



COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

JOINT STANDING COMMITTEE ON FOREIGN AFFAIRS,
DEFENCE AND TRADE DEFENCE SUBCOMMITTEE

Reference: Australia's maritime strategy

TUESDAY, 11 MARCH 2003

SYDNEY

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JOINT COMMITTEE ON FOREIGN AFFAIRS, DEFENCE AND TRADE

Defence Subcommittee

Tuesday, 11 March 2003

Members: Senator Ferguson (*Chair*), Mr Brereton (*Deputy Chair*), Senators Bolkus, Cook, Eggleston, Chris Evans, Harradine, Hutchins, Johnston, Sandy Macdonald, O'Brien, Payne and Stott Despoja and Mr Baird, Mr Baldwin, Mr Beazley, Mr Bevis, Mr Byrne, Mr Edwards, Mr Laurie Ferguson, Mrs Gash, Mr Hawker, Mr Jull, Mr Lindsay, Mrs Moylan, Mr Nairn, Mr Price, Mr Prosser, Mr Scott, Mr Snowdon, Mr Somlyay and Mr Cameron Thomson

Subcommittee members: Mr Scott (*Chair*), Mr Price (*Deputy Chair*), Senators Chris Evans, Ferguson (*ex officio*), Hutchins, Johnston, Sandy Macdonald and Payne and Mr Baldwin, Mr Beazley, Mr Bevis, Mr Brereton (*ex officio*), Mr Byrne, Mr Edwards, Mrs Gash, Mr Hawker, Mr Lindsay, Mr Nairn, Mr Snowdon, Mr Somlyay and Mr Cameron Thompson

Senators and members in attendance: Mr Scott (*Chair*), Mr Price (*Deputy Chair*), Senators Ferguson, Hutchins, Johnston, Sandy Macdonald and Mr Bevis, Mr Byrne, Mr Edwards and Mr Cameron Thompson

Terms of reference for the inquiry:

To inquire into and report on:

The ADO ability to deliver the necessary capabilities to meet Australia's strategic interests and objectives as defined in Defence 2000, with specific reference to the:

- ADO capability to apply the maritime strategy outlined in Defence 2000 in the current strategic environment;
- primary roles in Australia's maritime strategy of the key components of the ADO, including the three services, Defence Intelligence Organisation and ADF Command and Control structure;
- impact of Australia's maritime strategy on ADF capacity to participate in combined, multi-national regional and global coalition military operations;
- integration of maritime strategy with the other elements of Australian national power to achieve specified national strategic interests and objectives;
- impact of the evolving strategic environment on Australia's maritime strategy; and
- integration of Australian Defence Industry into capability development to support a maritime strategy.

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Committee met at 9.30 a.m.

CHAIR—I declare open this public hearing of the Defence Subcommittee of the Joint Standing Committee on Foreign Affairs, Defence and Trade into Australia's maritime strategy. The 2000 Defence white paper, in referring to a maritime strategy, states:

The key to defending Australia is to control the air and sea approaches to our continent, so as to deny them to hostile ships and aircraft, and provide maximum freedom of action for our forces.

The inquiry aims to develop a comprehensive understanding of maritime strategy and its place within Australia's broader military strategy and defence policy. The inquiry is not limited to an examination of Australia's naval or maritime forces, nor is it focused only on the defence of Australia. For example, the inquiry will examine the implications of maritime strategy for other tasks set out in the white paper—namely, how Australia's defence policy contributes to, firstly, the security of our immediate neighbourhood, secondly, the international coalitions beyond our immediate neighbourhood and, thirdly, support for peacetime national tasks.

The inquiry is challenging and particularly significant in ensuring that Australia's maritime strategy effectively underpins broader defence policy and helps to achieve national security objectives. Given the significant developments in the international security environment, it is timely to conduct this examination and ensure that Australia's defence strategy is adequate and capable of meeting new threats such as transnational terrorism.

The subcommittee previously conducted public hearings in Canberra on 25 and 26 February. A further public hearing will be held in Melbourne tomorrow. Today, the subcommittee will take evidence from Commodore Alan Robertson, Mr Alastair Cooper, ADI Ltd, the Maritime Union of Australia and the Royal United Service Institution of NSW. Before introducing the witnesses, I remind members of the media who may be present at this hearing of the need to fairly and accurately report the proceedings of the committee.

[9.32 a.m.]

ROBERTSON, Commodore Alan (Private capacity)

CHAIR—I now welcome Commodore Robertson to today's hearing. Although the subcommittee does not require you to give evidence on oath, I should advise that these hearings are legal proceedings of the parliament and therefore have the same standing as proceedings of the respective houses. We have received a written submission from you. Do you wish to make an opening statement to the committee? The week before last in Canberra we were asking those who were giving evidence to give a one- or two-minute precis of their background to help members of the committee who were not familiar with them or with their career. We ask that, if you choose to make an opening statement, you give your precis before that.

Cdre Robertson—I joined the Navy as a cadet in 1940 and went to sea in 1943. In 1944 and 1945, I served in Royal Navy ships in the Atlantic and the Far East. On return to Australia, I served in HMAS *Shropshire*. In 1947, I went minesweeping on the Barrier Reef and, in 1948, I was minesweeping in the Solomons. In 1952, I qualified in communications and, in 1955 or 1956, came back to Australia as the signal officer of HMAS *Melbourne*. In 1958 or 1959, I went to Darwin as the officer-in-charge of Darwin Naval Radio Station and, in 1960, I came back as the first lieutenant of HMAS *Voyager*.

I got promoted to commander out of *Voyager*, and went and did the Royal Naval Staff Course in 1963 in England. Then I went for two years to Singapore, where I was the head of the joint planning staff A team during confrontation. The A team was responsible for confrontation planning. I returned to Australia as the executive officer of HMAS *Melbourne*. In 1967 or thereabouts I was appointed to command HMAS *Duchess*, a destroyer. After service with the Far East Strategic Reserve, I went to Navy offices as the Director of Naval Communications in 1969. In 1971, I was appointed to command HMAS *Hobart*, the guided missile destroyer. We were all set to go to Vietnam when Mr McMahan decided we need not go, so we did not go. But we could have been out in 20 minutes. The Army was not out until some time in 1973.

After *Hobart*, I went back as Director of Naval Communications. After that, I was captain of HMAS *Stalwart*, the destroyer escort maintenance ship. Thereafter, I went to Navy Office as the Director-General of Naval Operations and Plans, and subsequently became the Director-General of Naval Policy and Plans. I resigned in 1979.

CHAIR—Thank you, Commodore. That is a very distinguished career. Would you like to make an opening statement now that is related to your written submission?

Cdre Robertson—Has the committee read my book, a copy of which I sent to all members?

CHAIR—Yes.

Cdre Robertson—It really encompasses my philosophy. As I see it, the white paper description of what it calls a maritime strategy is not a maritime strategy at all; it is a continental strategy. And it is a sea denial, which is only one of the sea power missions. It is typical of a continental power's approach to the use of maritime strategy. I believe that Australia

should adopt a wholesale maritime strategy, including not just sea denial but sea assertion, which is not, I might add, a favoured term among the more distinguished advocates of maritime strategy—such as Commodore James Goldrick, who is, I think, in the audience—but I use it because it goes with sea denial and sea assertion, which together make up sea control and power projection, which is using the Army as a bullet fired from a gun into the shore and also taken back out as quickly as possible if that is needed. That sums up my position.

CHAIR—Thank you, Commodore. I will now open the hearing to questions from our committee. Senator Ferguson, you might like to open the batting.

Senator FERGUSON—Commodore Robertson, in your submission you talk about a proper maritime strategy for Australia that should also include the other two sea power missions—that is, sea control and power projection. What are the limitations of designing a maritime strategy on the concept of sea denial?

Cdre Robertson—Sea denial does not allow for the protection of vital shipping. For instance, if we take the Army or the Air Force offshore they have to be supported logistically. War is about 90 per cent logistics. If you cannot protect that shipping then there is no point in taking the Army or the Air Force offshore.

CHAIR—What does Australia need to do to attain some sort of sea control?

Cdre Robertson—First of all we need to spend more than 1.8 per cent of gross domestic product on defence. This is ridiculous. We lived for years spending three per cent of gross domestic product on defence—and the country did not go broke, and I do not know that it would go broke if it spent three per cent now. It is just a question of allocating your resources the way you want to. That is the first thing. I do not think we have enough money in Defence at the moment for properly maintaining the current level of forces that we have.

Senator FERGUSON—That is a fair enough comment. I know there was three per cent at one stage, but you can understand the position that governments may be in when there are people saying, ‘If there’s not enough money for hospitals or health then there’s not enough money for other things.’ It would be a significant increase; I think 1.9 per cent of the budget is now spent on defence. It would be very difficult to convince the voting public of just where the money should be taken from to put into defence. It was virtually the only department that was quarantined from any cost-cutting measures in the last six years. While I accept that the more money which could be spent on defence the better, it is a matter of striking a balance when you are in government.

Cdre Robertson—Also, the money that is spent on defence is spent most inequitably.

Senator FERGUSON—That is a different issue.

Cdre Robertson—It is. But the Army at one stage had \$2,000 million more than the Navy over that 10-year period, and the Air Force had \$1,000 million. Yet all we see in the paper is the high cost of naval forces. It is quite wrong.

CHAIR—On page 2, you commented:

Power projection by Australia would see the need for the Australian Army to be reshaped on the lines of the US Marine Corps, trained in amphibious warfare, and organized into landing brigades ...

Could you elaborate on why you see that as a strategic need in Australia? What initial flexibility would this force structure give to the Australian Defence Force?

Cdre Robertson—I think it would give more flexibility to the government to decide what to do. Do you remember the Rabuka Fiji crisis?

CHAIR—Yes.

Cdre Robertson—We were exposed as being completely impotent. We could either send over F111 bombers and bomb the hell out of them or send a few destroyers out there and bombard the hell out of them, but we had no resources to take off the 4,000 civilians. The strategic defence centre study paper on this says that the lack of a helicopter carrier was sadly felt.

Senator SANDY MACDONALD—That has been partly remedied now, though, with respect to Fiji, hasn't it, with the *Manoora* and the *Kanimbla*?

Cdre Robertson—Yes, but you need a hell of a lot more helicopters than the *Kanimbla* and the *Manoora* can carry.

Senator SANDY MACDONALD—What would you regard as the most powerful weapons platform—for our existing concept of maritime strategy, which you say is not a maritime strategy at all—for sea denial?

Cdre Robertson—Probably the Air Force.

Senator SANDY MACDONALD—And the subs?

Cdre Robertson—And the submarines, yes.

Senator SANDY MACDONALD—Would you say the subs or the Air Force?

Cdre Robertson—I would not like to adjudicate between the two of them; I will just say that they are both fairly powerful sea denial weapons systems.

Senator SANDY MACDONALD—What would you say would be the most powerful weapon platform for sea assertion?

Cdre Robertson—An aircraft carrier.

Senator SANDY MACDONALD—What about the most powerful weapons platform for power projection? I think I know the answer.

Cdre Robertson—You need heavy-lift ships.

Senator SANDY MACDONALD—Heavy-lift ships with helicopter capability?

Cdre Robertson—Yes.

Senator SANDY MACDONALD—How strongly do you feel about an aircraft carrier?

Cdre Robertson—I feel very strongly about aircraft carriers. I am well known for it. I have written to the papers, and I have argued with Fred Barnes in the papers. He told lies about all sorts of things.

Mr EDWARDS—Chair, this is just to follow on from your question. It relates to the three brigades that you were talking about, Commodore. Where would you see them stationed in Australia?

Cdre Robertson—I do not know; probably Townsville, Darwin and one in the south.

Mr EDWARDS—What sorts of logistic support problems would you see for a brigade of this nature stationed in either Townsville or Darwin? It would be much easier to support them in the south. Given your statement that war is 90 per cent logistics, I wonder what sorts of logistic support problems you might see with a brigade stationed in either of those two northern areas.

Cdre Robertson—I do not think there would be much problem supporting them logistically. Transport is done by shipping, road and rail, and we have two of those areas.

Mr BEVIS—You referred to the array of assets we have for denial and made a comment that that is a bit of overkill in addressing a non-existent threat of invasion. If I turn to the question of power projection or sea control and the reference you made to a sea mobile army being an important deterrent to would-be adventurers, aren't the would-be adventurers equally a non-existent threat or at least as non-existent as the prospect of either high-level or low-level insurgency?

Cdre Robertson—The trouble with looking in crystal balls, as Lord Louis Mountbatten said, is that they tend to give answers of the same shape. I agree there is no sign of any military adventurers around, but the island chain around our north and north-west is known as the 'arc of instability' and there are all sorts of political problems in the Solomons and so on. Anyone who is liable to get up and do something not in Australia's best interests would perhaps be deterred by the thought of a brigade with full air support coming over the horizon.

Mr BEVIS—But, even if we were to increase the defence budget significantly, the prospect of an aircraft carrier fleet is probably a long way off in the distance. We would have to be doing a lot more than having just marginal increases at the edges. Looking within the constraints that governments confront, if we reordered our priorities and our platforms for the next 20 years away from those that you have said do a job very effectively but that that is overkill and took away those resources from there and put them into the power project and sea control roles that you mention, the question I have is: why would you make that assessment when the threat that you are seeking to deal with is no more likely than the overkill threat that you are critical of?

Cdre Robertson—I see where you are coming from, but it seems to me that Australia is a very maritime nation. We showed in World War II that we needed a maritime strategy in order to win. I do not think the facts of geography have changed at all, and I think Australia would be wise to adopt a full-scale maritime strategy as the essential component of its defence strategy.

There will always be an air component and there will always be a land component, but given the geography of our area I believe that maritime strategy is the way to go.

Mr CAMERON THOMPSON—Given your proposals in relation to carriers, would you like to comment on what you see as the shortcomings of the existing bare bases which are sprinkled around the Top End of Australia—the forward bases—as bases for aircraft to operate from?

Cdre Robertson—I really do not know a great deal about them. I am glad the Air Force has them, and I am glad it is getting a command and control system in order to operate the aircraft. But I do not know what their problem is; I imagine it is one of resupply.

Mr CAMERON THOMPSON—How are those forward bases significantly inadequate compared to a carrier?

Cdre Robertson—There is a limit to the number of hours a pilot can sit strapped into a cockpit. Years ago it was said to be something like four hours, and I do not suppose that has changed. Given the need for air-to-air refuelling—we have five air-to-air refuellers on order—there are only limited numbers of aircraft which could go out to any distance; say, 300 miles. If you look at a map of Australia and ascribe 300-mile radiuses from those bare bases, you will find you are not covering much of the ocean.

Mr CAMERON THOMPSON—Would you then give support to the idea of having more bare bases as a strategy?

Cdre Robertson—I think you are better off with a mobile base like an aircraft carrier. But we are a long way from getting anything in the shape of an aircraft carrier when we have not got enough money to support the current Defence Force.

Mr PRICE—I am interested in your comments about protecting our sea lanes for trade. How are they currently protected and what would you like to see us do in terms of protection?

Cdre Robertson—They are not protected at all at the moment, but they could be, to some extent, where there are existing forces. We would be deficient in areas where an aggressor had long-range aircraft and could launch antishipping missiles. We would only have the guided missile frigates to give them some degree of air protection.

Mr PRICE—Given, as you point out, that we are so heavily dependent on overseas trade—particularly shipping trade—are you aware of any international agreements in which we participate in terms of protecting that trade with other countries?

Cdre Robertson—We have the Radford-Collins agreement with America, under which Australia effectively becomes responsible for the Australia station. I have been to South-East Asia, and there have been agreements, although I am not quite sure how far they have progressed. The Australia Defence Association was very strong on sea lines of communication protection and took part in international discussions for a long time. As a result of that, there were informal arrangements. I think the then Chief of Naval Staff, Mike Hudson, organised the western Pacific meetings of chiefs of naval staff to discuss their mutual problem, but I do not think anything has been formally assigned.

Mr PRICE—Could I ask you again about your views on carriers. The idea that we should have three carriers the size of the US carriers would be a tad beyond our budget, but how small can a carrier be?

Cdre Robertson—Size of a ship does not govern its cost. Steel is cheap and air is free, so the size of the ship does not matter very much. It is what you put into it that costs the real money and that is where you need to be careful. One of the things that costs a hell of a lot of money in big ships is the cabling. But there are ways; for instance, with the internal communications of the ship you could have a system, which I discussed with the DSTO many years ago when I was Director of Naval Communications, whereby you had something like fibreglass cable running around the ship. You then would have individual units, phones and loudspeakers and you could carry video and so on around the ship. That would save you money in building it.

Mr PRICE—Let me ask the question a different way. What sort of capacity do you think the carriers you are talking about should have?

Cdre Robertson—They need to carry at least 20 AV8Bs or Sea Harriers and about 10 V22 Ospreys or something like that. They need to carry four airborne early warning versions—so the Osprey—and they need to carry, say, 10 helicopters and dunking sonar.

Mr PRICE—You are still talking about pretty big carriers.

Cdre Robertson—As I said, the size does not count. It is what you put into it that costs you the money.

Mr PRICE—Would a carrier provide a capability that we currently have and no longer need? In other words, if we were today to make the decision you seek, would there be cutbacks in the Air Force or somewhere else because the carriers would provide a capability that they would no longer need to provide?

Cdre Robertson—I do not think so. I do not think you could cut back on anything else.

CHAIR—I want to ask about control of our shipping routes rather than denial. Could you expand on our involvement as a country in terms of our trade routes that are obviously sea routes and could be breached by an aggressor sometime in the future? Could you expand on how far you would see Australia's involvement extending? Is it just to the near boundaries of our sea around Australia or does it extend further up towards Hong Kong and beyond? Does it extend into the Indian Ocean?

