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JOINT COMMITTEE OF PUBLIC ACCOUNTS AND AUDIT

Tuesday, 17 October 2000

Members: Mr Charles *(Chairman)*, Senators Coonan, Faulkner, Gibson, Hogg, Murray and Watson and Mr Andrews, Mr Cox, Mr Georgiou, Ms Gillard, Mr Lindsay, Mr St Clair, Mr Somlyay, Mr Tanner and Mr Kelvin Thomson

Senators and members in attendance: Senators Gibson and Hogg and Mr Charles, Mr Cox, Mr Lindsay and Mr St Clair

Terms of reference for the inquiry:

To inquire into and report on:

- the role and expectations (both public and government) of Coastwatch;
- the relationship of Coastwatch, as 'service provider', and its client agencies, as 'service purchasers';
- the effectiveness of Coastwatch's allocation of resources to its tasks;
- new technologies which might improve the performance of Coastwatch;
- the adequacy of existing or proposed legislation which underpins Coastwatch's functions;
- whether an Australian Coastguard should be created to take over Coastwatch's functions; and
- any other issues raised by *Audit Report 38, 1999–2000, Coastwatch—Australian Customs Service*.

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O'CONNOR, Mr Michael, Executive Director, Australia Defence Association

CHAIRMAN—The Joint Committee of Public Accounts and Audit will now resume taking evidence as provided for by the Public Accounts and Audit Committee Act 1951 for its review of Coastwatch. I welcome everyone here this morning. This is the third in a series of hearings which will examine Coastwatch clients, Coastwatch contractors, potential suppliers of high-tech hardware and surveillance systems and members of the public. Further hearings will be held in Brisbane in October and a concluding hearing will be held in Canberra in November. The committee has already heard from Coastwatch and its clients.

Today's hearing will begin by taking evidence from various non-government organisations which have an interest in Coastwatch activities. The first two groups have taken a differing view on whether there should be an Australian coastguard, and the committee will explore with them the basis for their views. The committee will then take evidence from Surveillance Australia. The Auditor-General has recommended that the contractor performance measurement system be reviewed so that it provides more appropriate incentives to help ensure cost effectiveness. The committee will be seeking Surveillance Australia's response. The public hearing will conclude with three providers of potential surveillance technology and surveillance platform. Telstra Applied Technologies is developing surface wave radar, which has the potential to enhance the detection and monitoring of both vessels and aircraft off Australia's coast. Oceanic Solutions has provided the committee with evidence about Elta Electronics Industries' land based radar and its airborne synthetic aperture radar. The third group of witnesses is from Pacific Corporate Aviation Services, which advocates the potential of its Seawolf amphibious aircraft as a surveillance and response platform.

At this point, I will repeat a comment that I made at an earlier hearing in Canberra: the committee does not have the technical expertise to be able to recommend the use of particular surveillance technologies. Nonetheless, the committee is interested in how such equipment could assist and enhance Australia's surveillance capacity. Before swearing in witnesses, I refer members of the media who may be present at this hearing to a committee statement about the broadcasting of proceedings. In particular, I draw the media's attention to the need to fairly and accurately report the proceedings of the committee. Copies of the statement are available from the secretariat present at the hearing. I now welcome the representative of the Australia Defence Association to today's hearing. Would you like to make a brief opening statement before we ask you questions about your submission?

Mr O'Connor—No, thank you. I will simply draw attention to one typographical error in the submission. On the last line of paragraph 36 of the submission, the word 'or' should read 'law'.

CHAIRMAN—We understand that you have made submissions on this topic to the government in 1977, to the Joint Standing Committee on Foreign Affairs, Defence and Trade in 1979 and to the 1984 Beazley inquiry into coastal surveillance and that you have also produced a paper for a conference on policing Australia's offshore zones, which was conducted in 1997 by the Australian Defence Studies Centre, and then again in 1997 for the Prime Minister's task force. In this paper, are you saying anything new, or are you simply saying the same things that you have been saying since 1977?

Mr O'Connor—I think that the thinking has developed a little, but essentially we are saying the same thing. I draw attention to the fact that there was an interdepartmental committee looking at this issue as far back as 1967, when I was serving in the Navy office, and I was peripherally involved in that. It concluded that coastguard was the best solution for Australia, but none of the participating departments wanted to give up the assets that they controlled at the time, so the proposal went no further.

CHAIRMAN—But again, in 1997, with the Prime Minister's task force, which resulted in the changes that we have seen recently to Coastwatch, they apparently took no more notice of your views at that time than anybody took of them in 1977. The question is: if nobody was very interested in this philosophy, why should we take particular cognisance of it now?

Mr O'Connor—I do not know the reasons why no notice was taken, but we believe, in more or less a philosophical sense, that law enforcement is not a proper function for the defence organisation, to start with. Secondly, effectiveness, in our view, demands an overarching authority, a clear authority, and a well-organised and equipped paramilitary organisation dedicated to law enforcement. Why people do not take any notice of that, I do not know. The explanation has never been given.

CHAIRMAN—Do you suppose it might have something to do with cost?

Mr O'Connor—It probably does. Whether the costs have been accurately considered I do not know. I suspect that cost has something to do with it, but I suspect that bureaucratic empire protection also has quite a lot to do with it, as it has in the past. It is not something I can comment on beyond that. Other people can explain better than I can.

CHAIRMAN—Is it not true, Mr O'Connor, that the majority of the operations undertaken by Coastwatch, the majority of their tasking, is for civilian purposes?

Mr O'Connor—I would hope so; indeed, that is the purpose of a coastguard. It is a civilian law enforcement body—albeit with paramilitary dimensions primarily to enforce the discipline and training necessary for the use of the heavier weapons that might become necessary in the environment in which it operates.

CHAIRMAN—We understand that the US Coast Guard operates as a paramilitary organisation. It has a huge number of assets and a huge number of personnel, but, in the event of war, they become part of the defence establishment. How do you see that we would organise an operation in Australia, with our relatively small number of people and huge coastline and sea areas of responsibility?

Mr O'Connor—I would not see the United States Coast Guard as a model that should be dogmatically followed. What we are really looking for here is a police force dedicated to operational effectiveness in the particular marine environment in which they are required to operate. It is something that I believe the Navy is not organised adequately to do. Indeed, as the technologies of war fighting develop, the gap between the Navy's ability to conduct war fighting operations—particularly in distant regions like South-East Asia—and its ability to effectively conduct law enforcement operations in Australia's exclusive economic zone will become greater and greater. The training requirements, the equipment requirements and,

therefore, the costs—very often hidden costs—will become greater. We think that Australia is a sufficiently mature country to now look at a much more effective and dedicated organisation for this law enforcement offshore.

CHAIRMAN—You say in your submission:

A paramilitary force, that is not quite military but more than a lightly armed police force, is essential. Inevitably it must have the authority and the capability to use force to apprehend an offender ... that force may involve the use of weapons heavier than small arms ...

You go on to say that there is a need to train personnel in the use of medium firepower conventional weapons. When on earth have we ever needed that capability?

