. The option to have both functions at Eden appears unworkable so we would still require a wharf elsewhere, presumably at Point Wilson, for the import-export function. That would still be, according to the figures we have provided,

without a breakwater at that cost, $144 million, which is twice the capital cost proposed for Point Wilson. The big stumbling block for Eden would remain the requirement to close anything that is happening in the green and yellow arcs while we were carrying out an ammunition trans-shipment.

CHAIR—All of those matters have to be considered but, when it comes to fighting a war, your submarines would be a lot cheaper if we took the armaments system out of them, but they would not be much help to us, would they?

Brig. Kelly—That's true.

CHAIR—This is a substantial area of concern to this committee—that we are proposing to have our armaments located so far away from where we might be active in a conflict.

Mr Young—It may be that in a contingency situation the submarines do not go back to Point Wilson to get their explosives.

CHAIR—The submarines will be at *Stirling*. They are not relevant to the issue.

Mr Young—The navy ships may load through Port Kembla with a public risk waiver in a contingency situation.

CHAIR—Then why are we chucking all the money into Point Wilson?

Cdre Cox—I do not think that is practical, but in reality you are talking of four days steaming. Sydney to Point Wilson and back to Sydney is four days additional time that we would have to do to go and get a full load of ammunition. We could also use *Success* to take ammunition to sea. The real thing that you have to do in any contingency is probably move ammunition to Darwin, because that is where you are going to have to top it up.

CHAIR—Considering this is a fairly permanent decision in the process of the longer-term operations of Defence, and if in your considered view Darwin is where it all should be, surely you should be telling us that.

Cdre Cox—Darwin is where you need a top-up facility but it is not a major base. Traditionally, ammunition facilities have been put adjacent to major bases, as has been the case in Western Australia, and you have also a maintenance facility there that can maintain ammunition.

CHAIR—Yes, it is ideal, but—

Cdre Cox—It is ideal.

CHAIR—It is a greenfield site.

Cdre Cox—We would not have those sorts of facilities in Darwin and we would not be using them on a regular basis. So in an ideal world you would have them located next to a base of the east coast, somewhere close to Sydney. What has really happened here, as we have just been pushed further south, is that we have had to take the most cost effective or least cost option. There are costs associated with steaming time and the distance that we have to go to do it, but there does not seem to be any other option that is practical.

CHAIR—It is our responsibility to pursue that. As for the ongoing cost of running back and forward in itself, your evidence is that Orchard Hills has got a 2015 life span. We originally talked of that place down there as having a 30-year life span or something, but I will stand corrected on that.

Mr FORREST—My question is in respect of evidence to be given by LOPAC. It is in their submission dated 22 January. I understand we will be asking Defence to come back to us after that. Can I ask the question now?

CHAIR—It might be better to get LOPAC because our policy is to have that evidence and then Defence comes back on the issue.

Mr FORREST—Okay.

Senator MURPHY—Concerning the selection criteria on page 9 of the submission, if I can just understand the matrix that has been used here, do the letters F, G and VG stand for fair, good and very good?

Brig. Kelly—That is correct.

Senator MURPHY—And the scoring system that is used in the summary on page 10 with regard to Jervis Bay, Twofold Bay and Point Wilson, is it '1' very good for Twofold Bay, then '5' good, '8' fair and '1' poor?

Brig. Kelly—That is correct, yes.

Senator MURPHY—Returning to page 9, under the heading of 'Adequate Depth', at Twofold Bay it is fair and at Point Wilson it is fair. Under 'Able to ammunition in one 8 hour shift', it is good for all of them. Under 'Safe vertical separation distance', it is good for all of them. Under 'Sufficient land area available to meet required safety standards' it is two goods and a fair. Under 'Least adverse impact on environment' it is fair at Twofold Bay. In terms of Twofold Bay, why would that only be fair?

Brig. Kelly—I do not believe that we did a full assessment of environmental issues

at Twofold Bay. It was excluded for other reasons, but there was an assumption that because of the nature of the area there would be environmental issues.

Senator MURPHY—And you have the heading 'Located in south east Australia.'

Brig. Kelly—As a strategic asset, and this is relevant to what we were talking about before about the fight being in the north and this being in the south, it is one of the requirements of this as a strategic asset that it be located in the south-east of Australia.

Senator MURPHY—I thought it was an east coast thing. All right.

Mr FORREST—Point Wilson would not get a G in comparison to the others if it was to be an east coast facility.

Senator MURPHY—We will come to that, Mr Forrest, I am sure, because I am interested how you have rated it good for its location if you then compare it in terms of its location to your facility at Orchard Hills. That seems to me to be a little bit contrary to what we have been given in evidence today. If you had three choices along the south-east coast of Australia and none of them had any problems, your first preference is Jervis Bay.

Brig. Kelly—I think it is worth going down to the criterion second from the bottom—'Proximate to east coast Fleet Base'. We do judge that Point Wilson is poor against that requirement.

Senator MURPHY—Yes, I understand that. The next one related to location is 'Ready access to main trunk roads'. There Point Wilson is good. Why is it any better than Twofold Bay?

Brig. Kelly—I would suggest that access out on to the freeway between Melbourne and Geelong and then relatively direct access to the Hume Highway would be the basis of that judgment, as opposed to the standard of the Princes Highway.

Senator MURPHY—You never balanced any of that up with regard to distance, et cetera?

Brig. Kelly—I cannot make a comment on that because this is a document that was prepared for the commission of inquiry and I am not sure of the basis. It is perhaps worth emphasising this requirement to consider the EO function in a commercialisation arena. In a few years time, our requirements could be different. I cannot say too much about this because, firstly, I am not aware and, secondly, it is perhaps commercially sensitive. One of the possible providers in a CSP environment has a capability in northern Victoria.

CHAIR—A manufacturing capability or a need?

Brig. Kelly—A manufacturing capability and a storage capability.

Mr HATTON—Have you ever looked at going north instead of south of Sydney for sites?