Cdre Robertson—I think the essential areas to defend are the areas marked on that map I gave you of the Sandison Line because, outside the Sandison Line areas, the ships could be going anywhere, and it needs a fairly sophisticated enemy to detect where they are going before he attacks them. He is not going to wildly attack all shipping in the hope of disrupting Australia's trade. But if he attacks within the ranges of the Sandison Line then he knows the ship has got to be going to Australia or coming from Australia.

CHAIR—So the direct trade routes to or from Australia is an area of interest for Australia that we should be not only able to defend but also able to control—or would you distinguish between those two?

Cdre Robertson—We ought to be able to control them.

CHAIR—What sort of capability would you need to do that? Is it shipping, air or submarines?

Cdre Robertson—Submarines are useless at defending merchant ships. They are good for sinking ships but they are not very good for defending anything. I have not heard of one shooting down an aircraft yet.

CHAIR—Where does superiority come from, then, in terms of that control within the Sandison Line—air power, naval power, land power? Or is it from your concept of the reshaping of the Australian Army along the lines of the US Marine Corps?

Cdre Robertson—The reason why I would reshape the Army into something like the Marine Corps—let me dispose of that—is that Australia, as a population of 19 million, should not have aspirations to become a continental land power.

Mr PRICE—But why wouldn't you reshape the ADF into a marine corps?

Cdre Robertson—The ADF? By all means. But the Army is going to be doing the essential work, being the fellows who go ashore with the fixed bayonets.

Senator FERGUSON—Following on from what Roger has just said and the question you asked, Chair, to what extent should Australia be self-reliant? We have alliances and the reason we have alliances is that we are a country of 19 million or 20 million and there are some things we can do and some things we cannot do, because we simply do not have a big enough mass or a big enough economy to be able to do all of the things that we would like to do. To what extent should we be self-reliant and to what extent should we rely on the alliances we have to provide the protection that you are talking about?

Cdre Robertson—I believe that, if we adopted my version of a maritime strategy, we would be very self-reliant. The so-called sea-air gap is the sea-air-land gap, and what we have to be able to do is control the land on the other side of the sea-air gap. In order to do that, you need an army which is structured like a marine corps which can go ashore, deal with a situation and, if necessary, be withdrawn.

Senator HUTCHINS—Quite apart from those that are coming ashore, would you like to comment on whether or not the Australian defence industry is up to speed in being prepared for some sort of conflict or being involved in this maritime strategy? Do you have view about, say, the increasing use of flags of convenience ships and how that may impact on this defence capability?

Cdre Robertson—What do you mean by using flags of convenience ships?

Senator HUTCHINS—Non-Australian ships.

Cdre Robertson—To carry our trade?

Senator HUTCHINS—Yes.

Cdre Robertson—But that is not going to protect the ships. Flags of convenience ships were attacked in the Gulf years ago and no-one did anything about it.

Senator HUTCHINS—There is a submission that says that the Falklands operation proved how important it was to have British civilian ships, whatever they are called. What I am interested in is whether you reckon the Australian defence industry is up to speed or capable or ready for some sort of threat in the near future—or is that outside the area you have looked at?

Cdre Robertson—I really do not know much about the Australian defence industry. They are obviously building quite good ships. They are building F18s and they are maintaining all the equipment we have got; I guess that, if they are not up to speed, they would not need much pushing to get up to speed. That is my answer.

Senator SANDY MACDONALD—As with all of us, you are very concerned about getting the best value for our defence dollar. I guess this question is a little out of left field but, as a former serving officer, you might have a view on this. What is your view on an integration of the New Zealand Defence Force and the Australian Defence Force, and what would be the easiest part of our defence forces to integrate initially?

Cdre Robertson—I would not integrate them, for a start. I think every country that is a sovereign country needs control of its own defence force.

Senator SANDY MACDONALD—I do not know if the EU would agree with you there. The EU are developing a ready reaction force.

Cdre Robertson—I have very strong views on the EU; I think it is a bloody disaster for Britain.

CHAIR—We will get back to the maritime strategy. We will hear enough on the EU, I think!

Mr BEVIS—I think it is here to stay.

Cdre Robertson—I do not think the EU is a very good example. I think each nation needs to be able to use its own defence force as it sees fit and not have to go, cap in hand, to some central body and get permission to use the forces it pays for.

Senator SANDY MACDONALD—But if you have got New Zealanders and Australians having Anzac ships, it is not too hard to draw a scenario where certainly, in the question of sea denial, our objectives might be exactly the same.

Cdre Robertson—Yes, but I could not see New Zealand providing submarines. They could provide some submariners. There is always loan and exchange around the Commonwealth navies. I have had lots of loan service with the Royal Navy. There is no reason that you should not have that, but I would not call that integration in the terms that you are talking about. For instance, if we got this mythical aircraft carrier, why not have New Zealanders as naval aviators providing a squadron?

Senator SANDY MACDONALD—Exactly.

Cdre Robertson—But they would then be available on land for New Zealand's own use if it wanted them. Does that answer your question?

Senator SANDY MACDONALD—To a very large extent, we are integrated already. We could not have made the commitment we made in East Timor without the New Zealand battalion. Evidence has been put to us that it was up to strength, which was not expected. It arrived on time, which was not expected, and it was better trained than was expected. It was a very useful contribution to the East Timor deployment.

Cdre Robertson—But I think there are specific instances of where you would combine, rather than having a formal standing combined arrangement.

Mr BEVIS—I would like to try and define a bit better the power projection issue. You gave as an example the Fiji coup of the late eighties.

Cdre Robertson—Rabuka—1987.

Mr BEVIS—The sort of task that you would confront, the assets you would require there—a couple of battalions, maybe a brigade—and what would be required to get it there and sustain it for what would be a comparatively short time to protect Australian interests and remove Australian citizens is one conceptual task that you might see a need for in the foreseeable future in, as you said, the arc of instability. There is a separate interpretation of power projection which actually goes to a substantial force being inserted into a warlike circumstance for a prolonged time in what might be a more traditional combat environment. We are not talking about extracting people in a matter of days or weeks; we are talking about an engagement that might last months or longer. When you refer to power projection and the sort of planning that government should take on board as part of its force structure, do you have in mind the first and the second or only one of those two? If I get an answer to that, I may or may not need to ask you another question.

Cdre Robertson—Both, as far as I am concerned—either quick in and out or there for the long term.

Mr BEVIS—Why would we want to maintain an expeditionary force to insert and conduct warlike activities on some landmass beyond the air-sea gap?

Cdre Robertson—It depends on what the opposition is doing and how much it is inimical to Australia's interests.

Mr BEVIS—But you have said that there is a non-existent threat of invasion to us.

Cdre Robertson—Yes.

Mr BEVIS—So why would we want to spend an enormous amount on resources to establish and sustain the sort of capability you are now describing? If, indeed, we are not subject to threat

ourselves, by your own assessment, why would we want to maintain a significant combat force and a capability to sustain it in warlike circumstances far from our shores?

Cdre Robertson—Again, it is a hypothetical question.

Mr BEVIS—Your own assessment is that we are not under threat. If we are not under threat, why would we want to pose that sort of threat to someone else?

Cdre Robertson—All I can say is that I think you should be prepared for it. As I said earlier, the trouble with looking into crystal balls is that they tend to give answers of the same shape.

Mr BEVIS—Don't other assets give us that capability—our air assets and, to some extent, our existing naval assets?

Cdre Robertson—Air assets need to have ground to operate from. If there is some sort of hostile ground force then you cannot put the air assets on the ground; they can only fly over and parachute in troops or something like that.

Mr BEVIS—I was not thinking so much of putting troops on the ground as providing a bloody nose to someone whom you might want to give a bloody nose to. If we were in a situation where we wanted to deploy a significant force in a warlike environment, our practice in the past has been to do that in conjunction with allies who have the assets that we can integrate with ours to provide that capability. Isn't that a more cost-effective way for us to deal with what is—I think by your own assessment—a pretty remote, if not non-existent, threat scenario?

Cdre Robertson—I really cannot handle these hypothetical questions.

Mr BEVIS—That is part of planning for the next 20 years.

Cdre Robertson—Yes, but I really do not know.

Senator FERGUSON—I want to follow up on Mr Bevis's question. I asked you earlier to what extent you think we should be self-reliant, and I think that follows on a bit from Arch's question. How far does our self-reliance go and how much do we rely on strategic alliances? And there are also the responsibilities that we have to those strategic alliances, which might answer the question about going outside of our sea-air gap. Many people would think that strategic alliances and interoperability are just as important as a notion of self-reliance and that there needs to be some sort of dividing line as to where self-reliance finishes and when we should move into strategic alliances and interoperability. I have never really got an answer on how self-reliant you think we should be.

Cdre Robertson—I think we should be as self-reliant as is possible in accordance with our national dignity. We should not need to go cap in hand to an ally to do a job that we ought to be able to do ourselves. But what that limit is I would not care to try to differentiate here.

Senator FERGUSON—There is no doubt that in recent times we have moved towards interoperability and working with alliances.

Cdre Robertson—We have been interoperable forever.

Senator FERGUSON—I know we have been interoperable; but in recent times, for example, some of us went to the Middle East and saw Australian and American sailors and we would not have had any idea who was who if they had not had different uniforms. That is how interoperable they were. I am not sure whether that has always been the case.

Cdre Robertson—When I was director of naval communications we had a thing called AUSCANUKUS Navcoms, where we discussed interoperability for ever and a day. That is how the Australian Navy got into satellite communications and all sorts of other things.

Senator FERGUSON—So is the answer that we will never be totally self-reliant?

Cdre Robertson—I do not think we will ever be totally self-reliant. But, as I said, I think we ought to be as self-reliant as possible, consistent with national dignity.

Mr PRICE—I have a question in relation to the merchant fleet. In times of conflict or peacekeeping, it may be necessary for Navy to acquire additional cargo capacity or whatever. Do you have any views on that? Further, given that the majority of our overseas trade and, increasingly, our domestic trade is foreign flagged and foreign owned, we no longer have the luxury of being able to commandeer Australian owned ships. Do you have a view about that, Commodore?

Cdre Robertson—I would like to see as part of our maritime strategy a revival of Australian coastal and international shipping. I think it is very important that we have access to merchant ship hulls, as we did during the Vietnam War, for instance. We acquired two ships; we bought one and we leased the other. I do not know what you could do today. I do not know what the size and scope of the Australian merchant service is, but I would like to see it much bigger and better and able to cope with all our coastal trade.

Mr PRICE—I have one last question. I do not wish to be unfair to the Department of Defence or the ADF, because we have yet to receive their submissions, but in terms of operations in the littoral it does seem to be predicated on two things: one, that it would be in an alliance arrangement or in cooperation with our friends and allies in the region; and, two, that there would be a friendly landing, if I could put it that way, that there would not be hostilities. Do you have any comment about the latter qualification to the way in which we are designing our ADF?

Cdre Robertson—I think the idea of designing an army that can go ashore only when the circumstances are reasonably benign is a mistake. You might not have an accommodating enemy who will not shoot at you. I do not think that is a very good idea, from a professional warrior's point of view.

CHAIR—Is that why you talk about the need for a marine corps?

Cdre Robertson—Yes.

CHAIR—That is, shaping the Army to have a marine corps capability for amphibious warfare?

Cdre Robertson—Yes. I mean a marine corps in the full sense of the word—equipped with its own aircraft and everything else.

CHAIR—I thank you, Commodore Robertson, for your attendance here today. If you have been asked to provide any additional material, please forward it to the secretary. You will be sent a copy of the transcript of your evidence, to which you can make corrections of grammar and fact. Thank you very much for your evidence and your submission.

[10.19 a.m.]

COOPER, Mr Alastair James Wishart (Private capacity)

CHAIR—Welcome, Mr Cooper. Although the subcommittee does not require you to give evidence on oath, I should advise you that these hearings are legal proceedings of the parliament and therefore have the same standing as proceedings of the respective houses. We have received a written submission from you to this inquiry. Do you wish to make an opening statement to the subcommittee? Before you do, you might like to give us a brief outline of your background for the benefit of members of the subcommittee. It will help us understand your background.

Mr Cooper—Certainly. I will do that and then move straight into my opening statement. I was previously a permanent officer in the RAN and I have studied and written on military history and strategy, particularly on the Australian Navy and the future of maritime strategy. Some of this has been published or presented in academic and service forums. One of my current research interests is the potential for changes to maritime strategies for nations in the 21st century.

At the outset of my opening statement I would like to emphasise a distinction I see between national maritime strategy and military maritime strategy. Although the two are related they are not the same. National maritime strategy incorporates all arms of government and is usually focused on marine areas out to the edge of the exclusive economic zone or the seabed boundary. Military maritime strategy denotes the involvement of all arms—sea, land and air—which can influence operations or activities in the marine environment. That strategy is concerned more with the implementation of government policy wherever it is deemed that Australia's interests lie: for example, in waters adjacent to Australia, throughout the region or indeed throughout the world. Military maritime strategy is something which I see as a subset of national maritime strategy in the areas in which they coincide. However, beyond that military maritime strategy would generally be considered to be a subset of national defence and foreign policies.

I have one further comment, as I see the committee is focused on force structure issues. As I see it, force structure questions are those which are decided within the context of a strategic appreciation. You have to first have your strategy before you can make decisions about force structure. I have three basic points I wish to make beyond that.

Australia's military maritime strategy must, I believe, be understood and framed within the context of the defence of Australia and its interests. These interests extend beyond the air-sea gap and the Australian exclusive economic zone. They reach throughout the Asia-Pacific region and beyond. By this, I do not intend to demean the importance of the defence of Australian territory—it is, after all, of fundamental interest. However, the effects of globalisation mean that we have interests in many parts of the world. If you accept that the responsibility of the Australian Defence Organisation is to represent Australia's interests as directed by the government, then it follows that the Australian Defence Organisation must have a commensurate capability. In brief, how would the Australian Defence Organisation represent Australia's interests? Essentially by showing the willingness and the capability of the Australian government to influence events in its vicinity and throughout the region. It can be done in many

ways: by supporting allies—diplomatically, financially or militarily—through the threat of, or actual use of, force and by an almost infinite combination of different shades of these elements.

The second point that I would make to you is that the extent and value of Australia's national maritime interests have increased in the last 40 to 50 years. They have been matched by similar increases in the maritime interests of all coastal nations. These increases have been greatest in our area of direct strategic interest. I believe this trend will continue for the foreseeable future—at least the next 20 to 30 years—and it is underpinned by greater attention on the environment and on fish stocks and other marine resources, oil and gas amongst them. If you look at the United Nations Convention on the Law of the Sea, it is indicative of the greater importance attached by coastal nations to their maritime rights. Given this level of interest and the underlying value of resources, I believe it is a natural consequence that the potential for conflict will increase. Whether that becomes more than potential and whether any conflict is violent are separate questions. I submit to the committee that the character of the maritime environment throughout the world is changing. UNCLOS is the most obvious signpost but it is changing quite rapidly. At present these changes are mainly a matter of character and perception but I believe there is growing substance to this and that substance will emerge over the next 20 to 30 years.

My third point leads to the issue of force structure. I believe the Australian Defence Organisation has a reasonable capability in the near sight of the air-sea gap and will continue to do so for the short to medium term. This capability is, however, effective in the locations where it is least likely that Australia's interests will be seriously or directly challenged. Outside the narrow bounds of the air-sea gap, the capability of the Australian Defence Organisation is more tenuous. I do not believe it is likely to improve relative to our strategic environment, and I do not think it reflects the growing value of Australia's or the region's maritime interests.

I think the Australian Defence Organisation's capability should be improved in terms of the capability to surveil the EEZ and its approaches and to enforce Australian sovereignty. I think it should also be improved in terms of the capability to deploy throughout the Asia-Pacific region to represent and defend Australia and its interests. Whether this involves an increase in overall defence expenditure is an open question as it depends on a long-term threat assessment, lead times for maintaining or developing basic capabilities and a large number of other considerations. However, it is my submission that the balance of resources has been weighted too heavily towards capabilities which are of limited utility outside the defence of Australian territory and the near sight of the air-sea gap. That is my opening submission.

CHAIR—Thank you for that. My first question is in relation to force structure. On page 2 you commented that the ADO's maritime forces will require expansion over the next five to 10 years. That is not very long term in defence planning. Could you discuss the two areas you have identified that should be expanded and why, in terms of force structure, you believe that to be so?

Mr Cooper—I go back to what I said about the increased value of Australia's maritime areas and those throughout the region. If you accept that people usually tend to come to conflict over things which are of value and that a nation should have the ability to defend its interests by force if necessary, and given my belief that our interests are expanding in that environment, I believe that our ability to defend them should also be expanded. In strategic terms, I see that as a relatively pressing requirement.

CHAIR—You have also mentioned taking in trade and a subset of foreign affairs and trade. How far do you see that extending to, say, the north? Does it go to the boundaries of China or Japan, Korea and back across to the subcontinent?

Mr Cooper—Fairly much. As I pointed out in my paper, we have recently concluded some fairly valuable liquid natural gas contracts with China, and I believe there are also ones which exist with Japan. Those are very valuable trades so anything which has the potential to interrupt those contracts is something which is of interest to us—not solely of interest to us but of interest. So, yes, I would see it extending that far.

CHAIR—So we should develop our maritime strategy to make sure that those trade routes are able to be defended or controlled?

Mr Cooper—Without going into the sea control and so forth side of things, yes: we must have the ability to have an influence there. Whether you would say that the Australian Defence Organisation or Australia would control an area to the exclusion of all others there on our own is taking it to an extreme which I do not believe would be possible. But, certainly, we should have a capability to influence that area.

Senator SANDY MACDONALD—You make the point concerning the defence of Australia that our interests lie beyond the air-sea gap—in other words, our interests are regional. Obviously, the protection of the air-sea gap is the prime aim of the ADF. How much do you see that, in extending beyond the air-sea gap into the region, our actions should be in coalition with other people and allies?