Mr O'Connor—We will not recognise the need until after it has happened if we do not prepare for it. If we are moving into an era in which Australia becomes a target for narcotics smuggling in a big way, maybe by Australian citizens, and they begin to resist a force that is unarmed or incapable of dealing with them, then we will see the need for it. I believe in pre-empting that particular need and, indeed, in deterring the development of the need. It is a case of shutting the stable door before the horse has bolted.

Mr COX—I was interested in your suggestions about armaments. You talked about using .50 calibre or 20mm to 30mm live automatic weapons, but you also propose larger capabilities such as 76mm weapons. In what sort of circumstances would you see those being used?

Mr O'Connor—In essence, I see a situation where a coastguard, if it were formed, may develop two or more sizes of patrol craft: one capable of operating at long range, compared with an exclusive economic zone maybe operating in southern waters; something akin to a lightly armed frigate—not a war fighting frigate but a lightly armed one—that is capable of long range and capable of dealing, perhaps, with incidents beyond the normal policing type of operation. It is not something I would be dogmatic about; it is simply a possibility. It is something that you would expect a professional coastguard to offer the government considered advice on that I am not competent to consider. I simply look at other coastguards around the world and see that they have such capabilities.

Mr COX—This would be a boat that would be of reasonable length and would have a helicopter capability?

Mr O'Connor—The helicopter capability would be an essential element of such a larger vessel, to give it a wider search area. I am thinking, again, of search operations in the Southern Ocean or at the more distant extremes of the exclusive economic zone.

Mr COX—Thank you.

Mr GEORGIOU—Michael, you draw a fairly rigid distinction between law enforcement and the military role but through your paper you also accept that has been more than a little attenuated, given some of the activities of the ADF in terms of peacekeeping. Is that distinction still as strong as it once may have been?

Mr O'Connor—I think the area in which I would be most concerned is operation of the ADF against Australian citizens. This is something that is politically and socially very sensitive. A police force is different. I think you have to make a distinction between Defence Force operations against or in foreign countries—as in East Timor, for example, in peacekeeping operations—and operations that are directed against Australian law-breakers. I think if you have the Defence Force put in a position where it has to use force against Australian citizens you will have a very difficult problem, whereas that is the job of a police force.

Mr GEORGIOU—So it is about that philosophical divide rather than a primarily military efficacy?

Mr O'Connor—Yes, that is the central point of it.

Mr COX—But do you think the Navy gives sufficient priority to its coastguard type functions and roles?

Mr O'Connor—I think the Navy gives as much priority to that as it is capable of giving. I think realistically, given its resources, the Navy has done a pretty good job of the job it has been given to do. But I repeat: I think the function of the Navy and the capabilities that we demand of the Navy in war fighting, with its requirement for operations beyond Australia's immediate area, are developing to such an extent that you are essentially developing two navies. I think that is a real problem for the Navy. It is something that we foreshadowed in our earlier submission; it is something that the Navy was looking at back in 1967, but other considerations intervened. The Navy likes its patrol boats because of the experience and training they give to younger officers—the opportunities for command for up-and-coming young officers. I do not believe that is sufficient reason for maintaining this capability.

Certainly where you have a Navy that is increasingly focused on missile based operations, war fighting operations and amphibious operations in a traditional naval sense, the law enforcement task, I suspect, is going to take a lower priority. Can I also add that, as the Navy looks to replace the present Fremantle class patrol boats, there is a distinct possibility that it will go for a vessel which is more attuned to a war fighting capability than to a policing capability. So the difficulty for the Navy will in fact increase if it is required to carry out law enforcement tasks.

Mr COX—Presumably the Navy's patrol boats spend a proportion of time in training activities that are not related to law enforcement?

Mr O'Connor—The Navy tries to do all sorts of things with its patrol boats, including pretending that they are fast attack craft in exercises with regional navies. These are vessels that are simply not equipped for that role—they do not have the communications fit, the weapons or the speed—so it is a rather artificial demonstration that it puts on in these exercises. These are police vessels—they are no more or less than patrol boats, and they have to be seen as that. So I repeat: you have in effect two navies.

Senator GIBSON—Can I just return to Mr Georgiou's questioning of the philosophical difference, if you like, between the Coastwatch activities against Australian citizens and the Coastwatch activities against others. Given that in recent years most of our concern has been

with the outside coming in—with both illegal citizens coming in and the drug trade—rather than with Australian citizens, it seems to me that we are forced to concentrate on that trade of persons or drugs from outside. Hence that is the main thrust of Coastwatch. Don't you agree?

Mr O'Connor—I agree up to a point, but again I go back to something that I said earlier, and that is that we are dealing with a situation which is a historically based one. I am not at all sure that that is sufficient. I think we should be looking to the potential for a much higher tempo of operations, a much higher level of threat, based on the activities of organised crime in this part of the world. We are already seeing the organised crime involvement in people-smuggling, for example. I could also perceive that occurring in the areas of narcotics smuggling and piracy even. This is something that we really need to be prepared for, even if it is only to deter.

Again I come back to the point that Australia is a sophisticated country, but we are one of the few countries in the world—sophisticated or otherwise—that does not give its offshore law enforcement to a proper coastal protection force, coastguard force or law enforcement organisation. I think I am right in saying that there are only three countries of the world—and I am talking about sophisticated countries—that have their navies carrying out this task, and they are Great Britain, Australia and New Zealand. There may be something in that sort of heritage, but most of the other serious maritime countries have coastguard separate from their navies—and I have listed those countries in the submission.

Senator GIBSON—On the other hand, given Australia's large size, the huge length of coast that we have to protect and a population of only 19 million to support those activities, doesn't the sharing of facilities to achieve that end, regardless of what you call the entity or how it is structured, make sense from a national point of view?

Mr O'Connor—I suggest that there are some hidden costs in the way we do things at the moment—one of which is the Navy commitment, if you like, to a small number of large bases; whereas a coastguard would tend to operate quite small detachments from a larger number of relatively unsophisticated bases. This enhances your coastguard or law enforcement capability because you have lower costs in maintenance, logistics and communications and you also have that access which you get from a local community to local intelligence other than the sophisticated surveillance systems. I cannot quantify these hidden costs but I think they are really a key element of the whole dichotomy between war fighting and law enforcement.

Senator GIBSON—We have only recently been introduced to all this—we went up north a month ago. I certainly had the impression when visiting Darwin, Broome and the Torres Strait that there was good coordination now between Coastwatch and the local communities in those three centres.

Mr O'Connor—I cannot comment on that. I really do not know; that is basically for your inquiry. It is certainly a guesstimate on my part. I would like comment on this question of cost. I have some figures that I derived recently with respect to the defence white paper. The 1987 defence white paper committed the government of the day to spending between 2.6 per cent and three per cent of GDP on defence. It never achieved that. A calculation of the shortfall over the 13 years amounts to just over $100 billion in today's dollars. This is capability which has been forgone. I guess it is an opportunity lost; that we have passed by. If a proportion of that money had been spent on a coastguard, we would be in a much better position than we are now to deter

threats to our offshore environment. Saving money and economising is all very well, but this is a very wealthy country which is really not spending what it should arguably spend on both defence and law enforcement.