Cdre Cox—Yes, they did. They looked at Gladstone to my certain knowledge. I cannot remember where else was looked at. Gladstone was certainly looked at.

Brig. Kelly—Sixty sites were initially looked at so presumably quite a few of those would have been north of Sydney. Gladstone made the short list of the final five and was excluded, I think, second out of those five.

Mr HATTON—That is even further away?

Brig. Kelly—Yes.

Mr HATTON—So nothing closer to Sydney?

Brig. Kelly—The judgment was made that Gladstone would be workable only if the fleet base were further north because it is so much further away than even Point Wilson is from Sydney.

Mr HATTON—I do not think we got an answer to the question in terms of if you just offloaded it all in *Stirling*. In terms of percentages, how much does go to *Stirling* by road?

Capt. Adams—We have just put new storage facilities over there and we are reviewing what is required on the west coast compared to the east coast, but our primary storage facility at the moment is defence area Orchard Hills in conjunction with Myambat because we do not have Newington any more. It used to be Newington and Kingswood. Our model is based on the storage at defence area Orchard Hills and we use *Stirling* as a retail. There is certainly more ammunition there now than a retail requirement because we do not have Newington.

CHAIR—Coming back on that point in terms of every trip that has to go in both directions, you could end up with a better service facility at, say, Eden—or Port Kembla, for that matter—meeting the requirements of the east coast fleet in terms of deammunitioning and top up because you have now converted your 1,000 tonne import requirement to the west coast because you have a facility, presumably, that has all the purple and whatever other colour lines. In fact, you have had a no greater transport requirement; in fact, in the opposite direction. What is the dollar outcome of that?

Capt. Adams—I do not have those figures, Mr Chairman.

CHAIR—You might like to prepare at least a brief paper on it for this committee.

Brig. Kelly—For navy; I would suggest that for the air force and army there would be very little requirement on the west coast.

CHAIR—There are some clear figures as to how that all works out. If there is a facility there that would meet the 1,000 tonne requirement now—and we are not saying there even is—then is that a proposition?

Mr HATTON—I want to ask about some definitions—the sort of frank and fresh approach to this. I still do not understand your usage of 'wholesale' and 'retail' because you skated over that. I am guessing that, if you get a bulk load of stuff, you are talking about that as wholesale. You are saying the retail stuff is when they need only a top up or a little bit here and there, and it is a case of picking and choosing what is needed. Is that close to it?

Capt. Adams—The terminology that refers to wholesale is things that are slow moving, as in they are there, they are stored and they are not required for use for a long period of time—mines, conventional ammunition and things like that. We have got a limited population of guided weapons and, as I stated earlier, we use them as a meccano set to have them as tactical weapons or as practice weapons—that is our torpedos as well. So you cycle them through the maintenance pipeline, convert them over for the purpose of use, use them, bring them back and do other maintenance. 'Wholesale' is long-term storage for slow-moving parts; 'retail' is the turnaround that you need in the maintenance pipeline and also to sustain the ship requirements to meet practice exercise requirements.

Mr HATTON—So it is the sort of thing that you would have at the spare parts place?

Mr Ferraris—Not quite. There is another aspect of wholesale and retail. 'Wholesale' usually relates to munitions that are stored outside the area of operations and need not be moved there. The storage of them could be commercialised. A study was done in 1993 within Defence when we looked at this specifically, at where we could locate wholesale and retail. Retail is something that you would expect the services to have a management responsibility for because they may have to move that retail into an area of operations. So it is not just slow moving. We produce ammunition in this country in batch production. We have a manufacturing facility and, if it were running all the time, we would probably have a huge stockpile because we produce plants to manufacture ammunition to meet our requirements for conflict, not for peacetime. Our peacetime consumption is a fraction of what we would require in a conflict situation.

Mr HATTON—The other question I wanted to ask related to Orchard Hills and the highway movements back and forward to Point Wilson. There is already a facility there at Orchard Hills where the maintenance is done on all of this stuff. So the facility

has been put in there; that is the major one and that is where the maintenance has to be done. If you are loading and offloading down at Point Wilson, why should not the maintenance be done at Point Wilson as well instead of trucking the stuff up and back just because that facility exists at Orchard Hills?

Capt. Adams—The original proposal actually had all that built into Point Wilson. You are also looking at a further stage that would actually put guided weapons maintenance there. A review was done on that and, in cost terms, it was decided that defence area Orchard Hill was for guided weapons; it was not cost effective to relocate that capability. When the minister asked us to look at more economical means of ammunitioning, we reviewed the concept of operations at Point Wilson.

Mr HATTON—Can I just stop you. That is cost. What about efficiency?

Capt. Adams—Sorry, when you are talking of efficiency, what are you talking about—transportwise or maintenancewise?

Mr HATTON—Not just cost. The whole range of efficiencies.

CHAIR—If I can interrupt there. Surely efficiency is best serviced by getting the loading and unloading point as close to the existing Orchard Hills facility as possible. I could take Mr Hatton's point of view that, if it is going to be at Point Wilson, it should all be at Point Wilson, but in reality, if an adequate facility to unload and load was much closer to Orchard Hills, you would get the same outcome and you do not have to rebuild Orchard Hills.

Capt. Adams—We would certainly welcome you recommending to stay in Sydney.

Cdre Cox—Obviously, it has to be more efficient if you get them close together.

Brig. Kelly—Certainly there is an efficiency trade-off against this cost saving, but the original ECAC cost was well over $200 million. We were asked to look at it again to reduce that capital cost.

Cdre Cox—All guided weapons that we have on ships in Western Australia have to come to the east coast for maintenance anyway because we have only one factory.

Capt. Adams—Other than torpedoes.

Cdre Cox—Yes, other than torpedoes. All submarine torpedoes are now done in Western Australia at the one facility.

Capt. Adams—All torpedoes are done in Western Australia.

Cdre Cox—All torpedoes, sorry.

Mr HATTON—Okay, but your major interest here is in terms of bringing the cost down?

Capt. Adams—That was the direction the minister gave us and, being good service people, we have obeyed the last order.