Mr Cooper—Given that if you wish to take some kind of military action the stakes are raised already, I would see us generally acting in concert with other countries wherever possible, simply because, if you want to take the example of container trades—and a lot of Australian container traffic comes from the Singapore hub—one container vessel might contain items of value to dozens of nations, so in one ship you could have dozens of nations. They could be in an area which is of joint interest to a number of other nations, so I think you are always going to be operating in some kind of multilateral environment. It is shifting.

Senator SANDY MACDONALD—How important do you think it is for Australia to be able to contribute to military actions beyond our immediate neighbourhood?

Mr Cooper—I think it is important; that is the bottom line. We should be able to contribute, simply because in terms of international credibility a lot of the influence that you have is dependent on your perceived willingness and capability to influence those events. As I said, that could be in military, financial or diplomatic terms.

Senator SANDY MACDONALD—Do you prioritise it by saying defend the air-sea gap both unilaterally and in alliance or contribute to our immediate neighbourhood in alliance and unilaterally or contribute beyond our immediate neighbourhood in alliance only or contribute to peacekeeping unilaterally and in alliance?

Mr Cooper—All of those things are possible. If we are talking generalities, the generalities tend to be fairly wide. If you wish to define it more, you really would have to put in specific instances. I am sure you—

Senator SANDY MACDONALD—If you are talking about in our immediate environment, the examples are there. East Timor was in alliance—in cooperation with allies. Perhaps if the previous witness had had his way in terms of Fiji that would have been a unilateral commitment to whatever was necessary to remove our citizens from Fiji, for argument's sake.

Mr Cooper—In my perusal of *Hansard* for the previous sittings of this committee, I saw that Air Vice Marshal Blackburn had made comments about the degree of discretion—I think that was the term he used—and o that the closer you get to Australia's territory, if you like, the less discretion you are going to have and the more you might be likely to act unilaterally; the further away you get the more discretion you have and the more you are likely to act in concert with others. These are shades of two poles, if you like, and I do not think you could ever, in every circumstance over the period of time we are looking at—which I would see as at least out to 50 or 60 years—rule out that you would not act unilaterally in a particular area.

Mr EDWARDS—You talk about defence of our maritime trade. Do you foresee some circumstances in which that trade might have to be conducted in convoy, for instance?

Mr Cooper—Yes, you could certainly foresee the circumstances where it might be likely, but whether or not you would necessarily choose that would depend on the circumstances that you were pushed into. You could equally imagine circumstances where you would route ships differently or where you might defend or attempt to protect a specific ship. A convoy is certainly a possibility.

Senator HUTCHINS—Because I have been walking in and out of the room I do not know if you have already handled this question. On page 2 of your paper you comment that the Australian Defence Force maritime forces will require expansion over the next five to 10 years. Could you discuss the two areas that you have identified should be expanded and also tell us why they should be expanded?

Mr Cooper—It has been addressed a little bit; I will try to expand on it and maybe make my position clearer. If I go back to the United Nations Convention on the Law of the Sea, it has provided nations with sovereign rights out to 200 miles in terms of an exclusive economic zone, and possibly even further under the seabed provisions. When you tie that with what I see as a changing perception in the way the world views maritime areas, they are large but they are no longer so vast that we cannot fish them out. The pollution that we put in does have an effect. We cannot necessarily control the environment, but we certainly have an influence over it. As the world's population has expanded, fishing resources have become more important. Fifty or a hundred years ago we did not have offshore oil and gas industries which were as valuable as they are today.

I would argue that the maritime area over which we wish to have influence is, in many countries, one that now actually approaches more of a land based idea of territorial control. If we have those interests and if other countries have those interests, in the first instance I believe that we have to be able to defend our interests there. So that is what I am talking about in terms of an exclusive economic zone. We have to be able to protect it not only in high-end threats, which we have dealt with, but in what have been grouped together as border protection issues in terms of fisheries and the environment and so forth. That sort of capability needs to exist, and you can achieve it with some of the assets that you use for the higher end capabilities. You might also wish to have, as we do, patrol boats and so forth, which can provide more of the

lower end capabilities as well. That is obviously something which is not happening to us alone; it is happening to other countries as well. In our area of interest, the disputes over the Spratley islands are fairly well known. So there are other countries which perceive their maritime areas to be increasingly valuable; they are not in conflict but in competition to exercise and define areas of influence. Our interests pass through and, in some cases, coincide with them. We need to be able to have a capability to represent Australia's interests in those areas. How much capability is another matter and in what form you exercise it, again, is another matter. But you have to first recognise that the interests exist and how they might interact.

CHAIR—Two areas that you have identified that should be expanded are platforms capable of deploying throughout the region and platforms capable of surveilling the AEEZ and enforcing Australia's sovereignty. Would you like to talk more about the platforms? Our previous witnesses spoke of the need for an aircraft carrier. You might like to talk about the platforms capable of deploying throughout the region. What sorts of platforms are they? Are they naval, air, submarines? Are they capable of surveilling? You might like to give us your view of those platforms which you speak about.

Mr Cooper—I would see platforms with capabilities which are similar but probably slightly more than what we currently have. An aircraft carrier is a marvellous thing to watch. They are also very expensive, as everybody knows. The question is not whether they are a good thing but what you forgo to have them. I would argue that we forgo too much to be able to have an aircraft carrier as they are currently conceived. However, you can still have ships which are capable of operating in that air environment and providing you with some of the capabilities that an aircraft carrier provides without going to that cost. I think in this particular context UAVs have not been as well explored as they might be in the future. I think the air warfare destroyer has been subject of some discussion.

An air warfare destroyer or something like it, within that platform or within platforms associated with it, takes advantage of some kind of UAV and would provide the sort of capability that I would perceive is appropriate to Australia where we might not be able to—if you do not mind the card analogy—trump any card that another country could play. But we can certainly force them to consider whether or not they wish to use their best cards or whether or not the issue is something that they do not wish to force at that point in time. We are not going to be a small version of the USN.

CHAIR—Our previous witness, Commodore Robertson, said that the aircraft carrier was one of the platforms that he believed would be an important element of our capability. He said it was not so much the cost of the aircraft carrier but what you put in it and on it—that is the cost. And now you are suggesting what you have got to forgo to have an aircraft carrier. Would you see it as desirable, or have we moved beyond the need for an aircraft carrier because the technologies have changed?

Mr Cooper—It is what you put in the aircraft carrier that is the expensive bit and it is not just the communications, it is the aircraft, the aircrew, the shore support organisation—everything that you need to support it. I do not know that it is fair to say that the current state of military technology has moved beyond the aircraft carrier. There is a very strong argument to say that the USN carrier battle groups as they exist in some ways represent the peak of the military technology scale at the moment, but that is not to say that there are not other ways of providing some of those capabilities. For example, airborne early warning capabilities were something

that the Royal Navy missed quite sorely in the Falklands. They developed a helicopter based solution to that. I do not see why in the future it should be technically impossible that there could be some kind of UAV based airborne early warning system which provides a lot of the capability that we would seek.

Mr BEVIS—My question is along similar lines to the one the chair just asked. It is important that you highlighted the economic and environmental dimensions to the issue of maritime strategy. We have got a very large economic exclusion zone to our south, as well as pretty inhospitable waters but with significant resources. We have had difficulty keeping that area under surveillance much less interdicting in it. In your answer to a question from the chair—which was similar to one that I would have asked—you mentioned air warfare destroyers as a potential platform. I would have thought they were, next to the aircraft carrier, the most expensive platform that we could put on the water. That is not to say we should not have them, as they have got a particularly important role to play, but I would have thought that was massive overkill for the sort of threat that we might have in our economic zone. What sort of platform do you think we should look at for our economics exclusion zone, bearing in mind the existing naval asset you can use there? But they are designed primarily to do other things. In that context, my memory harks back to a thing once called an OPV and whether or not we should be looking—if we want to take the economic and environmental considerations seriously—at some purpose built craft to deal with that part of our maritime strategy.

Mr Cooper—That is a perfectly reasonable contention. Given that it is only one possibility out of a range of possibilities and harking back to Commodore Robertson's point that steel is cheap and air and water are cheaper still, I think a large vessel—maybe even the size of an ANZAC frigate—might be a suitable vessel. It gives you a lot of space, a lot of capability in terms of its physical endurance and so forth. At the same time it gives you the capacity to put new things in and out of it as you might find the need or the money.

Mr BEVIS—If you wanted to protect our economic zone—I am talking here about non-warlike circumstances—what sort of platform would you need? Do you need aerial surveillance, whether that is helicopters or unmanned vehicles?

Mr Cooper—You would need a platform with exceptional endurance, an air capability for a helicopter, good communications, something which could take a boarding party or parties and something which is going to—

Mr BEVIS—It does not need harpoon missiles?

Mr Cooper—No, you do not need harpoon missiles to interdict fishing vessels, normally. That is not to say that you would not have enough space to put them in if you wanted to, but I would not see that as necessary. You might put a five-inch gun or something of that nature on it.

Mr BEVIS—To coin a phrase, 'something around an ANZAC, built for but not with'.

Mr Cooper—I have heard that before. But you might be a bit more conscious about exactly what you were going to put into it. For example, the USN Spruance class destroyers were conceived in the late sixties. When they were initially completed they had two five-inch guns, some small torpedo tubes and an ASROC launcher, and they were loudly decried at the time as being way underarmed for the size of ship. I think they have proven to be exceptionally flexible

platforms. You would go even further in terms of what you would not put in them, but you could build the platform and that platform could provide the capability that you are asking for.

Mr BEVIS—My final question, to go back to where I started, is: should we be looking at some small number of purpose-built ships for that sort of task or should we continue to do what we have been doing, which is taking existing ships that are designed more for a combat level environment and tasking them to do these things in the Southern Ocean?

Mr Cooper—You need to have a patrol boat type capability, but it would be based on a much larger platform.

Mr PRICE—What about speed? Doesn't it have to be able to move at speed? A helicopter can locate the ship but you have to get close enough to the vessel.

Mr Cooper—You are obviously going to need something which has a reasonable degree of speed but, from my understanding, you can achieve that with relatively low-tech means, such as diesel engines, which would be sufficient.

Mr PRICE—Do you need milspec for such capabilities?

Mr Cooper—Not necessarily.

Mr BYRNE—In terms of the strategy for the next five to 10 years that you discussed, if I were asking you to summarise it and say how many more ships and what types of ships we need and how many more personnel are needed and what sort of expenditure would be necessary, could you categorise it specifically?

Mr Cooper—I could not provide you with numbers, particularly for personnel, but I see that the platforms, such as I discussed with Mr Bevis, are probably the first priority. Towards the latter stages of that five to 10 years, I think you need to be looking seriously at where the higher end capabilities are going, but I would be addressing the lower end capabilities in the first instance.

Mr BYRNE—Would you be able to take that on notice and respond when you have had a chance to think about it?

Mr Cooper—I can do that.

Mr BYRNE—My next question is about the changing environment. Is there anything in your factoring, like a response to terrorism, that might require some sort of pre-emptive strike or some sort of capacity like that?

Mr Cooper—I see a pre-emptive strike as something which is a little overplayed in that it is the end of a process which tries to appreciate a developing situation, identify something which might be a threat and then try to neutralise the threat as far as possible to stop it taking effect. That particular logic has been set out in many different defence papers and theoretical papers, no doubt. I think the focus on pre-emptive strikes, like the focus on asymmetric warfare and so

on, is deceptive. You tend to end up focusing on things which are the result of what you should be doing anyway.

CHAIR—Can I get back onto the subject of strategy? Commodore Robertson gave evidence that he believed that we had a strategy based on sea denial, rather than sea control and power projection. Would you like to comment on that strategy? Should we be looking beyond just sea denial to the sea control and power projection elements of a strategy? You wrote in your submission of expansion over the next five to ten years, which is a very short lead time in terms of military planning. You might like to expand on the concept of sea denial which is accepted as the strategy which is in place, rather than sea control and power projection as part of a strategy that could be more in tune with perhaps the mid- and long-term requirements for Australia as you see it.

Mr Cooper—I think it might be useful for the committee to understand that when one talks about sea denial and sea control, these concepts are predicated on an assumption that the sea is inherently uncontrolled. If there is nothing there, we have no interest in controlling it. You only wish to deny the areas which an enemy might wish to use and you only wish to control the areas which are of use to you for the time that they are of use to you. The big change that I believe is starting to emerge is that, given the increasing value of resources which exist permanently within the maritime environment, nations are going to wish to permanently exercise control. As a result of that, a prudent national organisation is going to then have some ability to exercise that control. I would see sea control within Australia's exclusive economic zone as becoming a much larger task involving a much larger surveillance at least capability. Sea denial is probably more something you are going to consider in terms of the open conflict end of the spectrum. The actual ability to observe, regulate and control what goes on in the maritime environment I think is something that will become increasingly important—remembering that, for everything we are going to try to do, other coastal states will be trying to do it as well. If we wish to then represent our interests further afield, they might not necessarily see our activities occurring within an uncontrolled area in which they have no interest.

CHAIR—Do you see the strategy now as more about denial of the economic zone rather than control or power projection to that zone?

Mr Cooper—Yes, it has been denial but it has been based on a concept that I believe is a hundred or more years old. You might have heard of Alfred Mahan, who called the oceans a great common. If you go back into your second or third form high school work, the commons were open to everybody. They have been fenced on land and I believe they are going to be increasingly fenced at sea. What is yours you will wish to observe, regulate and control. Sea control within the Australian exclusive economic zone is going to be increasingly important, in my way of thinking.

CHAIR—As part of strategy, in other words.

Mr EDWARDS—How long have you been out of the Navy?

Mr Cooper—Three years.

Mr EDWARDS—How long did you serve?

Mr Cooper—I was in for 12 years.

Mr EDWARDS—If you do not want to answer this, that is fine, but you have such an obvious interest in the Navy: why aren't you still in there?

Mr Cooper—I looked at my interests long term and decided that I had a broad range of interests and that, on balance, in five to 10 years time I might wish to pursue them elsewhere. I am still a member of the Naval Reserve.

Mr EDWARDS—Good.

Mr Cooper—I still maintain an interest in this and I do not see that it is something which is necessarily incompatible with pursuing other interests.

Mr PRICE—You would agree that there is not a lot of water around Cherrybrook, though?

Mr Cooper—No, there is not; at least I hope there is not.

Mr EDWARDS—We may or may not develop the issue of separation of young people of high calibre such as you, Alastair. Obviously, we would like to see people such as you retained rather than separated. In terms of any strategy, I guess we have to think about conditions of service, although it is not something that we have focused on. Is it something that we should focus on?

Mr Cooper—In terms of a national maritime strategy—one which involves all arms of government—certainly the people resources that you have to comprehend and execute a maritime strategy are important. In terms of separation rates that you have referred to, my personal opinion—not applying to my specific circumstances—is that the Defence Force is going through a difficult period, where its model of employing and growing officers and sailors, if that is the term, is based on lifelong employment in a single industry. That still applies to some extent, but it is something that is limiting. From what I have seen, Defence is doing work on how you have mixed careers, if you like, and I think that has the potential to answer one aspect of the matter. The other thing, if you take a historical view of it, is that defence forces traditionally have difficult times recruiting when the economy is good and much easier times recruiting when the economy is bad. In a democratic society and a relatively wealthy economy such as Australia, that effect is only going to be magnified. There will be a cyclical nature to it. I guess it is how you anticipate and respond to that.

Mr PRICE—If the opportunity presented in the future—to pick up Mr Edwards's question—would you welcome an opportunity for a further period of full-time service? It may be relatively short, given the 12 years of full-time service.

Mr Cooper—I would certainly look at that, yes. It is not something beyond my comprehension.

CHAIR—I want to ask about strategy. Commodore Robertson said that there is a need to restructure the Australian Army along the lines of the Marine Corps—trained in amphibious

warfare and organised into landing brigades. As part of our strategy, would you see that as something that you would agree with?

Mr Cooper—If I understand Commodore Robertson correctly, I take that as meaning the ability to operate from a maritime environment, throughout a littoral environment and within a range of potential conflicts. We might disagree about how much ability through the spectrum you might have and where it might apply, but in terms of the ability to operate in that littoral environment and to be able to have some influence, I would agree with him.

CHAIR—What about a marine corps with an amphibious capability?

Mr Cooper—Yes, we need to have some amphibious capability. As to whether it means we can put waves of marines ashore under hostile fire, that is maybe not what we would be after. In terms of being able to support a land formation and to be able to provide them with logistic support, transport and some degree of surveillance of their area then, yes, it is a capability that we should have as much as possible. We must not lose sight of it, but how much you have of that is the question.

I understand that Commodore Robertson is using the idea of making the Army a marine corps as a shorthand term for these sorts of things, but whether I would want to make the Army like the marine corps is another matter. I would want to spell it out in a bit more detail rather than leave it at that.

Mr PRICE—You mentioned that you thought that all marine related activities should be in one department. Do you see a single department coordinating the various elements? Do you see the elements being placed in one department? Could you elaborate a little bit more on that?

Mr Cooper—I would go back to what I said about differentiating between national maritime strategy and military maritime strategy. There is going to be a differentiation. But in terms of national maritime strategy, there is a very strong argument to say that the complexity of the legal frameworks which exist in Australia's exclusive economic zones—the various jurisdictions that exist, the number of government departments that have some influence—needs to be reduced.

There is the example of land based pollution in Queensland having an effect on the Great Barrier Reef. Without going into various Queensland specific issues, it comes back to my point: we have an influence on our maritime environment and that influence comes from many different areas over which the Australian government has jurisdiction. But the sea is a united thing. If you wish to have a coordinated response to it you need to have, in my view, if not a department of maritime affairs then a department which is the lead department. In practice, if it wishes to be anything more than something which descends into endless committees, it probably needs to have some kind of budgetary influence so that people are interested in doing what it thinks.

Mr PRICE—There have been a number of things on TV, mostly documentaries, indicating that Australia is not able to adequately police its economic zone in relation to illegal fishing. Do you have a comment about that?