Senator GIBSON—That statement implies that we are not doing sufficient now, and that there are big gaps in activity that should be being covered. Where is your evidence for that?

Mr O'Connor—I do not have any evidence for that. It is a speculative thing, I guess. Again, I come back to future threat and deterrence: those elements that a coastguard would provide for. I suspect, too, that in this context the net cost of a coastguard vis-à-vis a navy trying to do two jobs would not be as great as we think it would be. Again, one example would come in: the question of the Fremantle patrol boat replacement. If the Navy goes down the track of developing what is in effect a war fighting patrol boat, then the capacity for law enforcement disappears, and it would be necessary to replace it somehow or other. One of the advantages of a properly organised and professional coastguard is that it would be much better able to define the types of capabilities it would need and maybe could develop more suitable equipment for the task than is currently the case—or looks like being the case.

Senator HOGG—In your model of the coastguard, where do you see search and rescue fitting in? Does it have a place? Or it is something that still sits outside—

Mr O'Connor—This is something that has got to be developed in consultation with the states, which have a substantial responsibility and capability at the moment—although that varies from state to state. I think your state of Queensland is probably better off than Victoria, say, is. The coordination carried out by the Maritime Safety Agency is certainly a federal responsibility. I would see that absorbed into the coastguard. I would absorb a number of tasks currently carried out by the Navy and by other agencies into a coastguard—such tasks as responsibility for search and rescue and, indeed, the coordination and standardisation of a lot of the volunteer coast patrol organisations around the country. I would see them taking over, perhaps, the marine science task from the Navy—the hydrography and oceanography, and the navigation safety aspects—lights and buoys and so on. All these tasks—if you like, the government ones—are scattered around a number of agencies, and it may well be that a coastguard is the more appropriate one to handle it. But that again is a matter for judgment. I simply put the model up as one that could work.

Senator HOGG—What about long range search and rescue? Would that still have to rest with the Navy, under your model?

Mr O'Connor— If you are talking about the Southern Ocean type of rescues, long range search and rescue is essentially going to be a task for the Navy and Air Force, because only they have the capabilities. I would not see a coastguard necessarily developing those capabilities, because it would be a rare and remote, 100-year flood type of task for them.

CHAIRMAN—One of the things that interests me in our discussions this morning is that you talk an awful lot about the Fremantle class patrol boats, as if that really represents the majority of Coastwatch's operations. I suspect that, from the experience that we have gained, we would probably not agree with you. How on earth does a separate coastguard operation get access to

other sources of information only available to our military forces by way of agreement with other countries?

Mr O'Connor—I do not think that would be a problem. The information that we gain in those circumstances would be as available to a national law enforcement body as it is to the Defence Force. You are not talking about sophisticated hardware; you are talking about intelligence information.

CHAIRMAN—Beg your pardon?

Mr O'Connor—Sorry?

CHAIRMAN—We're not talking about a sophisticated what?

Mr O'Connor—We are not talking about sophisticated technologies.

CHAIRMAN—We aren't?

Mr O'Connor—In the context of area surveillance, I do not see a coastguard as operating that sort of defence type capability, although it would necessarily have access to the sort of data that the Defence Force would develop that would be of interest to a coastguard. The sharing of information between government departments is surely part of their task. If I have emphasised the Fremantle class patrol boats, it is simply because that is the primary response capability at the moment. Surveillance and detection of potential law-breakers is one aspect but the response capability is a surface response capability and that is essentially the patrol boats at the moment.

CHAIRMAN—But isn't the majority of the task of Coastwatch an information gathering one? It is my understanding that the biggest part of the job is to find out what is out there or—what's more—what is not out there.

Mr O'Connor—With respect, it is not much good finding out what is out there if you cannot do anything about it if you do not have a response capability.

CHAIRMAN—I understand that. For instance, you said on page 10 of your submission:

... the annual gross cost of an Australian Coastguard on the suggested model would be unlikely to exceed $500 million at current dollar values.

Would you tell us where you got that sort of number?

Mr O'Connor—It is a back of the envelope figure. It is a guesstimate based on what we understand to be the size of the operation.

Mr GEORGIOU—It seems to me that your argument has two tiers to it. The first one is a philosophical issue. The second one is essentially a proposition that the involvement of the defence forces in policing activities essentially corrupts both the policing and defence activities. What sorts of costs at any level of expenditure would override that? If in the real world you

have an additional 200 million bucks to spend, would you allocate it to Defence or to a coastguard operation, given that you have to make choices?

Mr O'Connor—I think that in the circumstances where the whole Defence budget is up for grabs at the moment that would be very difficult to quantify. I cannot quantify it.

Mr GEORGIOU—I am asking what sort of trade-offs there are in terms of putting your money in one place as against the costs that you discern of having a substantial Defence involvement in policing functions, because at the end of the day there is also always scarcity and you can always talk about finite amounts.

Mr O'Connor—I do not think I can answer that in any concrete terms. I am not sure that these costs can be quantified in dollar terms, particularly the sorts of costs that tend to get buried in the coordination role and exchange of information role, in the extra training that has to be carried out or in the different training tasks. It is certainly beyond our capacity to quantify those, and I am not sure they can be anyway.

CHAIRMAN—I do not know if you have read the Auditor-General's report which led to this inquiry, but he does state that the cost associated with the delivery of Coastwatch services in 1998-99 was $168 million, which comprised an ACS component of 35, a Defence component of 133, including the operating costs of the Fremantles and the P3C Orions. It is a long way from $168 million to $500 million, for philosophical argument.

Mr O'Connor—I do not think the Auditor's costings take into account the capital costs involved or the through-life costs of equipment; I suspect that they are just operating costs.

CHAIRMAN—With the greatest of respect, Mr O'Connor, we trust the Auditor to audit all of the Commonwealth entities' books. Are you questioning his information?

Mr O'Connor—No, I am not questioning it. I am saying that that would be a figure, but if it is less than $500 million so be it. Maybe you can get a coastguard for that sort of figure. I suspect not, but the difference of $300-and-something million is maybe an amount of money we should be spending to get effectiveness, and we are not. These are matters for the committee.

CHAIRMAN—Can you point out where Coastwatch has let it down that would occasion us to spend another $350 million a year?

Mr O'Connor—No, I cannot.

Mr COX—I was interested in your discussion about smaller coastguard bases. Could you elaborate on the reasons for your suggestions about putting bases at places like Geraldton, Albany, Port Lincoln, Portland or Burnie?

Mr O'Connor—It is partly the search and rescue function. I am talking about very, very small and basic operations here with just an absolute handful of people and one vessel perhaps. It would depend on the task, and this is where a professional organisation can make the judgments according to the perceptions. It may not be necessary at all in some of those places, but what we are really talking about here is a capability that is certainly based on some

speculative need. But, again, you have a professional organisation which can make the judgments and the recommendations.

Mr GEORGIOU—Just following that, your argument is that Defence will not make those sorts of decentralisation decisions because of its other primary functions?