Senator MURPHY—I would like to ask a couple of questions in regard to the selection criterion 'Not subject to frequent flooding'. You have said that in terms of Eden that was fair. Can you tell me why a wharf site at Mungana Point or East Boyd Bay would be subject to flooding?

Brig. Kelly—I cannot answer that question, Senator.

Senator MURPHY—If you go to the 'Highly desirable' aspects of the selection criteria and the criterion 'Low susceptibility to mining', you have got Eden as good and Point Wilson as poor. For the criterion 'Proximate to east coast Fleet Base and fleet exercise areas', you have Eden as fair and Point Wilson as poor. For the criterion 'Close to C130 capable airhead', I can see fair and good. Then there is the criterion relating to frequent flooding—I do not know what that means. If we then go to the desirable aspects, it lists 'Armament wharf and Depot proximate to each other'. Can you explain to me why Point Wilson is good.

Brig. Kelly—This was based on the original proposal where we would have moved the Orchard Hills capability also to Point Wilson. This was the original ECAC proposal.

Senator MURPHY—So this is not an accurate representation?

Brig. Kelly—No, it is not.

Senator MURPHY—Okay, that is all right. I looked at the strategic things. From a defence point of view, if you are offloading armaments by ship, low susceptibility to mining would seem to play a reasonably important role in the decision making at the end of the day.

Cdre Cox—The mining problem really is a function of getting in and out rather than being a problem when you are there.

Senator MURPHY—I understand that. I guess I was thinking if you were in a conflict situation and you were wanting to do that.

Cdre Cox—In reality, Melbourne for the miner operating from the north of Australia is a fair challenge in distance terms, but not impossible.

Senator MURPHY—No.

CHAIR—We will conclude our questioning at this time. It is now proposed to incorporate the supplementary submissions from the Department of Defence dated 20 March in the transcript of evidence. Is it the wish of the committee that the documents be incorporated in the transcript of evidence? There being no objection, it is so ordered.

The documents read as follows—

CHAIR—Thank you, gentlemen. We request that you stay to listen to the evidence of our next witness and then we will recall you, as is tradition.

[10.00 a.m.]

NEWMAN, Mr John Gordon Jaffrey, Senior Consultant, Australian Marine Technologies Pty Ltd, 34-37 Essington Street, Mitchell, Australian Capital Territory 2911

YOULL, Mr Stephen John, Managing Director, LOPAC Pty Ltd, 3 Evans Crescent, Griffith, Australian Capital Territory 2603

CHAIR—Thank you, gentlemen. You have previously given a submission to this committee. The committee has a substantial interest in alternatives to the Point Wilson development based on whether or not we can be convinced that it is the best proposition.

Your proposals have also been included in the Defence submission. One of their options for topping up would be some type of barge facility. It is an interesting point as to whether something is efficient for a top-up, but would then by definition not be efficient for major load and unload. Clearly, capacity is an issue there. They are the issues we would like you to address today in terms of how you would address these problems.

Mr Newman—The concept of the barge was considered some time ago to provide a flexible facility for navy to be able to ammunition in any sheltered water around Australia. The barge is a simple affair, self-propelled, with its own crane, able to lift ammunition to the highest point in any naval ship. The most difficult situation is putting missiles onto the missile deck of the Anzac class. It was designed with that purpose in mind. If it could meet that criterion, it could do any ammunitioning job for any ship.

Being self-propelled, it does not need much infrastructure. It can be stowed where it operates, it can be moored where it operates, and be activated when the requirement arises. All it needs is a hard stand, just a normal concrete hard stand to run up to, secure itself there and keep the engines running to keep it firmly embedded there. The idea is for the ammunition truck, the semitrailer, to drive onto the barge, disconnect the prime mover, return to the shore, and then the barge proceeds out to where the ship is either at a buoy or at anchor where it can then offload the ammunition out of that semitrailer, using the barge's crane, straight onto the ship. In our opinion this provides a great degree of flexibility because our thought was that the truck or trucks would arrive from wherever, from whichever ammunition depot, and just in time for the evolution that the navy requires, at whatever harbour.

CHAIR—In that regard, whilst I think the proposition has been considered in a top-up capacity, reference was made to clearance of the installation of a missile in its container or whatever on board ship. As to the issue of putting on one, or of putting on 21, it is your view that such a facility would be able to do that in relatively protected waters, and I think your evidence was that the type of crane and that proposed would have the capacity to slide this thing in a fairly tight area—and you are not just swinging a

container across onto the deck. Could you comment on that aspect of it? And, secondly, what is the limitation? It is one thing to look at this barge as a top-up facility; it is entirely another if it were the main source of load and unload. Would you consider it practical, at some cost, to load and unload an entire ship with that barge facility as we perceive happening in, I admit, a different environment—in Hong Kong harbour?

Mr Newman—In taking the first question, I will ask my colleague to address the details. We are talking about putting missiles into a ship and eventually into its launcher in two phases. One phase is taking it out of the truck and putting it onto the ship, and the second phase is actually loading it into the launcher.

Mr Youll—This is the most difficult ammunitioning exercise. It is specific to the Anzac class, and it is specific to the MK 41 launcher. Our MK 41 launcher is the highest in the world, higher than American ships three and four times the size. The problem is that—and I think in Captain Adams's evidence it is also there—at Point Wilson, where we have ammunitioned MK 41 canisters, you have to have a crane height of something like 25 metres, and you are suspending this canister, which is more than six metres long, and it is a couple of tonnes.

The environmental conditions are that the rise and fall of the ship must not be greater than six inches and the wind must be less than 10 knots. These conditions are not easily met anywhere on the east coast and, given the sea swell conditions along the east coast in places like Twofold Bay and all the rest of it, it would be very difficult, a very small window, to have those conditions prevail. Obviously it would be facilitated if you could get the missile canister and the ship in the same frame of reference and attached to each other, and then all you are doing is going from the horizontal to the vertical. That is what we call MCLE, the missile loading canister equipment, is designed to do. That problem will be anywhere. If you want to load MK 41 launchers, you will have that problem wherever it is.