Mr Cooper—I think that hitherto the results have been far beyond the resources which have been put into it. From my perspective, maybe going a bit broader than just what gets reported in the media, I think that the results are quite good. I would argue though that, given what I have said about the increasing value of maritime areas, the resources and the capability that we currently have might not be adequate for the kind of pressure that will exist in that environment in future.

CHAIR—I have one other question on the marine concept and amphibious warfare capability. Are you aware of the MOLE concept—manoeuvred operations in littoral environment where there is not a hostile environment?

Mr Cooper—I have a very brief familiarity.

CHAIR—I think our time is getting a little short. Is there anything else you wanted to explain?

Mr Cooper—I am happy with that, thank you.

CHAIR—I thank you very sincerely on behalf of the committee for your evidence here today. If you have been asked to provide additional material, which I think you have been by Anthony Byrne, would you please forward that to the secretary. You will be sent a copy of the transcript of evidence, to which you can make corrections of grammar and fact. Thank you for your well thought out views and your time. We do value that.

[11.14 a.m.]

Di BARTOLOMEO, Mr Lucio, Managing Director, ADI Ltd

ODOUARD, Mr Philippe, Director, Major Programs, ADI Ltd

WILLIAMS, Mr Martin, Chief Naval Architect, ADI Ltd

CHAIR—Welcome. Although the subcommittee does not require you to give evidence on oath, I should advise you that these hearings are legal proceedings of the parliament and therefore have the same standing as the proceedings of the respective houses of parliament. We have received your submission to this inquiry. Do you wish to make an opening statement to the committee?

Mr Di Bartolomeo—I would like to take the opportunity to make an opening statement. I am happy to take questions from the committee after that.

CHAIR—Thank you very much. You will find we are not a bad bunch really. We include senators in that category!

Mr Di Bartolomeo—ADI is grateful to have the opportunity to appear before the Joint Committee on Foreign Affairs, Defence and Trade. We believe that the inquiry into maritime strategy is a vital recognition of the need to revisit the maritime force structure assumptions of the last 30 years. We believe that it is worth while to now consider the style and the number of amphibious vessels that Australia will need in five to 10 years time and beyond because of the growing concerns about the emerging threats of terrorism, the proliferation of weapons of mass destruction and regional instability.

In preparing a submission to the committee, we are not seeking to lead the debate on maritime strategy but rather to explore the potential role of industry in responding to emerging concerns in the maritime environment. Accordingly, we have been closely following the evolution of strategic thinking in the defence organisation and government. In particular, we have noted the growing concern about the potential for chronic instability in the region to our north. We believe that our role as a naval systems prime contractor is to apply our experience in the delivery of successful naval programs to the challenge of enhancing the ADF's capabilities for operations in the maritime environment in the 21st century. Given the nature of the emerging threats to our national security, the strategic geography of the region, the emerging doctrine for littoral operations within the Australian Defence Force and our particular experience in the construction of advanced warfare vessels, we chose to concentrate our efforts on a new class of vessel: the littoral ship. We believe that this type of vessel has characteristics that are worth examining in the context of the maritime response to regional instability and terrorism. Australia's geography has always called for a strong maritime dimension to our national security strategy. Nevertheless, priorities have evolved over time in response to changing circumstances.

The most recent change in Australia's strategic circumstances involves the growing need for the ADF to be able to respond rapidly to asymmetric clashes in the archipelago to Australia's

north. The speed, reach and 'lethality' of modern weapons systems and their availability to subnational groups means that this vast region now forms part of Australia's littoral area of interest. Increasingly, Australian maritime forces will be called upon to influence events in the littoral region, in close cooperation with littoral states. The East Timor peace support mission in 1999 and the Bali terrorist attack in 2002 are two key examples of the need for an Australian response to growing regional instability. Future terrorist incidents or peace support operations are likely to require our maritime forces to undertake tasks such as the protected evacuation of citizens, provision of humanitarian assistance or even limited combat operations in the archipelago. The high priority now given to these tasks means they are influencing the ADF's future capability development. ADI's submission brings the joint committee's attention to the possibility of providing our maritime forces with littoral vessels that, because of their speed and flexibility, are better suited to the types of operations anticipated in and around the archipelago and to the feasibility of developing these in Australia.

The following conclusions and recommendations were submitted to the joint committee for consideration. Firstly, Australia needs to consider the implications of littoral operations for strategic policy and defence investment, especially in regard to our maritime capabilities. Secondly, we need to explore, with close cooperation between Defence and industry, the characteristics of platforms and systems that are suitable for a littoral operating environment and the potential for littoral ships to satisfy our capability requirements. Thirdly, we have great confidence in the competitiveness of Australian industry in this area and the potential for an Australian solution that delivers expanded capability with reduced costs and crewing levels. Finally, we recommend that Australia consider establishing a funded development program for littoral ships to meet an Australian requirement.

In reaching this conclusion, we grew increasingly confident that ADI and its Newcastle facility have a vital role to play. Our advanced composite facility in Newcastle has recently completed the delivery of the world's best coastal minehunters to the Royal Australian Navy is ready to provide the Navy with a patrol craft employing the same advanced composite techniques. ADI's extensive experience in naval systems integration, signature reduction and advanced composite construction positions the company well to play a leading role in the Australian littoral ship program. Independent economic analysis of naval construction programs, including ADI's coastal minehunter program, have revealed the benefits that flow to the national economy as well as to the thousands of small to medium enterprises that we partner with in delivering complex naval systems.

The studies we undertook in support of our submission to the joint committee revealed that, while current fast ferry vessels are designed for efficient transportation of passenger cargo, they are not designed to meet defence requirements in terms of stealth, speed, endurance and battleworthiness. ADI has the ability to take the required elements of the fast ferry industry—an industry in which ADI has substantial experience—and combine this with our knowledge of the defence environment, with stealth concepts and with defence communications and weapons knowledge to come up with a vessel that is superior in its operational abilities to other available littoral ship options.

ADI's contribution has been to initiate a study of the strategic and operational issues surrounding littoral vessels. ADI's independent operational analysis, naval architecture and engineering studies are focused on identifying the optimal mix of crew size, modules, payloads, speed and operating range, with a more detailed design concept to be available later this year.

The resulting design may have elements in common with existing fast ship designs, but the vessel is likely to have significant elements of composite construction and include a high level of modularity in order to facilitate platform integration with a variety of different payloads. That ends our formal presentation. We are now available to answer the committee's questions. Philippe Odouard and Martin Williams have key expertise in this particular field—far beyond what I have—and we hope to be able to answer your questions this morning.

CHAIR—Thank you for that presentation. On page 2 of your submission you comment:

... Australia now needs to come to terms with chronic instability in the archipelago to its north.

Those are fairly strong words: 'come to terms with chronic instability'. Could you expand on that point and the implications of that instability in our region for Australia's maritime strategy?

Mr Di Bartolomeo—Our assessment of the so-called chronic instability refers to the numerous operational instances in which the Australian defence forces have been called in over the last four or five years. Whether they reflect an emerging pattern for the future is up for debate. We see, and certainly the consensus seems to be, that it may well be the pattern we will see for some time to come. Our ability to respond to those instances needs to be evaluated against the capability of our naval forces, in particular, today. We see limitations on being able to respond with the speed and urgency that may be necessary, and we are proposing a review of that capability more specifically designed to the circumstances of today as opposed to those of the past.

Senator FERGUSON—I was interested to hear you talking about the particular need for a new vessel. Do you think it is feasible to have self-reliance at the start of the 21st century? I ask because we talked earlier this morning about self-reliance or strategic alliances which help us perform what may be required in the defence of either our sea or any other defence requirements. I am interested also in your concept of a new ship. Our first witness said that we should be building or getting a new aircraft carrier, so we have two totally different points of view here. Do we revert to an aircraft carrier which can play that role, which is one that we had in the past and do not have now, or do we move to your concept of a littoral ship? I am interested to know whether anybody else has anything similar to this at present and what sorts of costs there would be. You have just presented us with a diagram without any real embellishments. I would like you to answer these two questions: firstly, do you think that we should be self-reliant and, secondly, can you provide a little bit more information about your proposed vessel?

Mr Di Bartolomeo—First of all, on the question of self-reliance, when it comes to the sort of environment, the sorts of skirmishes that we are talking about and the involvement that Australia has had over the last several years to its immediate north, a degree of self-reliance in that environment is, I think, necessary. I say that from a reading of strategists' thinking, and others more knowledgeable than me, so I am summarising some of the strategic thinking at the moment. Quite independent of Australia's desire to have strong strategic alliance with other partners, I think there are certainly circumstances where we need to be able to respond in our own right. I guess that is the particular environment that we are responding to. With regard to the specifics of the ship, I might defer to my colleagues who are able to answer some of your questions in more detail. Philippe?

Mr Odouard—Is there any particular aspect?

Senator FERGUSON—Is it just a concept? Does any other country have a vessel that is similar to this one or performs the same function or are we starting out with an entirely new vessel in the same way that we started out with some new submarines not long ago?

Mr Odouard—Maybe not yet but next—

Mr Williams—A number of other countries, America in particular, are starting to look at the transitioning form of what have been commercial ferry designs in the past. The Americans currently lease a total of two ships, one each from Incat in Tasmania and from Austal in Western Australia. The vessel that we are proposing is a derivative of those types of commercial design but taken to the next stage and incorporating a degree of the military features that are required by the Navy for normal operational roles. The vessels currently in American service, whilst they are very flexible, do not meet military standards of subdivision for battle damage control—items like that. There are issues of handling of helicopters on them because they are converted commercial vessels. None of those are major technical challenges; they are just issues that have to be integrated into the technology jump that has been made by the commercial shipbuilders in the last 15 years.

Australia has a very proud story of what has been achieved in that commercial industry. We have worked with one of the players in that area to look at their baseline vessel and at what can be added or what can be developed on that with minimal risk to achieve a naval vessel. So we have proposed a vessel that is not of extreme size, compared with what is being done in that market at the moment. We have proposed a vessel of around 100 metres. The market is out to 130 or 140 metres at the moment—98 metres is middle-of-the-road almost now. Powering propulsion wise: again, we are not at the extreme end. So it is a matter of bringing integration issues of weapon systems and things now on top of that to make it a serviceable vessel for the services rather than a pure commercial vessel.

Senator FERGUSON—So it is just a concept at present?

Mr Williams—It is a concept in that sense, yes, but it is based on a lot of proven technology.

Senator FERGUSON—Would it be an all-weather vessel, because Incat vessels, if the weather gets too rough, do not go very far.

Mr Williams—There are limitations with these vessels compared with conventional ships. But certainly they work under a different regime, whereas a conventional monohull ship—commercial or warship—works under a principle that it can go in any sea state, in any condition. Having said that, they are still very restricted to speeds and the performance they can achieve at the upper end. The high-speed craft work commercially under a different rule set where they have a performance curve that is actually written against sea state. The class societies which effectively oversee design of the vessels limited the speeds in different sea states, which is not dissimilar to what happens in practice with a conventional ship but, this time, it is more rigorously policed. There is a more dramatic drop-off in performance, certainly at the upper end of the speed range. You cannot do those high speeds in high sea states: the vessel becomes intolerable to live aboard. That is not to say the vessels cannot survive in those

conditions—there have been many instances of the vessels surviving in extreme seas—they are just not able to perform to their full envelope.

Senator FERGUSON—Has the Navy reacted to a concept like this?

Mr Di Bartomoleo—They have certainly been involved in discussions on this. The notion of a littoral ship is in the development phase, not just within Australia but also overseas. It is a recognition of a new demand that needs to be met and the development of a capability to achieve that requirement.

Senator SANDY MACDONALD—How many troops would it be able to embark?

Mr Williams—The payload for the vessel would be in the order of 800 tons. The number of troops very much depends on the mix of weapon systems that you have with it. For a vessel of this size, potentially you can carry 800 or 900 people, but I am afraid it is very much dictated by what you want to equip those people with. I would not like to give a hard and fast number in that sense. It is true to say that at the smaller end of these vessels—like the vessel that was chartered to go to the Timor crisis—they are payload limited in that they have a lot of volume but they cannot carry an enormous amount of weight.

Senator SANDY MACDONALD—Where were those vessels chartered from?

Mr Williams—There was one vessel chartered from Incat. It was a smaller vessel and those smaller ones tend to be very weight payload limited. They have a lot of volume, but they do not have much ability to carry weight. As you move up the size scale, you get a balance happening where you actually get both the volume and the payload capability. That has been one of the drivers in the fast ferry industry to the larger vessels.

Senator SANDY MACDONALD—What additional capability would they have compared to *Tobruk*?

Mr Williams—The ability to move somewhere quickly is the prime difference. *Tobruk* has different capabilities. They have complementary types of capabilities in many ways, but *Tobruk*, at the end of the day, will move across the oceans at around the 15-knot mark. I personally did one trip to Perth on *Tobruk* and it was a very long, slow trip, whereas these will move at three or four times *Tobruk's* speed in reasonable weather conditions. When you look at the sea state statistics for the northern areas, the extreme seas do not occur for very high percentages of the time, so the operational limitations caused by extreme—

Senator SANDY MACDONALD—Are these monohulled or twin-hulled?

Mr Williams—We would look at catamarans as the way to go. Mainly that is driven by getting the payload space in and—

Senator SANDY MACDONALD—Are your minehunters catamarans?

Mr Williams—No, the minehunters are conventional monohulls in that form.

Senator FERGUSON—What is the cost involved? It is all right to have a concept design, but you have to have some idea of what the cost would be.

Mr Williams—The cost is always a difficult one—

Senator FERGUSON—It is difficult for us too.

Mr Williams—It is driven by what you place on the vessel more than the baseline vessel, so I find that very difficult to answer. Commercially, a vessel of this size is a bit shy of \$A100 million. The cost of a military one would depend very much on the sensor systems and the weapon systems that you add on top of that, so you can easily double that or more.

Mr PRICE—Was it designed solely for Australia and, if it were adopted by the Australian Navy, would it have export potential?

Mr Odouard—You know that you can only export things that you design locally so, in that sense, it would be designed locally so the export potential would be real. As we said, the US are looking at similar concepts and a number of countries in the world are looking at these ideas. It is a thinking that is not specific to this particular forum; it is really widespread in terms of use. So, yes, the export potential would be there.

Mr CAMERON THOMPSON—There has been a lot of talk about this littoral concept and providing the right kind of capability there, but why is it considered valuable to have a vessel to do that kind of job when, for example, you could just airdrop a bunch of people in there? Given all the difficulties with sea states and all those sorts of things that you have to combat with that sort of thing, why wouldn't they invest in an airdrop type capability instead?

Mr Odouard—We already have that sort of capability with our C130s, fairly obviously. But, with regard to East Timor, quite clearly we had an airport available. That is not necessarily going to be case anywhere in the areas where we want to intervene. Your port or airport may be destroyed, and that is where these particular ships would be deeply valuable. The second factor is that the quantity that you can carry in one hit is a lot bigger than in C130s. You would need a lot of C130s to carry the equivalent load of one of these ships, and you can get into an area which is a lot more hostile. With the C130s, you need to secure the area before you can have aircraft landing in a particular place. You can always airdrop, but you cannot bring people back, for instance. One of the functions in the past was to retrieve some of the Australian nationals from Fiji and the Solomon Islands when you had problems there. In a circumstance such as that, you need to intervene very quickly and get your people back, and you may not have an airport operational at that stage.

Mr CAMERON THOMPSON—We can talk specifically about airdrops as a way of getting people in. We seem to be spending a lot of time and effort trying to develop a littoral zone concept, but I wonder why that is necessary. Why can't you just drop people straight over the top of that?

Mr Di Bartolomeo—There are going to be limitations to dropping people in. You can drop people in, but all the support equipment and capability they require is not going to be able to be dropped in in that way. Even if it were dropped in, there is a task in actually making it workable. Even if you bring it in by plane, offload it from big C130s—if you secure an airfield in the first

instance—it still has to be put into an operational state. When you transport equipment by plane, it is not ready to go into immediate combat use, or active use.

Mr Odouard—And then you need to retrieve the people, hopefully, or you are there for a long time.

Mr CAMERON THOMPSON—Can I just go to one of the problems with this littoral concept? In what sort of sea state can you unload people? If you get there and the sea is rough, it could be difficult.

Mr Williams—With the right unloading systems, which we envisage would include small landing craft-type vessels carried integral to the thing, you could unload up to sea states 5 and 6, which cover about 90 per cent of the sea state range occurring in our northern waters.

Mr CAMERON THOMPSON—Small craft that would exit from the bigger craft?

Mr Williams—Yes. Again, those small craft will have limited capability at the upper end, but they will be able to make some transits. You would also have things like RIBs, fast inflatable boats, to transport a group ashore.

Mr CAMERON THOMPSON—Peter Lindsay and I went on a trip to visit the *Manoora* during the Tasman Link exercise. The big point they made to us there was that trying to embark these small vessels from the bigger vessel was impossible in anything other than completely calm seas, that this was the major drawback with those vessels. How can you propose to do the same thing in sea states of 5 or 6?

Mr Williams—*Manoora* and *Kanimbla* are very restricted in their ability to do it at the moment, as they have to crane the vessels off their decks. You are talking about craning a 60-ton water craft which swings around wildly. *Manoora* and *Kanimbla* are converted from another role and, out of that, have a number of compromises built into them. The majority of overseas navies attempting the same role nowadays are going for dockship type concepts, which is what we have included, where you create a dock inside the after end of the vessel. That dock gives you a lot of protection for loading and unloading. That can include all the crew basically just stepping straight onto a boat that is not even in the water and then launching that boat into the water within the protected shelter of the docks. It removes a lot of the current difficulties that the LPAs suffer in the working of their craft.