Mr O'Connor—Yes. Defence is focused on war fighting as it should be. I suspect in the white paper it is going to be focused a lot more on regional security in South-East Asia and the South Pacific. So its focus will certainly be more away from the protection of the Australian coast. I do not think it was ever there, or even necessarily in a military sense should it be, in the sense of having a large number of small bases around the coast. That is contrary to all military principles, but it is not contrary to law enforcement principles. Again, they are dichotomies I think.

CHAIRMAN—Thank you, Mr O'Connor. We hope to conclude our inquiries this calendar year and to table a report early next year. We will certainly send you a copy.

Mr O'Connor—I look forward to that, Mr Chairman.

[10.13 a.m.]

EVANS, Mr Frank Geoffrey, Chairman, Advisory Committee, Navy League of Australia

HARRIS, Commander Graham McDonald, President, Navy League of Australia

CHAIRMAN—I now welcome representatives of the Navy League of Australia. We have received your submission, for which we thank you. Would you like to make an opening statement before we ask questions about your submission?

Cmdr Harris—The only opening statement would be, in effect, to reiterate our submission. We naturally have continued to monitor the operations of Coastwatch as they now work. In our view, it is a satisfactory system. It has been in operation for about 18 months. We believe it should be given its chance to prove itself. So far we think it is doing an effective job.

CHAIRMAN—You stated in your submission that Navy League felt that Defence, as a principal provider of resources, should coordinate the activities of the various authorities with the interests at stake. However, the league rejected the proposed establishment of a separate US style coastguard as being unsound, both economically and practically. Are you satisfied that the current operations of Coastwatch, that is to say with the direction of Coastwatch now being under the control of a naval officer, are an appropriate response to Australia's needs?

Cmdr Harris—Yes, we are. Historically—that is, over the last 20 or more years—we have had an interest in this matter. At one time, we felt that it should be directly and purely a Defence function, subject to proper funding for Defence. However, we have looked at what has occurred. We now think that the arrangement whereby a naval officer—Admiral Shalders, as it is at the present—with the command and control that he is able to exercise and the access that we understand he has to Defence communications intelligence and the like is working well, and it appears to be a good system to us.

CHAIRMAN—The question that I asked the last witness relates to that and it relates to the information gathering aspects of Coastwatch as it currently operates. I will repeat that it is my understanding that the greatest cost of this whole operation lies in finding out what is out there—whether we are talking about dangers to the marine environment, drugs, people-smuggling or whatever. Finding out what is out there seems to me to be the biggest task. Do you think that if we had a separate, paramilitary type organisation its access to Defence information could be the same?

Cmdr Harris—In theory, it could be. It would have to be to be as effective. The intelligence is fundamental to the operations of Coastwatch, we would say, because the interceptions by patrol boats or the other activities of the agencies that are interested all depend on good and timely intelligence. Yes, that is the major cost—certainly, it is absolutely essential that effective and timely intelligence be provided.

Cmdr Evans—If I could interrupt, I think one of the problems in the past was the lack of coordination between the various agencies and the people interested in organisations involved in

coastal surveillance—Fisheries, Immigration and so forth. Customs and Immigration, in particular, both have very good intelligence gathering organisations and they are very well backed up. Defence has an extremely good intelligence gathering organisation. One of the problems in the past was a lack of coordination between all these various bodies. It has taken all this time—since 1979 really, 20 years—to bring them together and this present government brought them together in July last year. The coastal surveillance people are now using the intelligence facilities of all these various organisations. They have come together and the intelligence facilities available to Coastwatch now are absolutely first-class. This is tremendously important. A lot of problems can be solved knowing what is happening in Iraq and so on around the world.

Mr COX—You said in your submission that you were concerned that, if a separate coastguard were set up, there would inevitably be competition between the coastguard and the Navy for resources. But, if the roles of the two organisations were absolutely clear and distinctly different, why would that need to be the case?

Cmdr Evans—It is not only the competition for funds but the people problem. Navy, as I am sure the committee knows, is desperately short of people. If we were going to have a separate, more localised navy, we would be looking for the same people to man ships. Young men are not so keen on going to sea these days—rather sadly, but there it is—and I think it is very important that we use the facilities we have. Navy has the resources and the ships, the patrol boats. Defence has the Orions. We must use them. We do not want to duplicate it and try to find people to man a duplicated defence force.

Cmdr Harris—Can I just add that the very nature of organisations is that, if you set up another one, you are going to have separate headquarters, separately staffed. It seems to us almost inevitable that there will be duplication. Things that are done now by one organisation will be done by a separate group and there will be some factor of being additional and not just separating out from the organisations that are involved in Coastwatch now. Personnel is one thing that does worry us considerably. Navy is significantly under strength, as I am sure you know. One of the factors that is thought to affect it is the lifestyle issue. For people interested in the sea from the lifestyle, family or domestic point of view, it may be more attractive to work for an organisation where they can be involved in ships and that kind of life but not have to spend months away from home or, indeed, have to risk possibly serious combat of any kind. That, in addition to all the other factors which seem to be impacting upon recruiting or lack of it at the moment, would be just another factor. We think it may be a real problem.

Mr COX—Navy is certainly having a lot of trouble recruiting people at the moment. It is down substantially on its ADFA quota, so it is not getting the officers through. It seems to me that there is a real possibility that it might make it easier to ensure that its vessels for more serious combat roles are actually properly crewed.

Cmdr Harris—I suppose, in a sense, Mr Cox, it is impossible to say until we try it. But we have real fears that it would not work that way.

Mr COX—I guess it is a question of whether young people, when they are making a decision to join the Navy, are actually making a decision to join the Navy or are looking for a life at sea

and they would rather be either under some less rigorous maritime command or, if the operation of the vessels were contracted out, under a maritime award.

Cmdr Evans—I do not think that would happen. All the surveys indicate that young people who are at that age that we want at sea are marrying young, for one thing. Family life has become very important to them. They do not want to be away anywhere at sea for long periods. Of course, with the coastguard, which is based to some extent in the north of Australia, there is still an unwillingness to serve in these places. I do not think that it is possible to look back and say that young men want to go to sea, love ships and that sort of thing. That feeling does not seem to exist any more. We have got only a tiny Navy and yet we cannot man it.

Cmdr Harris—It is something we cannot prove for you, Mr Cox, but it is a fear we hold, and everything that we know suggests that there would be a problem.

Mr COX—One of the possibilities of setting up a coastguard is that if it were a more conducive working environment than one of a major surface combatant or even a submarine and if people realised that there was somewhere for them to go afterwards, it might actually encourage them to join the Navy.

Cmdr Harris—You are suggesting a post-Navy career. That is certainly not the way it works in the United States Coast Guard. They have their own career streams. They may get some naval personnel transferring, but it works as its own separate force. They certainly have their own academies and career path. Whether it could be so structured in our obviously very much smaller coastguard, and where we would have it, I do not know. I would think that, whilst you might be able to cherry pick the odd ex-naval person into the coastguard if we had it, you might have problems because presumably you would have the organisation set up to run itself. If you started bringing in people at, say, an officer level, you might be affecting the career paths of people already in that organisation. Again, I am speculating because it is something we have never had in this country.