CHAIR—From the shore?

Mr Youll—Anywhere. One of our concepts of operations—for example, say you only wanted two missiles for a top-up or an exercise or something like that, it is envisaged that our apparatus, the MCLE, could be even carried out to the ship by helicopter and attached, and then the helicopter brings the missiles. You would need a pretty big helicopter, but they are in inventory. The barge—or the lighter, which is a better word—is not tied to this MCLE and neither is the MCLE tied to the lighter. MCLE applies to one operation and one operation only, the loading of MK 41 missile canisters into MK 41 launchers.

CHAIR—In all of this, with that particular problem, and in fact having got the missile in the canister, how does the navy, if at sea, having fired that missile, get the next one in?

Mr Youll—With difficulty, because at the moment I do not think we have developed MK 41 under way replenishment capability. The Americans do, but it is a very convoluted exercise. The Americans get away with it; they have a whole bunch of launchers. We are a little different. But it would normally be provided either under way by an under way replenishment ship such as HMAS *Success* and potentially using this MCLE equipment or, alternatively, you have to return to harbour.

CHAIR—Coming back to the MCLE equipment, you have just said that it is neither attached to the barge nor the ship; is that correct?

Mr Youll—No, they are independent. The MCLE is actually attached, physically screwed to the ship, but you do not need the lighter to use the MCLE and you do not need the MCLE to use the lighter unless of course you want to load MK 41 launchers.

CHAIR—So we have really got this exercise that suggests that, whatever and wherever, there needs to be a capacity on board the ship to lift these things into position, and that is MCLE?

Mr Newman—MCLE does that.

CHAIR—So MCLE should be considered as part of the Anzac equipment?

Mr Youll—No, not really, because we do not intend to design the MCLE to a military specification. You would not want to take it to sea. It is just a handling device; it is just like a forklift truck or whatever. You are going to put it on the ship and you are going to take it off.

CHAIR—So that is what you would do; you would take it out with your barge?

Mr Youll—Yes.

CHAIR—I have seen some drawings in your original submission, and I thought the crane was actually fixed to the barge. I wondered about that.

Mr Youll—It is.

CHAIR—So what do you use the crane for?

Mr Youll—To put everything else on. To put MCLE on the ship, to put the canisters on the ship, but the barge can put anything else on the ship—bullets, pyrotechnics, whatever.

CHAIR—And then you need MCLE to actually install the canister in its launching position?

Mr Youll—Only in the MK 41 launcher, which is in the Anzac ships. But if you have the benign weather conditions of less than 10 knots and if you have less than six inches movement of the ship, you can use a conventional crane if it has 25 metres of reach.

CHAIR—And the enemy is coming down the coast while you are waiting for the wind to go down. Is that the situation? This is the other aspect to all of this, isn't it: it is just not a logistical operation; it could be in an emergency. We should be considering the capacity to load these missiles in extreme conditions simply because we might need to go and fight with them.

Mr Youll—Yes, and our submission is that with a combination of a lighter like this in any port anywhere and reasonably sheltered conditions—sea state 1, metre-high waves and that sort of stuff—you can ammunition.

CHAIR—But basically, in terms of a much broader argument and in considering the reliance on this missile compared with old-fashioned guns, is it a fact that when an Anzac frigate goes to sea and discharges its missile it has to come back to port before it can shoot another one?

Mr Youll—It will have a few missiles.

CHAIR—How does it get the other ones into the launcher?

Mr Youll—The MK 41 launcher has eight cells, so the current configuration in the Anzac ship is that you can have eight missiles. However, Defence now has a program to get an evolved Seasparrow missile which has four missiles in each canister, and there is also an Anzac war fighting improvement program to give them more launchers.

CHAIR—So really and truly, when we talk about installing these canisters, we might have taken them all out and put them all back?

Mr Youll—Yes.

CHAIR—Okay, that is fine. I was just getting a bit worried that we went to sea with one missile.

Mr FORREST—I want to pursue that question of yours, Mr Chairman. At point 5 the submission describes those fairly mild conditions you need, but you do not say in the submission what sorts of conditions could be tolerated with this new equipment. Point 5 states that the current situation needs:

- wind less than 10 knots
- Sea State 1 or less

- rise of the ship beneath a suspended load of less than 15 centimetres—

or six inches—but you do not say what sorts of conditions you can now load in with this improved equipment.

Mr Youll—It would be in almost any condition that would be met on the east coast of Australia, I would have thought. Once the canister is restrained in the MCLE, you could probably have rolls of 15 and 20 degrees and 40- and 50-knot winds. The tricky bit will be getting the canister, which is six or seven metres long, up onto the ship using the barge crane.

Mr FORREST—What are the conditions for that?

Mr Newman—We have talked about sea state 1, which is half to metre-high seas, but at the moment the amount of design activity that has gone into this barge is quite rudimentary. It is a conceptual design at this stage, and to go from here to production you would probably have a proper barge delivered inside a year. So a lot more work has to be done in modelling the ideal size, shape and so on which will minimise this movement between the little barge alongside a warship. Both are moving in different directions so that when you have the crane at the top of its catenary, if you like, with this large canister swinging in the air, we have to minimise that risk. So a bit more design work has to be done to address that problem.

Senator MURPHY—Because they do not move at the same time or in the same direction.

Mr Newman—No, of course not. When the switch is thrown to get this one going, the next step in our development would be the proper modelling—design modelling and so on.

Mr FORREST—What is your best estimate? I do not really understand what sea state 1 is. Is it a range of sea conditions?

Mr Youll—There are sea states up to sea state 10, considering the wind, the gale and all the rest of it. Sea state 1 is about half-metre waves and winds of 15 to 20 knots—something like that.

Mr FORREST—They are not calm conditions.

CHAIR—Defence might clarify that for us when they return.

Mr Youll—There is a Beaufort scale of wind and all the rest of it, and ships are designed for specific things. Suffice to say that, however this is developed, it will provide a greater degree of flexibility than the current thing.