Mr CAMERON THOMPSON—I am interested to see that you have not got a dock at the back. You are proposing to use the same sort of thing where you drop the front of the vessel. I take your point about the crane but, during our visit to the *Manoora*, their point was that they could not match up a landing barge and the front of their vessel in anything but the calmest of weather, so you could not unload it. That still remains a difficult problem.

Mr Williams—It is a difficult problem but with their current arrangement they are still doing that matching up out in the exposed water behind the ship rather than being sheltered by the ship, which is why most vessels are going for a dock type arrangement. That is what we have envisaged with this vessel.

Mr CAMERON THOMPSON—So you are planning a floating dock arrangement at the back?

Mr Williams—A well between the two hulls so that you come in between them. There are a number of different concepts as to how you handle the craft between those hulls, including inclined and lift type systems for lifting the vessel into the craft to the vehicle deck.

Mr CAMERON THOMPSON—So we should not get too hung up on the little picture that we have?

Mr Williams—No, that is a very broad-level detail picture rather than a detailed drawing.

Mr CAMERON THOMPSON—A floating dock at the back between the two hulls—

Mr Williams—That is right.

Mr CAMERON THOMPSON—It seemed to be the express wishes of the Navy personnel that there be some capacity to have the things internal and launch them.

Mr Williams—I think that is a critical way of transferring and I do not think you will find one—

Mr EDWARDS—I see that you have established a working group, with a number of people on it, to examine and report on the role of littoral ships in Australia's future maritime strategy. Whether it is this particular ship that you are talking about or whether it is other areas, I assume that you try to get a strategic picture of where Australia's defence forces are going and what the requirements are. In this case you have put in place a working party with the appropriately experienced people. When that working party has completed its tasks, how do you then set about progressing the results of that study? Do you actively go out and lobby the government and defence personnel to convince them that what you have is something that is worthwhile and something that can be built here? How do you basically go about pursuing whatever it is that you come up with?

Mr Di Bartolomeo—To this point in time, we have identified this small working party to put some broad concepts together that allowed us, in this instance, to develop a submission for this committee. Our long-term intent would be to use this initial work to generate interest and joint longer-term studies, as we recommend in our submission, to develop the concepts further. We are fairly confident in terms of the broad direction of a littoral ship and the applicability of a littoral ship concept to the Australian Defence Force and to our particular environment to the north. But we will not profess to say that we have got all the answers here—far from it. We have some broad concepts that we believe have merit for developing further.

Mr EDWARDS—Those of us who went to Avalon saw how competitive the whole industry is. I think you said in your opening remarks that you have confidence in the industry. Generally, is that confidence in the Australian industry reflected by the ADF and by governments of any colour? Is the extreme competitiveness an advantage or a disadvantage in Australia at the moment?

Mr Di Bartolomeo—I will not try to comment in terms of what the Australian government or other governments think of the industry. I think I can talk relative to the Defence Force and say that I believe they do have confidence in the industry. The last 15 to 20 years have shown a significant upskill in capability in the naval sector in particular. In our own specific example of the Minehunter program, we have developed not only some unique technology capability and skill build-up in Newcastle with the advance composite design but we have actually developed a Minehunter class vessel that is second to none in its particular environment and particular field. I think those skills and capabilities can be put to broader continued use by the Defence Force. We hope to continue participating in that program. We are taking a proactive position here in attempting to identify what we believe is within our capabilities. While we may be specifically looking at ADI, I believe that it is a more generic capability that exists in Australia that should nevertheless be considered.

Mr PRICE—Firstly, congratulations on the Minehunter—on time and on budget.

Mr Di Bartolomeo—Thank you.

Mr EDWARDS—You would not be from New South Wales, would you?

Mr PRICE—I thank the member representing Austal! Mr Bartolomeo, you suggest that there ought to be a fund for the development of this ship. What sort of fund do you have in mind?

Mr Di Bartolomeo—I guess that, as with any capability, I believe that some initial funding early in the program to do more detailed study and analysis about what is required, what can be achieved and how it can be achieved is generally money well spent. That is applicable to any project, but particularly a project that is taking a slightly different direction. What we are suggesting is that, while we are happy as part of industry to contribute to this work—obviously this work to date has been done on our funding alone—we believe that, if it is to go to the next step, it does require more. We are not talking about huge quantum of money but certainly some funding which would do two things. It would help in progressing the studies further and would obtain a buy-in on what it is that is being developed so that the ultimate end customer is seen to have an input and involvement with an ultimate solution.

Mr BEVIS—How much is not much?

Mr Di Bartolomeo—Good question. I am happy to defer. I think we are talking about figures around the \$1 million to \$2 million mark that would help fund significant studies in this area.

Mr PRICE—Sometimes the US is keen to fund studies like that. Do you think they would be amenable to—

Mr Di Bartolomeo—I am not sure about funding studies here in Australia, but they are funding similar studies in the US for their own littoral ships. There are obviously opportunities for us to be sharing information and collaboration that could be leveraged in our own requirements. In that way we could no doubt leverage off the work they are doing.

Mr PRICE—Some of us believe that Australia's defence industries are very important. In the shipbuilding industry the government is clearly signalling that it believes that there should be some structural changes. What are your company's views?

Mr Di Bartolomeo—As I think everyone on this committee would be aware, the expenditure forecast in our forward capability requirements, looking at the next 10 to 15 years, has been identified as approximately halving as opposed to the preceding 10 to 15 years. There is going to be—we accept this as basically fact—a significant reduction in naval shipbuilding expenditure over the coming decade or so. No doubt the industry that has developed off the back of the prior expenditure needs some form of rationalisation. We accept that as fact. The question that we argue is how the rationalisation should take place. Clearly our view is that some sort of managed rationalisation is better than simply rationalisation on an at-will basis. We believe that Australia has built certain capabilities, facilities and technologies that should be retained, notwithstanding the reduced expenditure in this particular industry.

But, if we pick the best of our capabilities, the best of our technologies and the best of our facilities, hopefully we will have an industry to go forward with—one that still retains all the strength that it has developed but at the same time recognises that there is going to be a reduction in overall expenditure. All the personnel and facilities currently involved in the industry will not be able to be retained into the future. But, if we can be selective about what is retained, we have the opportunity to maintain all the good things that have been developed in the last decade or so.

Mr PRICE—How does the government determine it? What should be the process of structural change?

Mr Di Bartolomeo—The NSR plan attempted to identify a proposal that saw government and industry working in tandem. As I think you may be aware, ADI and its facilities and the Tenix facilities—through our two key stakeholders, Tenix and Thales—have sought to make an announcement recently that says, ‘Understanding the environment we now face, there is an opportunity for some rationalisation.’ In fact, Thales and Tenix, through—at least, at this stage—an agreement in principle, are looking at what those opportunities may be to jointly form a consortium that would seek to maximise those key assets and capabilities that have been built up over the last 10 to 15 years and have them retained, so we pick the best of the lot.

Senator JOHNSTON—The basis of tendering now for predominantly naval vessels is that the department, through the DMO, gives you a broad specification as to sea days, range—a broad description of operational requirements—and asks you to go away and come up with a vessel. You have done that here in anticipation of some broad parameters, and I am interested to know precisely what premises you have based this vessel upon. I would have thought that the concept as put to us today must be founded upon some fundamental presumptions as to range; type of operation; military lift; identification as to whether it is a company, a battalion or whatever; the type of equipment you are putting on board; and power-to-weight ratio effects. Let us hear some of the fundamental premises that you have anticipated our maritime operations are going to need.

Mr Di Bartolomeo—First of all, I will answer the question from a raw perspective and I will let my colleagues give you more of the details. There is no doubt that defence forces are going down the path where they are identifying their needs on a broader basis than historically has been the case. Let us take as an example the patrol boat on which we are awaiting—very soon—a result, along with our Western Australian colleagues. In that instance, it was about identifying specific operational needs. For instance, it did not even identify the number of vessels that they wanted. What they wanted was the number of operating days that they needed to have. It was

for the industry to come up with a number of vessels necessary to meet those operating requirements.

That was a specific response to an identified, proper process. It went through an RFP and ultimately an RFT, to which we responded accordingly as we got short-listed. In this instance, we have not responded to anything specific. This is not a response-specific tender or contract; it is not even a proposed contract for the future. This is a response to a much broader understanding of what we think—and I must emphasise what we think—might be some of the requirements that the Defence Force is looking for in the future. So it is not a specific response to a tender or a proposal in any form. Hopefully, it is a response that will get some initial thinking and some initial further studies under way and, I guess, provide some feedback as to whether or not we are on the right track. Ultimately, if the Navy concludes that it is a direction it wants to take, it may eventually be a proposal that we will respond to formally with other bidders. How did we come up with some of the dimensions that we have spoken about? I will hand over to Martin to talk about some of the detail.

Mr Williams—There is a limit to how much detail I can give in the answer. We divided into a number of subteams within our group. I received from the operational analysis people details of what they required in the way of payload for the vessel. I was required to provide approximately 800 tons of payload, and that was not defined to me in terms of whether it was a company or a battalion, but on their analysis of past requirements they felt that this was the upper end of the capability that they were looking for. It was then a case of what sized vessel was required to give that payload capability. I cannot answer your question directly, but I hope that gives you an indication.

Senator JOHNSTON—So we do not know what the 800 tons is referenced to, in terms of a capability and a troop movement ability or anything like that?

Mr Williams—A number of scenarios were looked at. I know we put a couple of specific ones in our response, which included a field ambulance unit of 126 people, various vehicles and so on. There was a whole range developed, and I was then given the 800-ton payload as the technical issue to address. With respect to speed, I was asked what was technically achievable given the engine's fuel requirements. The operators obviously wanted as much speed as possible, and on a technical basis we proposed 50-knots. That is achievable with a hull of the form and size that we are talking about, based on technologies that are commonly available. We looked at what propulsion systems would be best to achieve that speed. After a number of studies, we came to the conclusion that a turbine system called CODAG—combined diesel and gas—would be the appropriate propulsion. In that system, the gas turbines give you high-speed power and the diesels give you an element of loitering power, when gas turbines are comparatively inefficient and become maintenance intensive.

Senator JOHNSTON—Is that similar to the Anzacs?

Mr Williams—It is similar to the Anzacs. It takes the same technology. Waterjet was the propulsor chosen—again, very well proven in this field, very efficient in the high-speed craft mode and still surprisingly efficient at the lower speeds as well, although with some capital costs, which I suppose is the downside. Those are the major areas that we looked at. We also looked at the trade-off of structural materials.

Senator JOHNSTON—What did you choose?

Mr Williams—There are a number of options there. We believe, certainly for the topsides, that there is a very strong case to be made for composites, because of the ability to embed sensors and systems within them whilst minimising topside weight, which is always a critical issue.

Senator JOHNSTON—Can we just stop there. When you say ‘composites’, what precisely do you mean?

Mr Williams—I would predominantly mean a material based on traditional ‘E’ glasses for the reinforcement, with a degree of carbon fibre or Kevlar for high-stress areas. With the resin systems there are a number of options, ranging from traditional polyesters through to the epoxies. They all have their place, and it is a cost-weight trade-off between them. Phenolic resins are also becoming more and more available on the market. We in ADI have done a lot of work with them over the last couple of years, and they offer a big improvement in performance in fire situations, which is probably where composites are seen to be at their weakest.

Senator JOHNSTON—What is the availability of these exotic kinds of materials—phenolic resins and carbon fibre—and what is their repairability in the field?

Mr Williams—Carbon fibre is highly available nowadays. The material certainly was exotic five years ago, but a couple of large American manufacturers moved into the field, and its price has dropped dramatically.

Senator JOHNSTON—Are those manufacturers based in Australia, onshore?

Mr Williams—No. In Australia there is no capability to make either polyester ‘E’ glass based fabrics or Kevlar. We bring the raw material into the country in the form of a spun fibre, and there are a couple of commercial facilities around the country that will weave that into the fabric of your choice. That is often the critical part, because that is when the product is tailored to your liking.

Mr EDWARDS—Could you tell us what form the final report will take? Could you also tell us how much of the report will become public and how much it will be possible for the committee to see? It would help to give us an idea of the role that industry plays in the broader aspects of acquisitions.

Mr Di Bartolomeo—I see no reason why our final report cannot be made available.

Mr EDWARDS—A lot of questions that have been asked may be answered in the report.

Mr Di Bartolomeo—I have absolutely no problems with it being made available to the committee. At the end of the day, these reports are meant not to be some definitive statement of what should be acquired and what will be the capability requirements for the Defence Force but to provide the Defence Force with an opportunity to see what is available, what can be done and how it can be achieved, to put some notion of costings against it and hopefully to assist them in their decision making—let us not make any bones about it; it is their decision making—about

what is the ultimate requirement that they wish to pursue. As industry, we are here to support what those options may be.

We have made some operational assumptions about the characteristics of what might be required—payloads et cetera. At the end of the day, there is nothing to say that that is the right position. Obviously, we have operational personnel within ADI who have a reasonable understanding of what might be expected and what might be required. We use that as a starting point. We use that as a means by which to say, ‘This is what we can do in these particular scenarios.’ Do they fit the real environment? It is for others to make that determination. We are happy to share that information. We are not simply altruistic in this; we are here for our own long-term survival.

Mr PRICE—I was not aware of that!

Mr Di Bartolomeo—But we are here to put forward propositions and new thinking that we hope will at least be considered.

Mr EDWARDS—And it is a fairly valuable contribution that you will be making, I would think.

Senator FERGUSON—Following on from that, does your capability extend to requirements for moving armoury such as tanks, APCs and ASLAVs? Is that part of your area?

Mr Di Bartolomeo—Yes. A significant proportion of our key personnel in all those areas is ex-Defence. ADI are fortunate to have capabilities across land, naval, air and electronics programs.

CHAIR—How many ASLAVs would a vessel like this carry?

Mr Williams—The number of tanks that you carry is dictated by the payload. A typical tank is around 50 tons, so with 800 tons you can get, in theory, 16 tanks if you carry absolutely nothing else. Again, it is the mix question.

Mr BEVIS—I have two quick questions. In the section about the replacement of the *Manoora* and the *Kanimbla*, you refer to the possible next step as being the development of the vessel for experimentation. Defence in Australia has traditionally been very averse to the idea of getting involved in that sort of activity, although we have recently got involved in precisely that with the JSF. I have two questions. Firstly, when you talk about having a partnership and getting some input, is there any analogy with the JSF type arrangement where government gives a commitment in the early planning stages and gets a look-in at the development stage? Secondly, when you talk about getting a vessel for experimentation purposes, what sort of partnership arrangements are you contemplating that might entice a government to do that, given that it would be pretty new territory for the Australian defence department to engage in?

Mr Odouard—I do not think experimentation means creating something which does not exist, where we will build a ship just to see whether it is possible to do one, like the US tend to do. Here we are talking about technologies which are well proven. The charter of *Jervis Bay* for the Timor deployment demonstrated one aspect of this; it showed the sort of capability that can be brought to bear. It also outlined some of the deficiencies that a strictly commercial vessel

would bring. Here we are not talking about something to play with; rather, it is something that would be operational from day one and could take on a mission from day one. It is certainly a very innovative concept compared to what is available today, although it is well proven in terms of the technology it uses.

Mr Di Bartolomeo—I think it is important to understand that it is just that: it is innovative in its concept, in what is being brought together. But the technologies that we are talking about are far from unique, new or yet to be developed. It is the concept that, for the first time, we are putting some of these things together. I think the lease of the commercial vessel *Jervis Bay* was a perfect example. What was required by the Defence Force at that time was something that could carry a high number of passenger troops very quickly. It got a tick for that, but it had a lot of downsides. It had limitations on payload. In stealth terms, it was terrible. What we are trying to see is whether these various technologies and capabilities that have been developed, both in the commercial and defence forces, can be brought together to create a somewhat unique vessel, in that these particular features are coming together for a particular objective. We think that there is an opportunity to come together. They certainly can come together, so it is not experimentation at the ultimate.

Mr BEVIS—I misread the sentence in terms of the American experimentation. I have one final question. In the section dealing with economy of logistic effort, you made a statement that I am not sure I understand. It is: ‘These forces will rely on the concentration of effects, not on the concentration of force.’ I would be interested in what you mean by that because, when I read the rest of that section, it then identified a comparatively lightly equipped force going ashore with supply and firepower behind. When I put all that together, I was then looking at a ship which I think you are saying is going to transport troops and equipment, then act as a supply ship for those people, provide overwhelming firepower, ship to shore, and is going to operate at 50 knots and has got helicopter pads—and we are going to do all that in a ship that is under 100 metres long.

Mr CAMERON THOMPSON—With a crew of 20.

Mr BEVIS—Yes. It sounded pretty good.

CHAIR—You have got an endorsement from him!

Mr CAMERON THOMPSON—Will we send an order in now?

Mr BEVIS—Is it cheaper if we buy by the dozen? Am I misunderstanding what you are saying in that sentence about concentration of effects not force? Is that in fact what you are saying: it is going to do all those things? It is a troop carrier, it is a supply ship, it has got massive force capability to provide overwhelming force, ship to shore, to protect the troops that are on shore and it has got the helicopters and it is going to do all these other things.

Mr Odouard—You have to be careful there. The idea here is to have a ship which is multipurpose. We are talking about these different functions—

Mr BEVIS—So why do them all at once?

Mr Odouard—It might do two, three or four but not necessarily the whole lot at the same time.

Mr BEVIS—Okay, that makes some sense to me.

Mr Odouard—In terms of firepower, you may have a version of this one with a heavy gun on board, for instance, to have that particular effect that we talked about. The idea is certainly to have a multi-role functionality. Remember, we are never sure of the types of contingencies we will have to face in the future, so having something which is very flexible is something of great importance in our fleet.

Senator FERGUSON—You talked about a payload of 800 tons. How does that compare to the *Kanimbla* and *Manoora*? What is their payload?

Mr Williams—I am afraid I cannot quote that, off the top of my head.

Senator FERGUSON—Is it more or less?