Mr COX—There is a fair flow of people out of the Air Force to Coastwatch to do technical surveillance jobs.

Cmdr Harris—That is true.

Mr GEORGIOU—Unlike Mr O'Connor, you are focusing on the consequences of resource constraints. Do you accept that there are actually some tensions between the policing function and the military function of the sort that Michael outlined before?

Cmdr Harris—I heard what he said. I would not have thought that there was. After all, the policing function has been carried out aboard Navy ships for quite some time without seeming to have any difficulties of the kind he has suggested. The patrol boats, from time to time, carry police or other Commonwealth government agency or indeed state government agency officers when required. That does not seem to have created the kind of problem he has suggested. I notice incidentally that you mentioned piracy, which, happily, we have not had to deal with. That has been a naval function for hundreds of years in any event. No, I have not seen any tensions of that kind and I have not read of or been told of any.

Mr GEORGIOU—What about the strategic tension between a focus on the coast and a focus on projecting power into fairly distant regions?

Cmdr Harris—The fact is that navies are not limited to just projecting power or are not limited to just protecting the coastline; they have those roles all of the time. There is no cut-off with a brown water Navy and a blue water Navy; there is a Navy which has those various functions. Navy so far does not seem to have had a problem in living with all of those jobs.

Mr GEORGIOU—Given that, how do you respond to the issue that was raised that in Australia, New Zealand and the UK—assuming this is correct—people do not have a dichotomy between a distinct coastguard and the military or the Defence arm?

Cmdr Harris—I did not quite get that.

Mr GEORGIOU—How do you respond to the point that was made that we are in a very small minority of countries in not having a distinct coastguard?

Cmdr Harris—I do not know whether that is the test—whether others have it and we do not have it. The test should be what works for us.

Mr GEORGIOU—That is how I feel about compulsory voting.

Cmdr Evans—It needs to be said that no country in the world attempts to emulate the United States Coast Guard. Many people say they have coastguards, but they do not really. Even in Canada, for instance, the coastguard's primary job is oceanographic work—icebergs and all that sort of thing. It needs to be said too that the United States Coast Guard at the present time also has its problems with ageing craft, and it has enlistment problems and financial problems.

Mr GEORGIOU—It could be the Navy.

Cmdr Evans—Yes, the Navy also has. All the armed services do. I think it is a common problem in the Western world at the moment. It is not quite the same sort of world it was in 1939.

Mr GEORGIOU—That is certainly true.

CHAIRMAN—I think we can all agree with that.

Mr LINDSAY—Gentlemen, do you think Australians know that the director of Coastwatch is a senior Navy officer? If not, should they know?

Cmdr Harris—I think, based on what we know, they would be comforted to know what the arrangements presently are.

Mr LINDSAY—Was that a yes or a no?

Cmdr Harris—Yes.

Mr LINDSAY—So you think Australians do know.

Cmdr Harris—I am not sure whether they do know. But in answer to your second question: yes, I think they should know.

Mr LINDSAY—You have given some evidence about the Fremantles. Have you seen the Bay class that the Customs people use?

Cmdr Harris—Yes, I have.

Mr LINDSAY—Can you offer any comparisons between the two in relation to their suitability for the job?

Cmdr Harris—Customs have a particular role for which they had those vessels built. Navy has tended to look at slightly larger vessels, and you probably know that the various options that have been considered over the last several years have been larger vessels. As I understand it, the replacement for the current patrol boats would be a slightly larger vessel though still essentially a patrol boat type vessel. There had been a possibility some years ago—when it was thought we might do something jointly with Malaysia—of having a vessel which was large enough to have a helicopter on the stern. That seems to have disappeared, partly because the Malaysians pulled out and possibly for financial reasons. I would not comment on whether that boat is appropriate for Customs, but I think for a general patrol boat coastguard type function something slightly larger would be needed, because you cannot always keep close to the coast and sometimes, particularly in the west and the north, the seas require something a bit larger.

Mr LINDSAY—You gave evidence that it was unfortunate that people were not joining the Navy any more. Do you think that part of the reason is that the Fremantles are very old technology, that it is not desirable for young people to go to sea on a Fremantle when they can look at something like a Bay class and say, 'This is state of the art,' and the Fremantle is 30 years old?

Cmdr Evans—I do not think so. I do not think that sort of thought comes into their minds at all, really. A boy who really wants to join the Navy—say, a sea cadet or something—knows roughly what he is going into. He wants to join the Navy, and that is it.

Cmdr Harris—Can I just add that I do not think that at the recruiting stage it would affect minds, because they would not necessarily know whether they were going to go into a patrol boat or into our most modern frigate.

Mr LINDSAY—Do you agree the most effective weapon on the Fremantle is the dingy?

Cmdr Harris—For the use of a boarding party, do you mean? Most of the time that is the most common use. There is some limit on use of the major weapon anyway, given the types of ships they are apprehending.

Mr LINDSAY—It will depend on the white paper, I guess, but do you think there should not be any consideration of extension of life of type, that the Navy should move to a replacement as soon as possible?

Cmdr Harris—We would certainly say the Navy should move to a replacement as soon as possible. As you rightly say, the Fremantles have done a lot of service. The only qualification I would make to that is we do not know how much money there is going to be in the pot.

Mr LINDSAY—Finally, would you also say that officers and sailors who serve on Fremantles are just the most wonderful people in the Navy in what they do?

Cmdr Harris—I think that is a dorothy dixer.

Senator HOGG—Is that leading the witness?

CHAIRMAN—It definitely was.

Cmdr Harris—Yes is the answer.

CHAIRMAN—On the same issue that Mr Lindsay raised, we were fortunate to be able to see a Fremantle and a Bay craft side by side. They are basically the same length but they are completely different vessels. The most significant difference, I guess, is the fact that the Bay craft is simply a commercial hull. It is all aluminium and it costs something like $8 million. The Fremantle, of course, is built to mil. spec. It carries a much larger crew and costs I do not know how many times that—but one heck of a lot.

Cmdr Harris—I cannot remember the price—it was quite a while ago that they were built.

CHAIRMAN—Regardless of what they cost then, if you had to replace the—

Cmdr Harris—One of the options, which you may know of or you could certainly inquire about, that the Navy has considered is a somewhat larger patrol boat type vessel built commercially.

CHAIRMAN—A commercial vessel, not a mil. spec. vessel?

Cmdr Harris—Yes, and built by commercial yards. It would be a greater length than what you have been looking at.

Mr COX—You heard Mr O'Connor's evidence. Can you foresee any situation in the policing function where you would need a 76-millimetre gun?

Cmdr Harris—Yes. There was an incident some time ago where a rather large fishing vessel brushed off one of our patrol boats. The law is a bit limited in what they can do, but I would have thought that that came very close to a situation where it could well have been carefully used.

Mr COX—How carefully used?

Cmdr Harris—Well, you do not have to open fire on the bridge; you could just have a shot at the bow.

Mr COX—They frequently shoot across the bows.