CHAIR—Coming back to this facility, is it necessary for the crane to load to the same height—as we have discussed where we have got a wharf and a ship—or would it load on to some part of the ship and your MCLE proposal would take over from there, or would MCLE just be immediately adjacent to where the canisters have got to be loaded and just do the last bit?

Mr Youll—The last bit.

CHAIR—So the large crane has to still get it up there?

Mr Youll—Yes.

CHAIR—So you are still talking of a 25-metre lift?

Mr Youll—No. If you get the canister horizontally on to O2 deck of the Anzac ship, there is another eight metres for which you would have to have a crane if you were going to do it by conventional means.

CHAIR—Does MCLE replace that requirement? One of the steps to get that canister from the barge into the—

Mr Youll—That is illustrated in our submission, and you will see the steps there. The first step, on page B3, is that you load up the barge from a hard standing with the ammunition and the MCLE; you go out to the ship, you lift the MCLE on to the ship—page B5—and you secure the MCLE. Then you lift up a canister and you put it horizontally on the MCLE. The canister is then restrained, as on page B6, and then the MCLE orientates from the horizontal to the vertical, the canister being constrained all the time, and it is then—on page B7—lowered into the module into the launcher.

CHAIR—So the saving in height is the fact that you load the MCLE in a horizontal position. Presumably, from the shore—without the advantage of an MCLE—you would have your canister vertical.

Mr Youll—Hanging so, and with these very restrictive weather conditions. We had ammunition MK 41 at Point Wilson. The weather was marginal but we did it. But the operation would have been considerably aided in time taken and safety and everything else if we had had an MCLE or something similar.

Senator MURPHY—Why would we use this MCLE thing, even if the boat were at the wharf?

CHAIR—He is saying they would.

Mr Youll—You would. I am saying that you would.

Senator MURPHY—It seems to be a logical thing to do anyway.

Mr Youll—You get away from this problem of having to have minimum wind.

Senator MURPHY—And Dead-Eye Dick on the crane.

CHAIR—What percentage of the round figure of $10 million that is mentioned is represented by an MCLE?

Mr Youll—What is the $10 million?

CHAIR—In the original budgeting figures we had a figure like that floating around.

Mr Youll—MCLE is probably going to be able to be fielded for $100,000. You probably want only three: one on the east coast, one on the west coast and one in Darwin or one on board HMAS *Success* or something like that.

CHAIR—So even in the case of Point Wilson it improves that capacity?

Mr Youll—Yes, an MCLE would improve Point Wilson's utility for the loading of MK 41 launchers in whatever ship. Our point is that the lighter provides flexibility anywhere that you have got a hard standing and you have satisfied all the other naval problems of having relatively sheltered waters, the dreaded arcs and all that sort of stuff. We are not really suggesting—and you can confirm this—that this type of lighter of this size and of this sort of configuration would really be meant to replace a major deammunitioning and ammunitioning capability. Certainly, it would be not nearly as efficient as the current importation regime which is at Point Wilson. There is no need to do that by barge. There is a perfectly adequate wharf there, which the Defence submission now proposes to upgrade.

CHAIR—As for that $20 million down there, as I have said, I have looked out the window of a hotel in Hong Kong and probably there is some ammunition—considering their approach to life—but the realities are that I see a funny, old, stiff, three-legged crane going alongside a container ship and making substantial tonnage shifts.

All things considered, could your concept efficiently and adequately supply that loading and unloading facility if we decided that was a more economical approach to this proposition as compared to a land-backed wharf. I do not want to enter into the argument of which is better—that is something that you decide after you read all the evidence. The question I put to you is: could your concept be expanded to provide the total service?

Mr Newman—I think it would be a bit risky, looking at the importation with the

barge, because you would have to use the ship's crane to get the containers onto the trucks that are sitting in the barge. This is working on two moving planes. I am not fully aware of how tricky getting a container onto a truck is alongside Port Botany where it is dead calm, but I am sure—

Senator MURPHY—You would have to enforce more security holes.

Mr Newman—Okay.

CHAIR—As I said, I have asked the question; I do not mind what answer I get. I am not asking you to say that it is a good idea if you do not think it is.

Mr Newman—It is not something we have considered; we did not think it was feasible because of that—

CHAIR—You believe that your process is limited to a top-up type of operation?

Mr Newman—Yes.

Mr Youll—Just to add, as configured here, this crane has only got a capacity of four tonnes which caters for most pallets of ammunition and all missiles and that sort of thing. A 20-foot ISO container full of ammunition or explosive ordnance, dangling over the side of a 20,000-tonne ship, trying to be positioned on a barge some 30 metres below is not a scenario that you would wish to create.

CHAIR—Fair enough; that is now on the record.

Mr FORREST—I wanted to ask you, when you were running us through the sequence—I am returning to pages B4 and B5 again—how long does that process take or what is your best estimate?

Mr Youll—Seven to nine minutes and we might get it faster. At the moment, it is a good 15 or 20 minutes, I think. It is a brand new weapons system and the navy is just getting used to it. We have done two load-outs at Point Wilson.

Mr FORREST—Basically from step two onwards, there is a turnaround of seven minutes. That is pretty good.

Mr Youll—No, your first one is: you have got to get it on board and get it screwed down. That would probably take 15 or 20 minutes. That would get you to 16.

Mr FORREST—Hang on. Point 14—forget about that, because you have got all your canisters on the barge, on the lighter—

Mr Youll—Fourteen to 16—

Mr FORREST—From step 15 onwards, you have pulled up beside the Anzac frigate—how long before you get your first missile inserted in its cell?

Mr Youll—You would get the first one within, I would say, 30 minutes. It would take you 20 minutes to secure the MCLE to the ship. Then you could realistically expect to get a missile in something less than 10 minutes.

Mr FORREST—How does that compare with the current process at the wharf—it is the 10-minute cycle?

Mr Youll—We were taking it very slowly, but I think a missile took us half an hour.

Capt. Adams—We have improved. In actual fact, we have gone from half an hour down to about 20 minutes in round figures.