Mr Williams—It would be considerably more. They are a 15,000-ton ship. I am guessing their payload would be many thousands of tons.

Mr Di Bartolomeo—Many thousands.

CHAIR—That is the *Manoora* and *Kanimbla*; and this is 800 tons?

Mr Di Bartolomeo—This is 800 tons compared to a 15,000-ton ship.

Mr Williams—We are talking about a ship here that weighs 1,200 tons—that is its total displacement—compared to a 15,000- or 16,000-ton ship. They are different beasts in that sense.

Senator FERGUSON—With a variety of abilities—waterskiing, Tuesday; troop carrying, Wednesday.

CHAIR—We are over time but from the questions and the submission, we can see that there is a lot of interest in the concept, and we could probably go on for quite some time yet. I thank you very sincerely on behalf of the committee for your attendance here today. If you have been asked to provide additional material, please forward that to the secretary. You will be sent a copy of the transcript of evidence, to which you can make corrections of grammar and fact. This is a very interesting subject and we value your time and your submission. Thank you.

[12.10 p.m.]

CRUMLIN, Mr Paddy, National Secretary, The Maritime Union of Australia

CHAIR—I welcome the representative of the Maritime Union to today's hearing. Although the subcommittee does not require you to give evidence on oath I should advise that these hearings are legal proceedings of the parliament and therefore have the same standing as proceedings of the respective houses. We have received a written submission from you. Do you wish to make an opening statement?

Mr Crumlin—I thank the committee for the invitation to speak. I have just asked that some additional material be photocopied. It is media information that goes to the issue of flag of convenience shipping, open registries and related security in terrorist matters. Our submission speaks to the importance of Australia's merchant navy in building both prosperity and peace and in defending national interests in times of war, upheaval or threat. The submission also looks at the merchant navy in the current environment, where we are seeing an increase in the use of foreign vessels, particularly in domestic coastal trades, due to the current policies—or, as the submission says, the lack of policies—within the federal political environment. We then seek to make the connection that, unless you have serious policies in regard to the nurturing and protection of the coastal domestic fleet in particular—which, via the Navigation Act, is described as an integral part of the domestic transport sector—you cannot properly secure Australia's defence interests.

There are a number of other notations in regard to demonstrated cases within this country of the importance of the Australian merchant navy to the overall defence compact. Those include the experience in the Second World War when one in eight Australian merchant seafarers died, which was the highest proportionate rate of any service. They mostly died in Australian territories, due to the mining and torpedoing of Australian merchant fleets. We go on to draw a further connection, which happened as recently as East Timor. There is correspondence there from General Cosgrove indicating the importance to INTERFET of Australian support through the availability of Australian ships to carry cargoes, troops and those kinds of things to that area.

The material also contains correspondence from Senator Margaret Reid, identifying the importance in relatively recent times of having an interface with a well prepared, viable merchant navy that is able to quickly synergise its logistical efforts to move things. Australia cannot properly contain or foresee security threats. It is not a matter of trying to invent an industry or create a logistical support methodology or structure out of the blue. Our submission demonstrates that you have to rely on your merchant navy, and in the United States the Jones Act leaves no question about the importance of their domestic merchant navy. It is absolutely essential to the security of that nation—now more than ever. The United States does not want to rely on flag of convenience shipping or open registers, which keep no account of who owns the ships and have a tendency to be unable to account for things like insurance and who the principal behind them actually is. That is one of the reasons flag of convenience shipping is the shipping of choice for al-Qaeda and other terrorists—that has been well demonstrated.

There have been a number of very strong debates in the US Congress about the threat that flags of convenience and open registry ships pose to the security of the US and to its economy.

The US, Japan, Australia and Canada are all countries that rely heavily on shipping for domestic transport of trade. Shipping provides a useful cargo moving mechanism that competes with road and rail. The reason those countries have things like the Navigation Act, which protects and nurtures the shipping industry, has as much to do with their security as it has with the development of their economic interests.

I also have a couple of articles relating to these matters. A report appeared on 4 March in the *Daily Telegraph* on the terrorist threat to our coast, and a report appeared on 3 March 2001 in the *Lloyds List*, referring to the 'torrid tale of Tonga's troubled registry'. Alliteration was obviously very important to them in that issue, but Tonga really does have a troubled register. The issue of regional security is highlighted again when you see that a nation like Tonga has a massive fleet even though it does not have a port large enough to fit any of the ships into—or a secretariat or bureaucracy that could in any way maintain an intelligent or cogent overview. Yet, for no other reason than that there is no accountability, shipping is an important part of Tonga's economy. Basically, that type of shipping, which is called flag of convenience shipping and includes ships carrying the flags of Panama, Liberia, the Bahamas, Tonga and Vanuatu—many of these are in our area—dominates Australia's trade.

In our supplementary submission, in the part dealing with the current government's application of single voyage permits, there is a list of ships that were carrying Australian domestic cargo between 1995 and 2002. We are not talking about international cargo; we are talking about cargo that is moved intrastate or interstate under the Navigation Act, which protects the rights of Australian licensed vessels to have first option to carry that cargo. You will see there what an extraordinary business it is. There has been a proliferation in the quantitative and comparative data, and I think there are a couple of statistics in there. That demonstrates that under the current policies there has been a proliferation of permits and, consequently, there has been a diminishing of Australia's capacity to move its own cargo with its merchant fleet. Basically, Australia's flag is not competitive against flags of convenience from countries such as Tonga, Vanuatu or Liberia. There is a United Nations resolution on Liberia that basically goes to the fact that most of their shipping revenue has been fuelling the civil war in that country. The *Hansard* of the US Congress records that Liberia is now a serious threat to US security.

Our submission seeks to link these things and demonstrate that they are totally synergistic. You cannot divorce defence from the interests of the merchant navy. There are certainly issues of competitiveness—no-one is questioning that. As the National Secretary of the Maritime Union of Australia, I understand that we have moved on a little and that there is a need for competitiveness. However, competitiveness must be within the parameters of Australian industry, Australian security, Australian regulations, Australian taxation, Australian corporate taxation, Australian employee taxation, the Australian Migration Act and the Australian Customs Act. We are virtually destroying our merchant navy through lack of policy; we are effectively inviting flag of convenience shipping in. There are clear advantages to using those ships in the short term: they avoid tax, they have no corporate accountability and they are only operating from those countries in order to avoid any scrutiny or regulation. All those things give them a short-term advantage in freight rates—but even then, if you measure the advantage their freight rates offer in comparison to Australian shipping freight rates, that advantage is minimal. It is no more than about five per cent.

The thrust of our submission is to draw those connections together. We want to make sure that this committee has a holistic understanding of the objective facts that we are now dealing with,

particularly since 9-11 and the start of the war against terrorism. To continue attempting to separate policy around the merchant navy from the total picture of what secures Australia's corporate, economic and security interests is dangerous and likely to deliver long-term consequential effects that cannot be undone. The submission points out that the current government withdrew legislation that was basically about reforming and enhancing the effectiveness of the Australian merchant navy. The government then entered into three shipping reviews, none of which have been made available on the public record. The initial withdrawal of the legislation in support of Australian shipping—the reference to that particular act is in the submission—was done with a view to expeditiously resolving the policy question and coming back with a more appropriate and focused shipping policy. Effectively, nothing happened.

Looking back, it is unfortunate that Mr Sharp had to leave. He understood the industry and was very bipartisan in his approach to the shipping industry—if we can divorce shipping from stevedoring for the moment—providing a constructive engagement after a long period in opposition. Subsequently, we had Mr Reith in that position, and now we have Mr Anderson, and there seems to be a lack of focus. Admittedly, the Transport portfolio is very difficult and no doubt very engaging. Shipping may not feature as prominently as some other things, but effectively nothing has happened over the five or seven years since the policy came in.

The statistics demonstrate that we still have a very large merchant navy. You do not get to be a member state of the IMO, the International Maritime Organization, or the ILO on these issues unless you have sufficiently sized vessels to empower you to involve yourself in those debates. From Australia's point of view as an island nation, a long way from some of our potential consumer markets, we have always identified the fact that having a merchant navy also delivers us the capacity to have a voice on issues directly related to shipping. That is one of the reasons we developed the Australian National Line: we were seeking some control over the conferences that bring containers—you know, the natural monopolies that continue to be exempt under part 10 of the Trades Practices Act. That basically identifies shipping as so essential to the economic and total needs of Australia that we need to continue to participate. If we continue down this road—and you can draw your own conclusions about the impact of a holistic approach to defence—we will no longer have a voice or a vote in the IMO, we will not be taken seriously when arrangements are made relating to any of the issues looked at by the UNCLOS, the United Nations Convention on the Law of the Sea, and we will not have a voice in the ILO in those related areas.

Effectively, in shipping, you are either a player or a non-player. If you want to deliver policy, you need to continue to hammer away in those international regulatory forums. That flows on to the environment, safety and all the issues that AMSA is involved in. AMSA is a very well-respected international organisation, but in recent times it has said that, with the running down of Australian merchant navies, the competencies going into insurance, ship management, classification societies, regulation and overview and specific engineering and technical skills may also no longer be there. The Australian Maritime College in Launceston is a very important college. Australia is seen as a provider of quality competencies, and it is seen as a shipping nation—and perhaps as one of the most efficient, safe and competent shipping nations in the world. Effectively, that relies on ongoing application and focus.

Finally, you can just ask yourself whether you are serious about maritime defence when you do not have a structured approach to ongoing development of maritime competencies in deliberating on how you provide any serious approach to logistics support. With a country the

size of ours, it is not a serious proposition to in any way be secure in our borders when there is flag of convenience and foreign shipping with people on visas dominating trade within those borders. You have to understand visas. These people are in Australia on single-voyage permits and continuous voyage permits for up to 12 months. There is no scrutiny in terms of who those people are or where they come from. They go through a loophole, if you like, in the permit system. If you are on a permit, you get a special visa and there is no real review in the Migration Act. If it is happening now, and we have 50 or 60 Australian merchant ships that deliver 80 per cent of our domestic cargo, whereas that was about 95 per cent six years ago, what will it mean in 10 or 15 years time? Effectively, we will have a guest labour force without real scrutiny of who is working full-time interstate and intrastate. I think a debate needs to be had as to whether that is in the best interests of Australian security. That is a brief overview.

CHAIR—Thank you very much for that.

Senator HUTCHINS—You stated that a few years ago 95 per cent of Australian shipping of domestic goods was done by Australian shipping and now only 80 per cent is. Do you have a figure for international trade? Is that easy to come by?

Mr Crumlin—On Australia's involvement? Australia traditionally carried about four per cent of its international trade, and I guess that is now down to about two per cent. Most of that would be in the carriage of LNG—you know the big North West Shelf project, in which Australia has had a fundamental role. Australia has been involved in a continuity of operations agreement. One of the things that may be levelled at us is that the reason the thing has not gone on is that the MUA or the union movement have been irresponsible in their application. I point to things like the North West Shelf project, where we signed what was virtually a continuity of operation to not take any industrial action. That was the bones of what the Prime Minister said when he was in China selling to the Chinese the extension of one of the core infrastructure programs. So there were four Australian merchant ships, and those are the types of international ships. That has come down, but we would say that this is more about domestic shipping than international shipping.

Senator HUTCHINS—If it has gone down from 95 per cent to 80 per cent, that is nearly a fifth. Does that mean that we are not training enough merchant men and women? Is that the consequence?

Mr Crumlin—Effectively what is happening is that the market is being opened up by this loophole in the permit system. We have no problems with permits. Australian business needs to continue to function if an Australian ship is not available, but the Navigation Act provides for that to be the exception rather than the rule. Currently the department of transport is making it the rule more than the exception. They are effectively creating two markets. There is a market where they access all the vessels that are down here on other business to take our wheat, our containers or our oil away. Then they say, 'Why don't you move a bit of cargo from A to B? It's a freebie on a permit system.' It is impossible for an Australian operator to compete under those circumstances because the original cargo virtually pays for that ship to be down here. They offer freight rates with which Australian operators cannot compete. They do not pay tax, and they have all the other advantages of basically being an open register—they employ Third World labour et cetera. What happens is that there are two markets. It is not a level playing field or a competitive playing field, and the second market is growing and proliferating under the permit system.

Permits are being offered with as little as 24-hour notice, without the Australian operators being able to position their vessels. You have a situation where the permit system has underpinned changes to the application of permits to foreign ships, and this has been the basis of the proliferation and expansion. The Australian industry cannot hope to continue to invest in education, training—and all the quality things that make us important—if it is competing with Tongan or Liberian registered vessels crewed by bunches of Filipinos who may or may not be competent. One of the main flag of convenience registers in Panama has been in an international furore because you can purchase a second mate's ticket for £1,000. You are dealing with institutionalised corruption. Most of these registers are in New York or London or one of the big international cities with no real administration of standards, and we are competing with that. It is impossible for the Australian industry, in any way, to do anything but continue to be emasculated.

Senator HUTCHINS—I know you would not have had an opportunity to see the Australian Shipowners Association submission but there is a statement in there and I wonder if you wish to comment on it. It says:

... the Australian-flag shipping fleet is subject to a legislative regime in Australia which renders Australian shipping uncompetitive in the international shipping industry.

I do not know whether you would agree or disagree with that.

Mr Crumlin—I am a merchant seafarer, and my father is a merchant seafarer. He has got a foreign going master's ticket. I have only got an AB's ticket so he went a bit further than I did. It is difficult for us to understand that you have to pull down the red ensign and put up a Panamanian flag. Effectively the current policy settings are forcing Australian seafarers and Australian companies to pull down the red ensign and put up a Panamanian flag. Because, even in that area, having your vessel registered in Panama brings a massive saving in costs. I am not talking about regulations, because we self-regulate, and we are proud of that. I am talking about the standards in that one particular area—namely, the cost savings to the Australian seafarer of having to go FOC. They keep an Australian crew, pay Australian tax and all those other things, but they cannot carry the Australian flag. I hope that demonstrates—in some real way—the difficulties we have and how true that statement is.

Senator SANDY MACDONALD—With regard to that fall-off over the last 10 years—95 to 80 per cent of Australian intra and interstate trade—would any of that be reliant on an increase in road transport, heavy-lift or rail?

Mr Crumlin—No. These things take a bit of time to infuse into the consciousness of the transport sector, but with the proliferation of this alternative transport availability we are finding there are increasing complaints that road and rail is finding that its ability to compete is coming under serious pressure. Effectively, there is more cargo, and some of that has actually been at the expense of road and rail. Basically, it is because that 20 per cent offer is so opportunistic and, for the reasons I have outlined, rail and road cannot hope to compete.

Senator SANDY MACDONALD—So you are saying the nation's transport task has increased?

Mr Crumlin—Yes.

Senator SANDY MACDONALD—Despite that, the actual shipping task has increased as well?

Mr Crumlin—Yes.

Senator SANDY MACDONALD—So, despite the fall-off, it has increased.

Mr Crumlin—Yes, it has increased consistent with the growth in the economy and all those things. We are commodity based; we are internally commodity based. We bring a lot of minerals to the various manufacturing sites from outlying areas—Port Hedland, North Queensland, Weipa. Obviously, if the Australian economy grows, shipping grows at least at the same pace as road and rail, but it is diminished in real terms.

Senator SANDY MACDONALD—But it is fair to say that it is not like going across the Nullarbor. The freight task across the Nullarbor has substantially moved in favour of, or perhaps I should say vis-à-vis, shipping, but it has increased substantially over the last 10 years.

Mr Crumlin—That is one of the real issues. You have to run train or road transport arrangements backwards and forwards—you do not carry things in ballast. But what happens in Australia is that cargo goes only one way—from east to west—and that is one of the real problems. With all due respect to Western Australia, what do you bring back from Western Australia? You take a bit there, but you do not bring much back. So ships are coming down here to take a variety of cargoes away. They are quite happy to call in to Melbourne and Adelaide and move that cargo over to Fremantle for next to nothing, because they have already negotiated a contract to take cargo away to another country, and that basically pays for them to come here and go away. That is one of the real problems that is putting competitive pressure on road and rail.

At the end of the day, if there is 100 per cent, if you like—if you follow through the trend—and if nothing is done about it, Australian business will get out of shipping because of its inability to compete. Effectively that is what will happen, I think—it may not in Bass Strait and some areas—and then road and rail will have to compete with this other mode of transport that is here for a different reason. The thing about the permit system is that it is not about scheduling: they can offer an opportunistic freight rate for one cargo. They do not have to run a schedule, with the ups and the downs of the full cycle—taking the heat as well as having the good moments, everything that we know in business. They can come down here and just take an opportunistic approach on a particular rate that just happens to knock off that cargo being moved by road and rail.

It is a larger threat in terms of being able to plan, and that is now recognised by road and rail transport. At five per cent it was not on the radar, but now it is up to 20 per cent they are starting to see real problems. When it gets to 50 per cent, there will probably be a national inquiry into it. This is all about planning and being able to develop the right understanding about how these transport modes have traditionally interacted in this country.

Mr BEVIS—I am interested in the comments you made concerning US Congress debates and flag of convenience ships being linked with terrorism and al-Qaeda. Quickly looking through the material we have just received, I notice there is a *Washington Post* article of some

length that talks about that. Do you have any other information on that or some reference to US Congress dates or *Hansards*? If you do, I would be very interested to have a look at it.

Mr Crumlin—There is a process going on in the United States, and the committee may be aware of it. It is going to be impossible for any seafarer to enter the United States unless they have seafarers' identity. It is about total security. Flag of convenience shipping is now debated in Congress as one of the country's greatest security threats. They are putting more money into their domestic merchant fleet—for reasons I have outlined—and they are now looking to reregulate their international fleet. It is interesting. In a way, what is happening in Australia does not take account of the real issues in shipping that are confronting nations post 9-11.