Cmdr Harris—No, I said at the bow. A warship's shot across the bow is not a request to stop; it is a command. If somebody does not stop, it is a matter, I guess, for politicians and diplomats as to what your next step is. If you are asking me whether I can think of circumstances where something might have to be used, that is a circumstance where it might have to be used.

Mr COX—I think they communicate with the minister before they take the next step.

Cmdr Harris—Yes.

Mr COX—So far I do not think anybody has yet had to go beyond a 50-cal. machine-gun round into the steering gear of a boat.

Cmdr Harris—One hopes that is always the case. The instance a couple of years ago that I referred to was a particularly difficult one; indeed, the vessel got away, as you no doubt know.

Mr COX—Yes.

Cmdr Evans—Entry by sea is limited compared to the number of people who are coming in by air through airports and one thing and another. Customs handled something like 15 million entries by air. That is why we feel that Customs is probably an appropriate department for Coastwatch to be situated in at the moment rather than Defence. It seems to us unnecessary to create yet another department. Customs, fisheries and the Barrier Reef agencies will continue to exist if a coastguard is formed. It seems to be a pity to be denuding them of their personnel and any of the facilities they have. To be bringing them all together seems to be the logical thing to do in a country of our size and with our mini population.

Mr COX—The Australia Defence Association's submission suggests putting some of the present civilian functions that are in the department of transport into the coastguard—the Australian Maritime Safety Authority, Australian Search and Rescue and so on. So there are economies to be made in other areas.

Cmdr Evans—That remains to be seen. I do not think anybody knows the answer to that, really. I would have thought that a completely new department—they do seem to have the habit of building themselves up—just seems to be unnecessary, if the present arrangements are working. Our whole feeling is that there have actually been an enormous number of Coastwatch inquiries—eight, to my knowledge—and it seems to me that the organisation should be given a chance to prove itself. If it doesn't, and people start pouring into the country, it would be a different matter; but it appears to be working.

CHAIRMAN—Do you have a view on what we should be doing about the Southern Ocean?

Cmdr Harris—About the Southern Ocean?

CHAIRMAN—In terms of surveillance.

Cmdr Harris—At the moment, the surveillance requirement is for foreign fisheries, essentially. Our view is that, yes, our EEZ should be patrolled and enforced. The Southern Ocean is a particular problem because of distance. When you are talking about sending ships there, the seas are such that you need something pretty robust. You are certainly talking about more than a patrol boat of any kind. The problem, I suppose, is cost. We have a responsibility to protect our sea resources in the EEZ and we should do it. The answer is yes, that it is our responsibility and we should do it. If you are right now asking me how would we do it, we would think that the only sort of force that has the ships is Navy; but to send a frigate down there on permanent patrol would not be cost-effective either, given the distances involved—and I am sure you know they are very considerable: to Heard Island and those sorts of places, you are talking in the thousands of miles or kilometres.

We would think regular patrolling rather than constant patrolling would be the best way to go. Again, this is an area where good and timely intelligence must be a factor. You cannot, we would think, patrol the whole of that area all of the time with ships of the kind that you would need to patrol in those seas; therefore good and timely intelligence to give you a reasonable chance of apprehending people who wrongfully intrude into there is, in our view, the best way to go. Given the ranges, you would have to use P3s to assist you; but we think that something along those lines is the best thing to do.

I would just add that, allied with good intelligence and assisted by airborne surveillance, you may not have to use a warship. It may be a question of chartering some suitable merchant vessel, properly equipped and able to handle the seas that inevitably you will run into down there. That may be the answer. There is no cheap way of patrolling so large an amount of difficult sea. I am sorry I cannot give you a more definitive answer. Do you have anything to add?

Cmdr Evans—No.

CHAIRMAN—I do not think anybody would disagree with you. It is a difficult task. As there are no further questions, we thank you very much. We appreciate your submission and your coming along to talk to us today. As you perhaps heard me telling Mr O'Connor, we hope to finish our inquiries before Christmas, and we will certainly send you a copy of the report next year when it is tabled. And perhaps this will be the last inquiry for a while. We do take the point that there have been an awful lot of inquiries on Coastwatch.

Cmdr Evans—Do not forget that the Navy will be 100 years old this year, so I suppose that eight inquiries over all that period—

CHAIRMAN—We accept that; but since they made major changes, we have a responsibility to review all the audit reports. Since the Auditor did produce a report on Coastwatch, we thought it was our responsibility to follow up on some of the issues that were raised and see—in our view, representing parliament—how the new arrangements are operating. So far, we have been given fantastic access to the assets, the operations, headquarters and the whole lot, so it has been very informative.

Cmdr Harris—Thank you, Mr Charles. Our view of what we have seen is 'so far, so good' with the new arrangements, but we will be interested to hear what your committee says.

CHAIRMAN—So will we.

Proceedings suspended from 10.45 a.m. to 11.01 a.m.

CROWE, Mr John Bernard, Chief Pilot, Surveillance Australia Pty Ltd

GILES, Mr Graham, Group Commercial Manager, National Jet Systems Pty Ltd

JOHNSTON, Mr Michael, Chief Observer, Surveillance Australia Pty Ltd

OLLERTON, Mr David, Operations Manager, Surveillance Australia Pty Ltd

PATTERSON, Mr Anthony, General Manager, Surveillance Australia Pty Ltd

CHAIRMAN—I welcome the representatives of Surveillance Australia appearing at today's hearing. Thank you for your submission, which we have received. Do you have a brief opening statement that you would like to make?

Mr Patterson—Yes, we do. Surveillance Australia is a company fully involved in special mission operations. Of these, the Coastwatch contract is by far our largest and most important, and for this we supply aircraft, aircrews, engineers and management support. We are largely responsible for training our own aircrews, and this year we will fly almost 20,000 hours for the Coastwatch operation. To put that into some perspective, next year that will be double the number of hours flown by the RAAF's 20 P3 Orion aircraft. By the end of this year from our four northern bases we will be operating 15 aircraft, of which five are Dash 8s, three are Cessna 406s, six are Islander aircraft and one is an Aerocommander. The company has one general manager, four senior specialist managers, four middle managers and approximately 130 aircrew and aircraft engineers. This enables us to put the majority of our effort into the service required by Coastwatch and not get bogged down by a heirarchy of management. Our submission is limited to our specific areas of expertise—aerial maritime surveillance, aircraft operation and technical advances in maritime surveillance—and to those areas of the audit report relating to ourselves.

The team before you has the expertise to answer questions on the preceding points. To give you an idea of the expertise, let me introduce each of them by way of background. John Crowe, Chief Pilot, started life as a P3 sensor operator. He completed a pilot's course and returned as a P3 aircraft captain; he ended his 24 years with the RAAF as the CO of one of the P3 squadrons. He has about 30 years experience in maritime surveillance. Michael Johnston, Chief Observer, is another ex-RAAF senior officer, specialising in sensor management. Mike also has about 30 years experience in maritime surveillance and about 8,000 maritime surveillance flying hours. David Ollerton, national Operations Manager, is one of the original Coastwatch observers, having been involved in the Coastwatch operation for about 11 years. He was previously Coastwatch base manager in Broome. Graham Giles, the Group Commercial Manager looking after government and military business, is also an ex-senior RAAF officer; he specialised in sensors and operations. He spent 11 years in Coastwatch, mostly as the director of surveillance resources, developing operational concepts and managing the various aerial surveillance contracts. He finished his time in Customs as the director of marine acquisition where he set up the purchase and operational concepts for the Customs Bay class vessels, which are just coming into service. He has approximately 34 years experience in the field. As the General Manager, my speciality is managing special mission operations, which I have been involved in for 16

years in both search and rescue and air ambulance. I have been the General Manager of Surveillance Australia since its inception some six years ago.