CHAIR—What is coming out of this particular inquiry more importantly than anything else is that, irrespective of where you load and unload a ship, when you are dealing with this particular missile, the MCLE becomes a very substantial improvement to the loading system—or a thing of that nature.

Mr Youll—The committee should not underestimate the difficulties or the challenges of having such an ordnance handling piece of equipment qualified by the appropriate agencies—both Australia and particularly the United States navy—who control this MK 41 launcher. However, my company does not have a recent history of being deterred by challenges and we intend to press on.

Senator MURPHY—Where does the crane operator sit in terms of the crane on the barge?

Mr Youll—He sits in the cabin, I should think.

Senator MURPHY—On the barge?

Mr Newman—Yes, he sits on the barge.

Senator MURPHY—In terms of potential movement and where he is going to put the MK 41 missile on the bed of the MCLE—and I do not know the dimensions of this missile; I understand it weighs about two tonnes—it obviously has to slip into some sort of cradle. It is then ultimately tipped up and dropped into a hole. On this question of movement, it would have to be fairly accurate. I cannot understand how a crane operator can sit below the place that he ultimately has to put it. He may be able to see people up

there directing him or whatever else but—

Mr Youll—Or he could have a remote control for a guy on the deck.

Senator MURPHY—Absolutely. I was wondering when someone was going to get a remote control into this operation, because I could not see where this crane guy was going to sit in terms of the crane on the barge.

Mr Newman—As with all crane operations, the crane operator is good to a certain point, but the final setting or settling is controlled by a dogman, if you like, at the point.

Senator MURPHY—Yes, true; but in most cases you are talking about fixed cranes with no movement up and down and no movement except for on tall construction sites, where you might get some wind movement, but everything else is basically fixed with no movement. We are talking about on the water. You have got to hope for the best conditions at sea with less than a metre of movement, but you are still going to have that movement. I do not know how the vessel is going to be secured to the other one, whether it is right alongside, tightly secured or sitting just off. Those things, I would think, would play an important role, regardless of whatever.

Mr Newman—Yes, they would.

Mr FORREST—I refer to points 16 and 17 of your submission on 22 January, on page 5. You offer some comments about Point Wilson and its suitability and so forth. You may say that you are not qualified to offer any more; you may just be speaking in the broad. Point 17 talks about distinct disadvantages of Point Wilson, which are listed there. By what sort of authority are you able to make that comment or is it just an observation?

Mr Youll—Just an observation based on combined 65 years of naval operational experience and another 25 years of commercial naval maritime operations, but we are not experts and I would defer to those who have already been sworn in.

Mr FORREST—Thank you.

Senator MURPHY—What about point 18:

The continued suitability of Point Wilson as the principal facility for importation of ammunition, however, is acknowledged due to the existing infrastructure and the relatively small number of movements.

Can I just ask you about the existing infrastructure and the relatively small number of movements?

Mr Youll—I do understand this. I am talking here about the importation of

explosive ordnance. It is three ships a year—the existing infrastructure. It is happening right now. It has happened for a number of years. My understanding is that the Department of Defence are tying to ensure that capability exists for some time in the future—and this is the refurbishment of the wharf and the upgrading of the roads and all the rest of it. Because they have not been able to get their preferred site, nominally Jervis Bay, for an ECAC, they have been forced to come here and they are optimising the existing infrastructure there for importation and for these nine major deammunitionings and ammunitionings. But it is there. It exists; it works.

CHAIR—Yes. Thank you very much. It is appreciated that you gave us your time. You have cleared up some aspects of things called MCLEs—

Mr FORREST—What is it like with the exporting potential, 220 units around the world.

Mr Youll—They are ships with the system, so not every ship would have one.

Mr FORREST—I just did a quick sum on what that might be worth to the GDP.

CHAIR—Thank you very much. Would the representatives of the Department of Defence like to return?

[10.29 a.m.]

ADAMS, Captain Malcolm David, Superintendent of Armament Logistics, c/- RAN Armament Depot, The Northern Road, Kingswood, New South Wales 2750

COX, Commodore Timothy Harvey, Director-General, Maritime Development, Department of Defence, Russell Offices, (B-4-05A), Canberra, Australian Capital Territory 2600

FERRARIS, Mr Diego Felice, Project Director, Department of Defence, Campbell Park Offices (CP3-3-23), Canberra, Australian Capital Territory 2600

KELLY, Brigadier Garry Ross, Director-General, Project Delivery, Department of Defence, Campbell Park Offices (CP3-3-03), Canberra, Australian Capital Territory 2600

YOUNG, Mr Steven Bruce, Project Manager, Department of Defence, c/- Gutteridge Haskins and Davey Pty Ltd, 380 Lonsdale Street, Melbourne, Victoria 3000

CHAIR—Thank you, gentlemen. Mr Forrest has a commitment shortly and has a couple of items he wishes to raise. Rather than let you comment first, I will give him the opportunity to ask his questions.

Mr FORREST—I am just interested in MCLE. We have heard the suggestion that it is a unit worth about $100,000 but it seems to me that, with that sort of cost, it would be better for it to be permanently fitted to the frigate and so facilitate the inserting of the missiles no matter where the ship is located. Has that been considered by navy?

Cdre Cox—No, it has not. MCLE does not exist today. We have no objection to MCLE. I would like to see the concept demonstrated—and I think it is a good idea—but we would not need to have it there all the time. Transferring missiles at sea into Anzacs would be very difficult, from my perspective, off the ammunition ship. You might be able to do it with helicopters but the helicopters we have at sea at the moment would not have the lifting capacity to do that.

MCLE, in my view, is something that you would use for top-ups and you would use in a harbour or protected waters in a 'benign sea state', or sea state 1, which, from memory, is less than half a metre and less than 10 knots; it is Sydney Harbour on a good early morning when there is not a lot of breeze around. Those are the sorts of conditions that we would normally look at for putting these missiles in. But MCLE is a fine concept; it just has to be demonstrated. I have no objection to it.

Mr FORREST—It would have to have further development, obviously, before navy would be satisfied?