The real debate in Congress now is what to do about it. They have accepted that these things have an impact on the economy. They are virtually institutionalising a biometric system, which I understand to be something that identifies a person in a way that cannot be corrupted in any way, such as fingerprint and eye pattern identification. Therefore, every seafarer in the world—just consider the size of the American market—has to have a biometric identification, separate from a passport, in order that their identification cannot in any way, including administratively, be bastardised or corrupted. The Australian government has not participated in that process at the ILO. There is a conference in July about this process and, as you can imagine, it will be a massive exercise. It will involve trying to give every seafarer in the world a licence and ensuring that the administrative systems and everything else consistently support that. This includes Third World countries too.

Mr BEVIS—Can you let the committee secretariat have some references to this, so we can get some of that information. I think it is significant.

Mr Crumlin—It is pretty well documented, but we will get it for you.

Mr BEVIS—I want to follow up on a question that Senator Hutchins raised about the submission by the Shipowners Association. They suggested that there is a problem with the tax treatment of wages for crew. In their submission, they recommended that there should be changes to the law, so that crews on ships on the high sea would be deemed to be in a foreign country and not obliged to pay what would otherwise be normal tax in Australia. Do you have any view about that?

Mr Crumlin—That is for international ships. It is a matter of whether or not you want to genuinely benchmark yourself to what is best practice in international shipping. International shipping is so competitive that you cannot regulate it. It was the industry before the Internet. It was the first real international industry. It is very hard to regulate. All you can do is match best practice. Best practice for anyone who is serious about being an international seafarer and working internationally—trading to and from Australia or wherever—is that they do not pay tax. That is according to OECD standards, and that is what they do in Europe, the States and everywhere, but the fact is that it is not sinking in here in Australia. Again, the problem is that we do not consider these issues to be important in terms of the national interest.

That is international shipping. In domestic shipping, it is the reverse: you have all those people who do not pay tax coming here and staying here. We are not advocating that Australian domestic seafarers should not pay tax. That would be hard. We are saying that anybody who comes here and works in the domestic environment should pay tax. The Navigation Act was

posted in 1912 to stop exploitation, cheap labour and tax avoidance in domestic transport. We seek to apply the intent of the Navigation Act in minimising that stuff. When permits were at five per cent, they were a good shock absorber and they provided an advantage to shipping. They were the exception rather than the rule, and we lived with them. We monitored them closely. I was articulating the difference between international and domestic shipping. We are not arguing in any way that Australian domestic seafarers should not pay tax.

Mr CAMERON THOMPSON—I have read your submission and wondered if, from your perspective, you could give us some alternative prescriptions—what would you like to see happen?

Mr Crumlin—Australian shipping has always been bipartisan. If you go back to McEwen's day, one of the greatest transport ministers we had was Ralph Hunt. We were able to identify issues on a bipartisan basis. Shipping was taken out of partisan politics—for unions or against unions—or whatever is underpinning the current lack of policy. We think we should move back to a bipartisan approach to industry development in this area. There are clear guidelines. It is not a thing we have to reinvent. We had legislation. We were reforming ourselves. I think to a large degree the issue of shipping got caught up with and dragged down in the issue of stevedoring, which has been unfortunate. It is a different industry with different backgrounds and different perspectives. I think all the answers are still there. Australian seafarers are well-respected, our industry has the best safety record in the world, and AMSA, the Australian Maritime Safety Authority, is recognised—all that demonstrates that our policies have been successful for many decades.

Mr CAMERON THOMPSON—What I am asking is whether you want a subsidy for Australian shipping, for example. You said there was a five per cent difference. I find it hard to believe that could make such a big difference—the difference between whether an Australian organisation is viable or not. So are you talking about a subsidy or are you talking about some kind of legislative strictures being placed on flag of convenience vessels?

Mr Crumlin—They are already there. If you are running a transport business or any kind of business involving logistics, five per cent is five per cent. The reality is that people will take the lower freight rates. Once they have a natural monopoly, they will be able to set their own rates. It will be less than five per cent, but at the moment they can get in at five per cent. If they could get in at 10 per cent, they would, but at the moment they can get the work at a five per cent reduction so, if you like, the two markets are applying themselves.

You do not have to do anything: the Navigation Act provides for Australian licensed vessels which carry interstate and intrastate with crews being paid Australian wages. The problem is the permit system. Up to five or six years ago to get a permit, because it was a loophole, you needed to demonstrate to the Australian Shipowners Association that there was not an Australian ship available. It needed to be transparent and accountable, so we knew that people coming in on permits were not bodgie or creating an alternative market. There is no longer that overview role in the department of transport—or maybe it is the people. It is common knowledge that you can apply over the Internet and get a permit within a matter of hours. Then it is a matter of catch-up for the Australian industry to go and demonstrate that they may have had a ship that could have carried that cargo. Where are they going to go? Should they go to the Federal Court for an injunction and go through that, or should they take on the department of transport? With the Navigation Act, the legislation is there, but we have had this change in the

application of the regulations, and that is what is effectively creating a second market. There is not much that has to be done. More rigour and application of the Navigation Act would do it.

Mr BYRNE—In your view how many of the flag of convenience ships coming in are unseaworthy, and what is done to monitor their seaworthiness?

Mr Crumlin—We had a ship named the *Kirki* that broke in half off the North West Shelf of Australia about 10 years ago.

Mr PRICE—It was further south than that—it was just north of Perth.

Mr Crumlin—Yes. It was lucky because that was light crude oil, which evaporated; it was not the type of oil carried by the *Prestige* or the *Erica*—the ships that dumped all that oil off Spain and off the south of France. We have had these things. Hamersley Iron had a lot of rigour applied to their approach, because over a five-year period something like 10 FOC bulk iron ore ships left Dampier and never arrived at the other end. One of the things about shipping is that there is no huge hue and cry when a ship leaves a port and never returns—it just becomes an insurance matter. Unless it creates a noticeable environmental problem, it is not on the radar. That is one of the reasons Lloyd's listed the insurance industry. If you go to some of the root causes of the crisis facing the international insurance industry, shipping is one of the large problem areas, because of this lack of accountability. How do you regulate an international industry like that?

We have been fortunate, but the accident with the *Kirki* and incidents with other ships happened when we had a much larger merchant navy with a more efficient and expanded industry attached to it—and all the invisible industries like ship management, insurance, classification, engineering, education that come with that. We cannot maintain that. AMSA is already saying, 'Where are we going to get seafarers to be the regulators of the future, when we have not got a domestic industry? Are we going to bring them in on business visas? Where are they going to come from: India, Pakistan, Third World countries? They are going to be our next generation of regulators.' Again, this is about long-term planning. ANL, which has been privatised, has ships that continue to run aground. That is flag of convenience shipping with foreign crews trading internationally. ANL is a demonstrable case. Before ANL was privatised, when it was still crewed by Australians, it had a faultless record. Since then, it has basically adopted another level of standards. Fundamentally, that is going to apply across the board.

I think even quality shipping can have problems, as was demonstrated by the incident involving the Italian ship here in Sydney Harbour that spilled all that oil. It had a mixed foreign crew, but it was flying the Italian flag, which is at the better end of flags—it is not the best, but it is at the better end—so you ask yourself about some of these other things. It is not a matter of 'if', as they say, it is a matter of 'when', unless you do something about it.

CHAIR—We are running very short of time, and we have a schedule this afternoon. We could obviously be asking questions for some time yet, but I have to cut it off at this point. Not only your submission but your presentation today has been very interesting. I thank you for your attendance today.

Committee suspended from 12.54 p.m. to 1.45 p.m.

LEACH, Vice Admiral David Willoughby, AC, CBE, LVO, RAN Rtd, President, Royal United Service Institution of New South Wales Incorporated

LEECE, Brigadier David Ronald, PSM, RFD, ED, Rtd, Secretary and Public Officer, Royal United Service Institution of New South Wales Incorporated

CHAIR—Welcome. Do you have any comments to make on the capacity in which you appear?

Brig. Leece—I should add for both of us that the views we present are personal views. Although we appear in our official capacity, the institution is prohibited by its constitution from having a corporate view on these matters.

CHAIR—Thank you. Before I ask you to give evidence, I seek the subcommittee's permission to publish a supplementary submission. That is agreed. Although the subcommittee does not require you to give evidence on oath, I should advise you that these are legal proceedings of the parliament and therefore they have the same standing as proceedings of the respective houses. We have received a written submission to this inquiry from you and a supplementary one. Do you wish to make an opening statement to the committee? If so, prior to that you might give a one- or two-minute precis of your background for the benefit of other members of the subcommittee who may not be aware of your careers to date.

Vice Adm. Leach—I joined the Navy in 1942 as a cadet midshipman and served for 43 years. I was captain of *Vendetta* during confrontation; I was captain of *Perth* in Vietnam; I was director-general of operational requirements, director of naval materiel, chief of naval personnel, fleet commander, and I was chief of naval staff—or chief of Navy, as it is now called—from 1982 to 1985.

Brig. Leece—I joined the Army in 1960 as a member of the Citizens Military Forces, as it was in those days; it is now the Army Reserve. I was commissioned in 1962 and served as a rifle company commander of the United States Marine Corps Reserve for two years from 1967 to 1969. I commanded the 17th Battalion of the Royal New South Wales Regiment from 1978 to 1981. I commanded the 8th Infantry Brigade from 1988 to 1990. I was a student of the Joint Services Staff College in 1982. In civilian life, I was in the New South Wales Public Service for 42 years. I was a research scientist in the Department of Agriculture for 20 years and then I was a senior executive of the State Pollution Control Commission, subsequently the Environment Protection Authority, for 22 years. I was also deputy commissioner of the Murray-Darling Basin Commission for 12 years.

CHAIR—Thank you. Vice Admiral Leach, did you want to make an opening statement?

Vice Adm. Leach—Yes, I would like to make a statement. While we do not give an RUSI view, we are encouraged to publicly state our personal views, and it is in that context that we are here. Our primary submission to you on 18 October was based on *Defence 2000*, of which you have a copy, and we touched on the items we thought were important. We endorse the maritime strategy. When we looked at the capital program, the things that we were concerned about included deficiencies in amphibious and logistics support and the airborne early warning control

system, which I do not think is coming until 2007. The PC3 Orion platforms are more than 30 years old and they need to be updated. We are concerned about the replacements for the area defence ships—one is sitting on the bottom of the sea off Albany, another is off the coast near Adelaide and the HMAS *Brisbane* is yet to be sunk somewhere. It is worrying that their replacements, which will be used for the escort of any ships we send overseas, are not expected to be in service until 2012. I also think the patrol boat program needs to be expedited.

On 19 February we made a supplementary report, of which you now have a copy. This capability review for 2003 deals with the maritime strategy and it means that ADF involvement in coalition operations further afield is somewhat more likely than in the recent past. The government has already decided to implement a number of measures as a result of the Australian new strategic environment. They include the raising of the special forces, the establishment of special operations command and enhancements of various facilities, which is a change in our order for battle.

I think it is still a problem that our amphibious operations capability is not that strong; that needs to be strengthened. Looking at our recent past in Vietnam we had HMAS *Sydney*, HMAS *Boonaroo* and HMAS *Jeparit*, and in East Timor we had HMAS *Jervis Bay* to take our troops abroad. We have not got that capacity to take up from trade. We only have to remember how well Britain did in such a short time in the Falklands, because they were able to take up vessels from trade.

The RUSI supplementary submission says that there are 49 vessels on the latest available Australian register and that most of these are specialised vessels, designed for commodities such as natural gas, petrol, oil and cement. There are only nine roll-on roll-off vessels which could be potentially used, but five of them are dedicated to trade in Tasmania. So, if we are looking for transport for any troops abroad—and our submission says that is the likely strategy in the future—we should be identifying these holes. I do not think we are going to have another HMAS *Jervis Bay* sitting and waiting for us to pick up. The Americans are very interested in that type of vessel and I think they have been down to Tasmania to look at the third one.

I was concerned at recent announcements about the ‘son of Star Wars’. It was discussed a little lightly by the Minister for Defence, and the Prime Minister mentioned it, but the mere fact that we are thinking of it worries me that we are going to be pouring money into a sinkhole—you have to identify any missile that is launched, be able to track it to find out where it might be landing and then have a means of shooting it down. I am concerned that our Jindalee radar system, which was going when I left the Navy in 1985, is still going—that is 18 years ago. I referred to it then as a ‘half-blind sentry to the north’. I do not think it is really an operational system yet. It is subject to the vagaries of the ionosphere. It does not give you height, and that is why I think our AWACS acquisition is vitally important—and quickly. I still keep to the fact that we should be moving ahead on the items of capital equipment that are important to our maritime strategy.

It is very worrying at the moment, as we are all sitting here thinking of what might happen in the next week or so, because if that occurs and the Iraqis do not fall back from the chasm or the presidential guard does not give up the fight before it gets too hot then we are going to have a lot of money going in operations and not as much as we would like in capital equipment for the future. That is just a quick run-through of the items we raised. I will pass now to David Lece, who wanted to talk on reserves and retention.

Brig. Leece—I just have two quick things to say. I am concerned about what seems to me to be a distraction from our primary defence tasks—in terms of activities in Iraq and Afghanistan. I think the problems in our immediate region, which did get a focus in the defence update, should have higher attention than they have been receiving. In that context, the lack of emphasis on amphibious operations is a weakness in the way we are currently preparing for future contingencies. *Defence 2000* indicated that if we are to be able to sustain operations then the Defence Reserves are going to have to contribute very substantially to contemporary military operations rather than continue their traditional role in providing a mobilisation base for a major conflict. My main concern here is that I am not sure that the reserves really understand the implications of that new role, nor does the community that supports them. There is really a need for a very substantial cultural change. That substantial cultural change can only come about by government explaining that very carefully to the Australian community and making sure that much more attention is given than has been given so far to the implications of the additional commitments, the additional training that is needed and the need for units as opposed to individual volunteers to be available for call-out for contemporary operations.

CHAIR—Thank you. You have opened up, I am sure, a whole raft of questions from the committee.

Senator FERGUSON—You mentioned primary defence tasks. What do you consider to be our primary defence tasks?

Brig. Leece—I think that the *Defence 2000* document got it pretty right. But the three things which were the emphases of the defence update 2003—terrorists, weapons of mass destruction and the immediate region—are subsets of the range of tasks which was emphasised in *Defence 2000*. While they certainly do have increased attention paid to them at the present, and quite properly, our primary responsibility remains the defence of Australia and Australia's interests. The further you go beyond Australia, in general—maybe not all the time, but mostly—the less and less our interests become.

Senator FERGUSON—I wanted to be sure of what you thought were the primary tasks, because in fact the 2003 paper suggests that we have moved on from 2000 and that there are different sets of priorities now.

Brig. Leece—I do not think that that is true; I think that they are subsets of *Defence 2000*. *Defence 2000* encompassed those three issues; those three issues were mentioned in *Defence 2000*. Of those three issues, I think the problems in our immediate region are more important than ones farther away.

Senator FERGUSON—In the supplementary submission that you have given us, you say:

As a consequence, we see no future for the current Australian Merchant Navy as part of Australia's defence.

Before lunch we heard the Maritime Union putting a different point of view, suggesting that it should have a future. I am interested in whether or not you have seen the propositions from Australian Defence Industries about a new type of littoral ship that may take the place of some other vessels we currently have which would overcome some of the problems you talk about in moving troops and armoury and all that sort of thing. I think they are talking about 800-ton ships. I wonder how this fits in with your saying that you consider the government should

institute a search for further vessels of the *Kanimbla* and *Manoora* style and seek to acquire them—because this is a concept proposal.

Brig. Leece—Just to clarify our submission, in our primary submission we expressed the pious hope that we would continue to have a merchant navy.

Senator FERGUSON—I read that.

Brig. Leece—But the advice of our expert members is that, while that may still be a long-term hope, in the short term we have little chance of doing that.

Vice Adm. Leach—We think it is very important. It cannot happen at the moment because they are specialised ships and, as I said, there are only 49 of them and most are taken up on Tasmanian trade and, if we tried to pick them up, they would starve down there. *Kanimbla* and *Manoora* are good but they have been configured for command duties as well as hospital ships et cetera, so they are not ideally suited to taking troops and stores back and forth. They need to be on station. They have a helicopter lift capability and can take 450 troops, but they cannot do all of those things at once. If there is some proposition of having a littoral ship that can do these things or a flat deck that can take these 12 heavy-lift helicopters we are getting—which I see in this morning's paper have blown out from \$350 million to \$700 million—that is all to the good. But if we are going to have a maritime strategy and it is going to have to go offshore in coalition ways or to the basket case which PNG is becoming, we need ships to effect that.

Senator FERGUSON—Would you care to look at the submission from ADI and perhaps make a comment on it to the committee, if you have not already seen it? They make a concept proposal which we discussed at length here this morning and questioned and, with your experience in the Navy, I would be very interested in your opinion of it.

Brig. Leece—We would certainly like to see it. As well as having a helicopter capability, a really good amphibious support ship needs to have docking facilities.

Senator FERGUSON—That is what they are talking about. And it needs to be capable of taking tanks and ASLAVs and that sort of thing.

Brig. Leece—Part of the problem is that there is only a limited amount of stores that helicopters can lift. You are really dependent on surface ships as well as helicopters to get things ashore.

Vice Adm. Leach—Going back to Fiji, we were very deficient there because we did not have the amphibious capability to get troops ashore. We did not have many parachute trained people, and all they had to do was put concrete blocks on runways to make it very difficult to land Hercules with troops in them. So we want look ahead to those propositions.

Senator FERGUSON—I understand.

Mr PRICE—This is a small point. You mentioned the consultation that was involved in the white paper. I think consultation is very good per se, but do you really think the Australian people are capable of cherry picking through capability and making an informed decision that

way or might it have been a more rigorous process if the government had indicated what capability it was leading to and then sought feedback from the community? Also on consultation, do you think it was appropriate that the consultation committee were not able to make recommendations to the government as a result of that consultation?