At this point I would like to stress that we attend this meeting with no complaints or gripes. We are happy with our relationship with the Australian Coastwatch Service and its clients. We believe Coastwatch is working well. However, like the majority of attendees, we do have an agenda. Our agenda is based on the thoughts of a team of professional surveillance operators and it is to make Coastwatch a more effective operation. Our belief is that substantial gains are available through incremental change. We believe there is a real opportunity to increase the operational effectiveness of Coastwatch through carefully selected changes and upgrades to equipment and operating methodologies. The gains that will be obtained are disproportionate to the cost. The result is a more effective and efficient surveillance operation. Given this, we see our presence as an opportunity to expand on our submission, which attempts to further the debate on new technologies which could be applied to the Coastwatch operation. We invite the committee to explore any of these areas with the team we have here today. To facilitate this, we are quite willing to discuss all areas of our submission, including the confidential section that is not appearing on the public web site. I thank you in advance for the opportunity to be part of the inquiry.

CHAIRMAN—Thank you very much. One of the questions that I have is that in the audit report the Auditor-General says:

> Coastwatch and its clients were generally highly complimentary of the contractor aircrew. The audit team spent some time with the contractor crews and was impressed by their professionalism and enthusiasm for conducting operations, despite some technical difficulties with equipment. A concern expressed by Coastwatch was the level of contractor staff turnover and the need for Coastwatch to continue to invest heavily in the training of new staff. The ANAO considers that Coastwatch should address this issue when new contracts for the fixed and rotary wing aircraft are let.

The CPSU, in their submission, also commented on turnover. Your comments?

Mr Patterson—Turnover of staff is obviously a concern for us as an organisation. However, turnover needs to be seen in view of the industry norms, and in our response we commented in that respect, that whilst every organisation would like to minimise its turnover it has to be seen against benchmarks of similar operations in the industry. Coastwatch operates in an extremely remote area, and for any organisation employing staff in remote areas turnover is always a problem. Our experience is that we are very much within industry norms in terms of turnover.

Mr Giles—The management team for Surveillance Australia has been the same since contract inception, which is an important aspect in actually maintaining continuity in the operation. The majority of turnover is in the pilot area. Like Coastwatch, we tend to consider that the strength of the contracted flying operation is with the observers. Up until the recent recruiting drive from Coastwatch, we were pretty able to maintain our Coastwatch observers for a long, long time.

Senator HOGG—What is the turnover rate? What benchmarks do you use to test that against?

Mr Patterson—I do not have the particular rates in front of me or available off the top of my head.

Senator HOGG—Please take what the turnover rate is on notice and let us know. That would be interesting. It may well be that you want to give us pilots versus observer versus technical support staff versus something such as that—I don't know what. It may well be that you have a higher turnover rate in specific areas. If we could have that identified, that would be interesting if it is against the benchmarks that are used in normal commercial activities, and also if you would give us some indication of the replacement costs, the training costs, of putting a new person into a position. It may well be that, every time someone leaves and you replace them, it costs, in the case of a pilot, $50,000 by the time you train them, bring them up to speed with your operations and so on, whereas it might cost you only $30,000 for an observer. So could you give us an indication of the cost of replacing staff, individually and on an annual basis?

Mr Patterson—We can certainly do that. I would just like to point out that those costs are something that we bear as an organisation; they are not passed through to Coastwatch.

Senator HOGG—I accept that, but if you can gain greater efficiencies in that area it may well improve the service that you give. One of the things that I am aware of with Defence is that they have difficulties in retaining pilots and certain other classes of defence personnel. I am just wondering if you suffer the exact same difficulties as Defence and, if so, what strategies you could put in place. Defence have the retention bonus, which has been shown not to work. But what strategies, given the remoteness of the areas that you deal with, can you put in place to improve the service delivery and the continuity of the delivery that you provide through Coastwatch? I am not being critical of your operation; I am just asking in response to what the chair has raised out of the audit report.

Mr Patterson—Sure.

Mr COX—On page 11 of your submission, you talk about a change in the nature of your operations from what you had originally tendered for, which was basically strategic flying, to a greater requirement for tactical flying. Could you elaborate on that and tell us how it is affecting the operation?

Mr Patterson—Essentially, the contract was tendered on the basis of a strategic flying operation. However, it has been our experience of the operation that it has developed into more of a tactically operated contract whereby there are specific targets that the crew has being tasked to search for, particularly antidrug operations and, obviously, illegal immigrant operations.

Mr COX—What proportion of the flying that you are doing would be technical and what proportion would be strategic?

Mr Patterson—Coastwatch in their submission came back to, I think, 80 per cent strategic and 20 per cent tactical. The tactical operations are very resource intensive, because obviously it is a timely operation—in other words, it is not something that extends over a long period of time. Short periods of very intensive flying operations are typically demonstrated in a tactical flying operation.

Mr COX—Does that mean that, at the times that you are flying tactical operations, the more general surveillance—the strategic flying—has to be neglected or reduced?

Mr Patterson—The strategic operation bleeds off to support a tactical operation. That is not to say that the strategic objectives are not maintained to a certain extent, because in any Coastwatch flight there are certain areas of interest. So, if you see something that you may not have been tasked for, you will still report it.

Mr Crowe—There are always going to be resource limitations, and if resources are being used in a tactical operation—which are always resource intensive, especially in relation to pilots and observers—it stands to reason that there will be fewer human resources available for the ongoing programs.

CHAIRMAN—Could you give us an example?

Mr Giles—I think the important aspect of this, before we get to the examples, is that the contract was let to a very specific budget. That put restraints and a number of limitations. If an operation is running 24 hours a day, that is essentially going to chew up three to 3½ full Dash 8 crews a day. Depending upon when the aeroplanes are flying, there are limitations set by the Civil Aviation Authority as to how many hours we can fly on aircrew. The major limitation is 900 hours a year, going down to a hundred hours a month to 30 hours in seven days. As we fly those operations, the number of hours that people have got are simply not available to be used. So what we have is that limiting factor of the budget when the contract was let, with the increasing factor of tactical flying, which chews up the finite resources. The answer to that is to put more resources into it, as per the firemen and ambulance analogy that we put in our report. The balance that has to be made is how many resources do you have standing around for the unpredictable tactical operations that you have to do. That normally becomes a matter of budget.

Mr COX—If you came to the conclusion that the amount of strategic flying was inadequate because of the day-to-day tactical requirements and there was a need to increase the financial resources applied, would you need financial resources only to provide for more aircrews, not financial resources to provide for more aircraft?