Cdre Cox—We would like to actually see MCLE on the streets. We would be

only too delighted to trial it.

Mr FORREST—Points 16, 17 and 18 of the submission from LOPAC make comments about the suitability of Point Wilson. Point 17 particularly says it has:

. . . other distinct disadvantages as an ammunitioning site due to:
- The vulnerability of the entrance to Port Phillip Bay, The Rip, and channels to blockage and mining
- Transit time from The Rip
- Exposure to weather
- Environmental concerns

I would like comment from the witnesses on each of the points that are listed there. What is Defence's view of these listed disadvantages?

Cdre Cox—They are not disputable. They are all a statement of opinion. How much vulnerability there is, I do not know. The Rip is vulnerable to mining. It is also vulnerable to a shipping accident that could close off the Port of Melbourne, but that would be the same for most ports in Australia. As for transit times, we are already transiting two days from Sydney; the transit time from The Rip to the facility is minor.

I accept that the weather is limiting. On the day that we were there inspecting the facility, the weather was benign. One would be foolish to think it would be like that all the time. In fact, I am quite certain that it is not, and that that was probably just an exceptional day. The weather is something we just have to come to grips with. Normally some of these evolutions can be done early in the morning and then the weather limitation will come into play. We do not dispute the weather is a limitation and 'fetch' would be a limitation, as stated by Mr Youll. Once the sea state gets up, certainly putting missiles into the MK 41 launcher is an evolution that you could not continue with. On environmental concerns, my view is that we have probably overcome them to a large extent.

Mr FORREST—At a cost of $600 million.

Cdre Cox—Yes, sir.

Mr FORREST—What is your view of point 13 of their submission, which says:

An ideal ammunitioning facility should be:
- Close to training and evaluation facilities
- Relatively close to, but not vulnerable from, potential operational areas
- In a relatively benign weather environment

Cdre Cox—I do not disagree with any of that. I think Mr Youll in his evidence suggested, and I would support this, that there is not a benign weather environment on the east coast of this country. I do not dispute any of those points. In fact, in an ideal world you have it next to your operating base, as we have got in Western Australia—and it is

not vulnerable. It is a long way from where you are going to operate or potentially operate.

Mr FORREST—So, in all honesty and in all reality, it goes to the question by Mr Hollis earlier that Point Wilson would not be navy's preferred site. Would it be?

Cdre Cox—No; it is certainly not, from my point of view.

Mr FORREST—Would it be a compromise to accept it?

Cdre Cox—It is the best compromise we have got left. In fact, in my view, it is almost the only compromise we have got left.

CHAIR—That is a dreadful reason for making the decision. Can I just say something that is really outside the terms of this inquiry. In an operational sense—a real knock-down, drag-out conflict—how quickly would the navy expect to fire off its eight missiles? I know they cost a huge amount of money and that you would select your targets very carefully, but how does all that work?

Cdre Cox—We would normally operate Anzacs together with DDGs and FFGs, which have larger numbers of, and longer range, missiles. The standard missile gives protection out to about 25 miles, and we operate them together with Anzacs. Anzacs have got the Seasparrow, which is what we would call a point defence, self-defence, weapons system. They have only eight missiles. The DDGs and FFGs have 30. When the Evolved Seasparrow comes along, we can put in four per canister which would give Anzac, under its current configuration, 32 missiles.

What we hope to do with Anzac in our program is to increase that missile silo capacity threefold to make it 24. Then we will have a mixture of missiles between the longer range and the new variant of the longer range vertical launch missile, the SM2, which is about the same size as the ones we have already got and also these quad packs of old Seasparrow.It is very difficult to say how long it would take you to fire off all eight. On a bad morning I would reckon you could be through them by lunchtime.

CHAIR—At which stage you are indefensible.

Cdre Cox—At which time you leg it over the horizon.

CHAIR—If you can beat somebody else's missile!

Cdre Cox—That is right.

CHAIR—So, as I said for entirely other different reasons, an upgrade there is pretty important.

Cdre Cox—Yes, and that is coming forward very shortly, too.

CHAIR—As I said, that is outside this inquiry.

Senator MURPHY—I want to go back to the weather conditions, and what information you have with regard to the weather conditions that prevail at Point Wilson and if any assessment has been made of the usage of the facility there with regard to those weather conditions. I am sure studies are available of the prevailing weather conditions and that you ought to at least be able to make some assessment or analysis of what interference that might cause the facility.

CHAIR—Senator, would you consider that to be an assessment in a relative sense between the available sites? In other words, how many bad days do you have?

Senator MURPHY—I would have thought it should be in the case of all sites.

CHAIR—Yes.

Cdre Cox—I do not have it to hand, but I can provide it. My judgment of Port Phillip Bay—from just having been there on a number of occasions—is that there are more bad days than good days, so I think that there will be weather limitations—there is no doubt.

Senator MURPHY—To me it is an important aspect, when you are considering outlaying significant amounts of money, to consider the capacity for usage or possible interference from weather that it may have. You are right: there are more bad days than good days with regard to Port Phillip Bay. If, for instance, those days amount to a significant number that might prohibit you from using the facility, that ought to be a fairly important consideration for us—for me it is—when you are talking about putting in fairly substantial infrastructure development and spending a lot of money versus some of the other things that we have to consider.

Cdre Cox—There are two parts to the question and two parts to the answer. Firstly, except in the more extreme conditions of thunderstorms and rain, the general conditions down there are about 25 and 30 knots and a sea state of about two metres along that wharf, from what I would expect on the worst occasion. You could still load the other missiles, the SM1s, because you are just craning them on to the deck and you could still load the other ammunition up to the extremities of those sorts of conditions. There will be times when you would have to stop, certainly for rain and thunderstorms; you would give it away because of the danger with the thunderstorm in particular.

As for the conditions that LOPAC are talking about with the Seasparrow, you will have to do that early in the morning and, when the weather gets up you just will not be able to do it because you just cannot plumb the crane. There is no debate about that.