Vice Adm. Leach—Going back to the white paper, there was extensive consultation, as you remember, by the Peacock committee, which toured around Australia. In fact, the RUSI appeared before it. It was surprising how well informed the public were, and their thoughts on what was needed made a lot of sense. I think the observations that Peacock made were reflected pretty well in the white paper. That is two years old now. It has stood the test of time, although there have been a lot of changes in the strategic situation. This helps to bring it up somewhat and what you are doing now is a further step forward. But we are all waiting to see what happens in the next fortnight or so. I hope to God that they pull back from the chasm of invading Iraq. I have handed over some briefing notes which talk about strategies in Iraq, such as the big thump or urban guerrilla warfare, but the dangers of a prolonged and very bitter stoush there and the aftermath of Syria, Iran and all the others are not to be forgotten. We are discussing strategy in a strategic situation which has got a few balls in the air at the moment.

Mr PRICE—The update seems to indicate that the coalition of operations, in terms of niche capability with the Americans overseas, now appears to be a force determinant, whereas before we were pretty ruthless about saying the defence of Australia was the only force determinant. Secondly, we certainly did not use peacekeeping as a force determinant. What is your view on this break-out or extension or however you like to describe it that we should now be restructuring for niche capability in coalition operations overseas with the Americans?

Vice Adm. Leach—I still think you have to have the basic capability. It is interesting that the ANZUS pact was reactivated after 50 years. I think it would be silly to think that we would be going it alone in any areas without American or coalition help. But you must have the basics. It is no good having niche capabilities if you have not got the standard capabilities. That is the defence of Australia, the maritime strategy and the ability to deal with the sea-air gap.

Brig. Leece—I think, though, you might be misrepresenting the *Defence 2000* white paper, Mr Price. As I understand it, *Defence 2000* provided the capabilities for the defence of Australia and its interests and from those capabilities we would be able to draw what we needed for additional things such as peacekeeping. But we would structure our Defence Force for the defence of Australia and its interests and from that Defence Force we would draw what we needed for those wider issues.

Mr PRICE—It does seem, in terms of Special Operations Command now, that part and parcel of that will be active duty wherever with the Americans on coalition arrangements.

Brig. Leece—We would still need Special Operations Command whether we are involved in Iraq or not.

Mr PRICE—I am not saying we would not but I think it is fair to say that we are probably stretching the numbers at the moment in terms of our capacity to adequately provide.

Brig. Leece—Whether we have taken on more tasks than we can adequately man from existing resources and whether we can sustain those operations are real issues, yes.

Mr PRICE—I was very interested in your comments on the reserves. It does not seem to be clear at all what the role of the reserves is, given that the army sustainability model is not complete. You referred to slot theory. Whilst that has been a very useful exercise, the hard question is that if you want formed units capable of being manoeuvre trained and deployed then there is a whole range of serious reform you need to undertake with the reserves to provide that capability. But it is not clear that the ADF are at that point yet. They keep on talking about developing blended companies out of brigades or perhaps one company per brigade. That is five companies of deployable reserves out of five brigades, which is horrendously expensive if you think of \$950 million going into those formed blended companies.

Brig. Leece—I certainly believe that you can have a naval reserve crew for a ship, particularly a logistics ship—such as a patrol boat, a minehunter and so on—as we did in World War II. We can continue to do that.

Mr PRICE—I do not disagree, but Navy and Air Force use their reserves very differently from the way Army does.

Brig. Leece—I am not sure that they do; that is one of the things which worries me a bit. I think they could get far more value from their reserve than they do. I think the same for Army: it could use the reserve more effectively than it presently does. But I think there needs to be a change in culture in both the reserve and the permanent component if we are going to get the same value from our reserves that, say, the United States Marine Corps gets from its reserves. I think the United States Marine Corps could serve as a model for the Australian Defence Force, particularly for Army but more broadly as well, because of the level at which they have joint operations. They do not have them at the three-star level, like the army and air force in the United States do; they have them down at the one-star level and below. That is the sort of level we have to be operating at in Australia as part of our maritime strategy.

Vice Adm. Leach—The reserves are different. I remember when Wrigley was in Defence, and he had all sorts of ships in reserve to be manned by reserves. The FFGs have a complement of 179, as opposed to the DDGs, which had 350. It is all automated, there is a great deal of training. You cannot swing Saturday afternoon sailors into complicated ships and expect them to fight and win at sea. The reserves can take a very important place—like on *Manoora*, *Kanimbla*, *Westralia* and the oilers and tankers and that sort of thing—but, when it comes to the combatants, it takes a lot of training to get to be able to man a piece of equipment in split seconds and deal with it.

Senator SANDY MACDONALD—There are very highly skilled people who have been regular sailors and who have become naval reserves, because that is the only way they can be kept in the Navy. I have been on an FFG where the principal warfare officer was a naval reserve woman who was no longer in the Navy. The only way they could keep her was to have her come back on deployment.

Vice Adm. Leach—If she is recently trained, that is fine and that is great. I must say that I was against women in submarines, but they seem to be coping all right. You cannot take up a Saturday afternoon sailor and put him into a complicated ship and expect him to fight and win at sea. But, if someone is fully qualified and keeps the skills alive, that is fine.

Mr EDWARDS—Brigadier, in your submission, with respect to recruitment, retention and conditions of service, you say:

The issue is bigger than just maritime strategy but it is fundamental to it.

I would not disagree with that. But you go on to say:

... conditions of service need to be reviewed with emphasis on making service life-style more attractive to families ...

This is something that has challenged the ADF and successive governments for many years, given the nature of defence life. Do you have any specific ideas as to how you would go about that, apart from that 'retention bonuses warrant re-examination', which you mention in the submission? Do you have any other ideas or are there other areas you feel could be examined, looked at or adopted?

Brig. Leece—It is not so hard when you have a fleet based in, say, Sydney or Perth and you have the infrastructure and support of a city like Sydney or Perth. It becomes a lot harder when you have Army units and Air Force units which are based in the north and you have families who, in this contemporary day and age, want to have two incomes. If you have regular moves and so on, it disrupts the employment of people. So it is a question of how to find places where you can base units and you can provide support for the families of servicemen, which is a major trick. I am not sure what the answer is. I think you have to go one of two ways: either you have to minimise the number of units you have located in remote regions or, alternatively, you have to really build up a few key places—equivalent to somewhere like Townsville—where you have sufficient mass to be able to generate the use of civilian infrastructure and support that the families need.

Mr EDWARDS—Obviously we do need to have large numbers of ADF personnel in places like Darwin, so you cannot deal with the problem by not having personnel there.

Brig. Leece—It is a case, perhaps, of trying to generate the mass necessary to support the families.

Mr EDWARDS—I wonder whether you, and some of your people, could give some thought to that, because I think it is a very important question. Perhaps you could provide the committee with some of your considered views, because yours is one of the few organisations which, in making submissions, have hit on the importance of these areas, particularly conditions of service. They are important. You might be able to give some thought to it and, in due course, come back to the committee.

Senator SANDY MACDONALD—In your submission where you talk about the 'Capital Programme', you say, 'Deficiencies exist in amphibious and logistic transport.' I think Senator Ferguson raised the question of the amphibious lift capability, and I think you undertook to give some considered advice on the previous submission on that.

Brig. Leece—Yes.

Senator SANDY MACDONALD—Airborne early warning is going ahead. I know it is a little way off, but the program is well in place. You mentioned the PC3s as a platform being 30

years old. There is a considerable program going on at this time to upgrade the PC3s, and I think that is moving ahead. You talk about the concern you have about the capacity to patrol the Southern Ocean, but that is not the air-sea gap we talk about. That is not helping, interfering with or having a capacity to intervene in our immediate neighbourhood. It is probably not international cooperation; it is not peacekeeping. Is it a role for the ADF to play in the Southern Ocean, or is it perhaps another specialised role that is outside the area of the ADF? In terms of patrolling the Southern Ocean, putting a surface combatant down there is a little bit like using an FFG for border protection. It is not a very good use of available resources.

Vice Adm. Leach—We have had a fishery protection role for years, of course. The Air Force has so many hours of PC3s and a patrol boat to protect the exclusive economic zone. We have made a couple of jaunts down there to stop the poaching of the patagonian toothfish. I think it is about preserving your exclusive economic zone. If you say, ‘It doesn’t matter,’ or you cannot get there, you should think why you cannot get there. I think it is important economically. If you give that away, you give away perhaps oil search, mineral search and various other things as well. It is expensive and, as you say, it is not a very good use of—

Senator SANDY MACDONALD—It is not really in the criteria that we talk about. The defence of Australia covers primarily the air-sea gap—which is JORN, the AWACS and all the other things that we have for the air-sea gap. It is not helping our region or industry.

Brig. Leece—As part of our interests, the ocean and the ocean resources are part of Australia’s natural resources. They are very important.

Senator SANDY MACDONALD—But somehow it does not fit the criteria of where our ADF fits in.

Brig. Leece—I am not sure. You need vessels that have got very good sea-keeping capabilities, and you may need armed vessels and armed boarding parties if you are going to carry out that task well. We could have a coastguard in addition to the Navy. But, traditionally, we have seen that as being a naval role or a joint force role, because you need the Air Force as well.

Vice Adm. Leach—I remember that Mr Beazley said that we should have a coastguard. I was against it because in Australia only so many people go to sea in ships. You have to remember that the American Coast Guard is bigger than our three services combined and it does things like shipping and transport as well. If you have a coastguard, they require additional funds and they want additional vessels. Like the American one, they would make sure that they could be brought into the order of battle afterwards and so forth. I do not think it is sensible to have a coastguard. Having said that, I think we need to guard our coasts and I would argue for a more effective, efficient patrol boat. I agree that sending a combatant down south to look after toothfish is a bit silly, but you need the PC3 Orions to detect them and then you send, I hope, a seaworthy patrol boat that can deal with the situation.

Senator JOHNSTON—Gentlemen, I would like to draw upon your combined experience for a moment, not necessarily relevant to matters that you have portrayed in your submission. I want to ask you about the process of strategy development in your experience. How involved were you as senior service chiefs in the development of overall strategy? Were you satisfied

with the integrity of the process, or was it a process that came through the department and really did not engage the men who had to put it into effect? Could you comment on that for me.

Vice Adm. Leach—You had input, but a lot of it came from the defence think tanks—the Whites of yesteryear et cetera. We did not think we had as much influence as we should have had.

Mr BEVIS—You are not suggesting that he is a relic of yesteryear, I hope!

CHAIR—That was picked up on this side of the table.

Senator JOHNSTON—We like him, on this side of the table.

Vice Adm. Leach—We were arguing very much for an amphibious capability. That fell on deaf ears in Army; they thought, I think, that we were going to form a marine corps like that in America. The Army were not interested in naval gunfire support. We were arguing for a five-inch gun instead of a three-inch popgun, and we eventually got it. So there was a lot of interservice rivalry which deflected strategy. You all gave input.

It was not really a strategy, but I remember when the Army were going to have a firing range from Victoria through to Sydney. It was an area the size of Tasmania, and they were going to have tanks rolling through it. I do not know if you remember that. People were going around placating farmers about who was going to fix the fences et cetera. I thought it was a ridiculous idea. It was encouraged a bit by Defence, but it did not come to anything. So the answer is yes, we do have the mechanism in the Chiefs of Staff Committee to put strategic thoughts and development in. However, the three services are arguing in different ways, and it needs the umpire to come out and say ‘maritime strategy’, not ‘bayonets around the foreshore’. It is a bit of both.

I was never really frustrated except on the carrier question, which I believed the Navy needed. We nearly had the *Invincible*, if you remember, but that was snatched from us because Malcolm Fraser handed it back. I went over with Ian Sinclair to try to get it back, but Madam Thatcher said they were not returning the hero of the Falklands War. I would like to see a helicopter carrier that can take these 12 heavy-lift choppers in one hit, that can be protected properly and that can go where we want and do what we want. So you do get frustrated over the way you think it should go, but you have to obey the umpire. It was David Evans who wrote the book *A Fatal Rivalry*, which was about what happens when the cake gets too small and the three services try to cut their own bit and make it bigger than the next. It is a very welcome development that now it is so much more joint, that all the commands are joint. We argued, of course, to get the Orions—it seemed to make maritime sense. The concept of ‘maritime’ is a new thought; it used to be ‘Navy’. We now have joint commands, which is sensible. There is a lot of cooperation and respect for each other’s services, which I think is a great recent development.

Mr CAMERON THOMPSON—I would like you to expand a bit more about the AEWG. We have made the decision to purchase four of these aircraft and I think they have got seven radars—that means three radars sitting somewhere in a box. What is your view of the importance of AEWG as a tool? Can you expand on that and where we are at with that, whether the level of capability that we are purchasing is sufficient or whether we need to do more?

Vice Adm. Leach—You have got to walk before you can run. They are very powerful machines. They sit up there and they can hack about 50 targets at once, I think. Jindalee will not give you height, and the ionosphere goes up and down like a fiddler's elbow depending on the weather. They have been tweaking around with—as far as I know; I am a bit out of date—all the computers to try and get it right. I think they have changed contractors about three times in the meantime. I do not even know who has got it now but it has always been tested and trialled. I remember when Defence science were testing it; I went to see it and they all knew when QF421 was going to take off from Singapore because they knew where it was coming from. It is terribly important to have capability to the north. If you have got a flock of Hornets up there, they have got to know where to go and when, and the AEWG provides that. I am all for it and for accelerating its purchase.

Mr CAMERON THOMPSON—With regard to your comments about the Jindalee system, the views from within the Defence hierarchy seem to be complementary. I think they have spent \$900 million on the Jindalee and they have still got another \$300 million to spend. Are the two going to be complementary or would it be wiser at this stage to put more emphasis on the AEWG?

Vice Adm. Leach—From what I have seen, I would rather back the AEWG. We have got rows of what look like bedsteads across Australia; I do not think it is an operational system, although something might have happened in the 18 years that I have been out of the Navy.

Senator SANDY MACDONALD—It is not all bad.

Vice Adm. Leach—I hope we would not spend all that money and not be all bad, but I do not know how reactive it is or whether, if they get an echo, they can alert Tindal or get planes there. They say, 'What height?' and the response is, 'Don't know'. There is a big difference between going in at ground level and coming in at 20,000 feet.

Mr CAMERON THOMPSON—Did Jindalee work at night while you were there?

Vice Adm. Leach—Yes, Jindalee works at night but the ionosphere moves up and down and it is a bit unreliable.

Mr CAMERON THOMPSON—It does not work at night now.

Vice Adm. Leach—Is that because the scientists are asleep or what? The ionosphere is there and you have got power, but I do not think it is a terribly reliable operational system. I remain to be convinced but, as I said, it is 18 years since I left the Navy. But it was still being tested then.

Brig. Leece—From a scientist's perspective, Jindalee is a really exciting concept. But it is one thing to have an exciting concept and another one to make it work. Maybe once Jindalee is fully operational and functioning the way it was originally envisaged, it would be a complementary system to the AEWG. Certainly my understanding of the situation at the moment is that it still has a way to go before it will be fully operational and provide us with complete, 24-hours-a-day coverage of our approaches.

CHAIR—Let me ask a final question, because I know we are running out of time. Commodore Robertson said this morning that the Army should be restructured to provide a

marine and amphibious capability such as that the Americans have. Would you agree with that concept?

Vice Adm. Leach—A capability, yes, but don't call them marines, because they will back off and they will say that the Navy is taking it over! The Army has always had landing craft and water-borne operations, but it needs people who are trained in amphibious operations. I do not think we do a lot of that, and I would say that that would be important. I look to what might happen in New Guinea. I was President of the Australia-Papua New Guinea Friendship Association, and I have watched New Guinea go down the tube. The police are almost in revolt and, with the rascals and all the rest, I think there will be problems there. There have been problems in Bougainville, and there is potential for that to occur in other places, so I think it is important that we have amphibious trained troops.

Brig. Leece—I would agree with that. I have had a reasonable amount of experience in amphibious operations, and they are highly specialised. You really need troops who are specialists in amphibious operations, just as you need troops who are specialists in SAS. It is just as important to have troops who are specialists in amphibious operations, particularly on the modern battlefield. An infantry battalion that has its primary responsibility as something else can be given work-up training and so on with the people who are going to land it, but it is quite a different matter to conduct amphibious operations properly, with the correct standing operating procedures and so on. It is a different task for the 4RAR (Commando) Battalion, which has been training with the amphibious vessels we have at the moment, particularly *Kanimbla*. The 4RAR (Commando) Battalion's primary interest is in raids—it is a commando's job. It is one thing to conduct a raid, where you go in, do a job and come out again—you do it in little rubber duckies or with helicopters and vertical envelopment—but it is quite another matter to do it with infantry companies, with infantry battalions in landing craft going ashore to secure a lodgment area—a beachhead as a basis for, say, carrying out an evacuation. It requires different sorts of equipment, different sorts of training and different sorts of standing operating procedures. Those tasks need to be rehearsed with the Navy well and truly in advance. If you have to pull on a job like that at really short notice, you do not have the luxury of doing what we did in World War II in 1943 before we invaded New Guinea and in 1945 before we invaded Borneo.

CHAIR—Thank you for that, Brigadier. As you can see from the questions we have asked, we could probably talk for the rest of the afternoon. However, I would imagine your time is limited, and ours certainly is too. I certainly appreciate your comments about an amphibious warfare capability and about marines. I thank you for your attendance here today. If you have been asked for additional material, would you please forward it to the secretary. On behalf of the members of the committee, I sincerely thank you both for your submission and for your interest in maritime strategy. We value your contribution because of your experience in your careers. It will certainly help us in our final deliberations.

Vice Adm. Leach—Thank you for all your courtesies. I wish you every success in the completion of what is a very difficult task. I hope world events do not overtake it too much.

CHAIR—I move that the committee authorise publication, including publication on the parliamentary database, of the proof transcript of the evidence given before it at the public hearing today. There being no objection, it is so resolved.