With Twofold Bay, the same thing would apply. You get a sea state that rolls in there which also limits the amount of movement alongside the wharf. We experience the same thing in Western Australia at *Stirling* when there are a number of days in the year

when you cannot actually get alongside that wharf because of the 'fetch' of the sea that is running into the sound there. Those conditions tend to prevail everywhere except when you do ammunitioning in Sydney Harbour which, generally speaking, is benign enough to do it nearly every day of the year.

CHAIR—I interrupted Senator Murphy previously on the basis of relativity. I guess that means we go back to section 2 of the previous investigation which inferred that, on a comparison, Jervis Bay was an 'F' for fair, Twofold Bay was 'VG' for very good in terms of sheltered water and Point Wilson was a 'G' for good.

Cdre Cox—The wharf at Twofold Bay is protected from the prevailing southerly and therefore you will get good protection from that. You will not be so well protected from the nor'easter, but the nor'easter does not bring up the same sort of swell. I would not dispute those sort of facts.

CHAIR—On the basis of relativities and on the issue of sheltered water, Twofold Bay is the best of the three, according to what you have told us here.

Cdre Cox—I would not dispute that. I have not personally measured it, but I would think that is a pretty fair statement.

Capt. Adams—The other point on the weather is that we have actually loaded Seasparrow on five occasions at Point Wilson with conditions up to the 20- to 25-knot range. The problem we have found is more in the wave movement than the actual wind. We have run into problems in Western Australia simply because of the wave movement alongside the wharf and we are reviewing that at this point in time.

Senator MURPHY—You are reviewing it?

Capt. Adams—We are reviewing the locations of where we load Seasparrow. We are actually looking to create a licensed site further south that does not have the same wave conditions.

Senator MURPHY—What happens if you get to Point Wilson and, in terms of the Seasparrow, it proves ultimately that the weather conditions make it just uneconomical and too hard—there are too many days when you want to do it but cannot. There may come a time when you want to do it or you need to do it and you cannot do it because of conditions. Will you then look elsewhere?

Capt. Adams—As I say, we have loaded Seasparrow on five occasions. In actual fact, our expectation and our experience in loading Seasparrow have increased as we have gone along.

Senator MURPHY—You said 'in 20-knot winds'?

Capt. Adams—Yes.

Senator MURPHY—Twenty-knot winds—it depends on which direction they are coming from as to whether or not you get the wave movement. If you had the same wave movement at Point Wilson, you would not have been able to load them any more than you would have been able to do so at *Stirling*. Is that so?

Cdre Cox—*Stirling* is pretty crook. When the weather conditions are bad—I will be careful what I say about Western Australian weather—and when the Fremantle doctor blows across *Stirling* naval base, it gets fairly hammerish from about 10 o'clock of a morning onwards on most days. The sea can get up quite quickly and, in certain conditions, the wharf at *Stirling* is not safe to stay alongside in thin-skinned warships.

Senator MURPHY—I would be interested in the same information about sea movement in regard to Point Wilson. I am not worried so much about the wind; I accept what you say about the wind. In terms of the wave movement at Point Wilson, I would like to know what it is and over what days that runs versus when you bring a boat in, because you are not going to say, 'We will watch the weather'; I assume you are going to import on designated times and that you will do that on the basis of your program—you will not do it according to the weather.

Cdre Cox—That is true. I do not have that—

Senator MURPHY—Can I just follow that up? Do you, at this current point in time, have a designated program for your nine major—

Cdre Cox—No.

Senator MURPHY—There is not a sort of, we get three boats in in March or one boat in June and another two in July?

Capt. Adams—Those operations relate to our maintenance profiles and maintenance package. We negotiate that on a 12-month basis and we actually look at what the program will be in catering for those major maintenance requirements. You need to deammunition to undertake the major maintenance and then to reammunition when you have completed that.

Cdre Cox—In answer to your question, in my previous job I moved those maintenance periods up and down the chart with pretty much gay abandon. No, you cannot plan in advance.

Mr Young—The other comment is there is wind and wave information available for Point Wilson. There has been also a wharf downtime study that has been conducted there. I do not know what the results are but we could forward that.

CHAIR—I think that is in the context of relativity, if we are selecting a site and there are all these different factors—and I am not saying we are selecting the site—but if a site has been selected, the concept of how many down days you might have at Point

Wilson compared with how many you might have, if you like, in Sydney Harbour, where it has been suggested you have none, and all the ones in between are still subject to consideration. This is all taken in the context of the fact that the committee is concerned that Point Wilson is too far away. In other words, it has got to have a lot of things going for it to make up for that gap.

Cdre Cox—We are comparing a little bit of apples and oranges. We do not load the Seasparrow to the MK 41 launcher in Sydney, so we are not carrying out that particular ammunitioning in Sydney.

CHAIR—Fair enough. I accept Sydney is a no-go. If you wanted to go from the best to the worst, where would you start and finish, all other things being considered. If you are going to talk about effective weather patterns in Point Wilson, we would like them relative, for instance, to Eden or somewhere else that might still be in consideration if other matters can be confronted.

Senator MURPHY—Point Wilson had some attractiveness for me in regard to the possibility of landing a fast ferry from Tasmania and offloading it.

Capt. Adams—I think we are getting bogged down in a bit of detail here. Seasparrow ammunitioning is related only to Anzac frigates and it is a small proportion of what you are actually loading.

CHAIR—That is right. You tell us that.

Capt. Adams—I think you need to appreciate that aspect.

CHAIR—Yes, we understand that. But, whatever the function, even if you are taking off a hand grenade, there is a relativity in terms of the conditions under which you operate if you are dealing with explosives. It just gets less of a problem if it is not a Seasparrow missile.

Capt. Adams—Correct. That is why we have those safety arcs and we require those distances and we operate under NATO safety principles.

CHAIR—Any other questions? Thank you, gentlemen. That is the extent of our formal inquiries today. I would like to thank witnesses for appearing before us today.

Resolved (on motion by **Mr Hollis**):

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

Committee adjourned at 10.48 a.m.