Mr Patterson—Yes. More aircrews are an incremental increase that would then give better utilisation of a very expensive capital asset, being the aircraft assets. There is obviously a limitation to each airframe, but we would not be at that limit at this stage. There is more flying capacity out of the current assets that are employed.

Mr COX—Can you give us a rough percentage of what the level of capacity of the airframe for the Dash 8s is at the moment?

Mr Patterson—It would probably be best to compare it to, say, an RPT operation. If you were an operator of a Dash 8 aircraft in an RPT environment, you would be looking to get somewhere between 2,000 to 2,400 hours per annum out of the aircraft. In the Coastwatch operation, when the new aircraft come on board, it will be approximately 1,600 hours per year. That comparison has limitations. RPT works to have a fixed schedule. It does the same thing basically every day and you know the flying program a year in advance. The Coastwatch operation is obviously different and the flying program and the threat analysis changes on a daily basis. So some of the efficiencies that you would normally get out of an RPT operation are

not automatically transferable back into an operation such as Coastwatch. But, yes, there is spare capacity in the airframes that could be utilised if there were more crew available.

Mr COX—So a 25 or 30 per cent increase in capacity would be possible?

CHAIRMAN—But you knew all this when you tendered.

Mr Giles—No. The original requirement was written around a specific objective. The operation has changed during the years to become more tactical; therefore, the assets put into place to meet the original requirement are no longer as valid as they were five years ago.

CHAIRMAN—What are you saying? Are you saying that you are not happy with the contract? Is that when you are telling us?

Mr Giles—No.

Mr Patterson—No. Our contract has very much evolved with the way that Coastwatch has changed over the last five years. You were asking a question in relation to gaining more efficiencies out of the current assets. Those efficiencies are available with an increase in crews.

Mr Crowe—The other point that needs making, too, is that tactical operations consume human resources at a greater rate—pilot and observer flight and duty time. It is a long story but, for example, if you are flying on the back of a clock in the wee hours, there are longer stand-down periods when you finish. So if you do go tactical, the way in which you use those human resources actually accelerates. So you are going to have a greater and a more sustained tactical response if you increase the numbers of pilots and observers. They are the high profile resources that are quite important for the crunch times of the operation.

I can give you one example. There was a particular operation off the east coast, and we were almost down to the last pilot and observer when the actual apprehension was made. If it had gone on for a longer period of time, we would have been hard against resource limitations because of the high rate of consumption of human resources for tactical operations. What I am saying is that, if it is more routine, that is, strategic, you tend to get more hours per pilot and observer in the aircraft. The tactical operation does use it up more rapidly.

Senator HOGG—It is a bit concerning that, because of a definite limit to your resources, you could not have proceeded with that particular operation any further. Is there a fall-back position that you have in circumstances such as that? Let us just say it was imperative for that surveillance to proceed beyond the limit of your resources. Is there a fall-back position?

Mr Crowe—With the utmost respect, there is always going to be a limitation. With very intensive tactical type operations, the limitation is always human. The aeroplanes would just fly 24 hours a day, but getting the crews to be able to do that would normally be the critical part.

Senator HOGG—I accept that. So there is no reserve pool that you can call upon?

Mr Ollerton—I was involved in that particular incident. In that particular instance there was fall-back by way of a P3 Orion.

Senator HOGG—That was what I was looking for.

Mr Giles—There always is a fall-back in that the tactical operation does not consume all of Coastwatch resources. So the trade-off is less strategic flying to more and more tactical as that goes along.

Mr Crowe—I suppose the other thing from a contractor's point of view is that our endeavour is to have the contracted number of aircrew available, and that is what we do. To some extent, how those resources are consumed is beyond our control and even beyond the control of others because of, say, a developing tactical situation. As honest brokers we go all out to provide the contracted required number of aircrew.

Senator GIBSON—On page 9 of your submission you talk about the P3 Orions. You comment on paragraph 3.11 of the audit report which said that the Orions can provide 'additional services', and you then go on to say:

This statement is agreed, however, it does not indicate that many of the specialist equipment capabilities carried on the Orion can now be obtained on the civil market at a much lower price.

Would you care to comment on that?

Mr Patterson—The P3 Orion is set up as an antisubmarine warfare aircraft—that is its role. Coastwatch is a civil maritime surveillance operation which has got an altogether different threat profile. With respect to the P3, as I said to you, the backend of the equipment is essentially in the vicinity of 20 years old. These days a lot of that equipment which is appropriate to a civil maritime threat is available. The flowdown from the military technologies into the civil world has occurred and is much more rapid than it was in the past. There are civil versions of the equipment that are in the P3 that are suited to a civil maritime threat available at a far cheaper price and they are, to a certain extent, far more effective than some of the equipment that is currently fitted to the P3.

Mr Giles—An example is the acoustic sensor. Ten years ago there was nothing but military specification acoustic sensors. Today you can buy commercially available sonorboards and commercially available processors which you can put on an aeroplane. It is the same with electronic support measures for eavesdropping. You can now buy them commercially. All of those could be fitted onto an aeroplane like the Dash 8 if the client requires them.

Senator GIBSON—Four paragraphs down in your submission you make reference to the Southern Ocean. You say:

The RAAF is used to patrol the Southern Ocean because this task was written into the concept of operations surrounding the present Coastwatch contract. It is not because it is beyond the capability of the civilian aircraft, though it is conceded that the RAAF aircraft can go further south than the current contracted aircraft.

Would you care to expand on that and explain to the committee what you really mean there?

Mr Giles—I wrote the concept of ops for this contract, so I know it reasonably well. The concern with the P3s was that the AFMA were worried about the loss of transit time to go from the traditional base at Edinburgh in South Australia to the normal Coastwatch northern patrol areas. Essentially, a deal was done between Coastwatch and the Department of Defence to allow us to transfer money from the operational cost of the P3s to Coastwatch to get them further offshore and the amount of flying time that the Air Force saw as training value on the P3s. That amount was 250 hours. To get the maximum benefit out of that, it was agreed between both departments that the majority of that flying would be used in the Southern Ocean because it was close to Edinburgh—a trade-off of very little transit time for a lot of on-task time.

Senator GIBSON—Are you still suggesting that you could do the task in the Southern Ocean more cheaply than if it were let out to civilian aircraft?

Mr Giles—I guess the way we interpreted the audit report is that a civil contractor could not do the Southern Ocean task. We are suggesting that that is not correct. We could do it, but under the requirement that we had there was no requirement for us to do it.

Senator GIBSON—And obviously the RAAF needs some training, out of Edinburgh anyway.

Mr Giles—That is correct.

Senator GIBSON—Also in regard to the Southern Ocean, in your supplementary submission there is reference to the proposed air link between Australia and Antarctica and coordinating surveillance in the Southern Ocean between them. Would you care to comment on that?

Mr Patterson—We see a confluence between the requirements of two government departments. Graham has been involved in the development of the concept of operations with the Antarctic Division.

Mr Giles—The area of particular problem is Heard and McDonald Islands. The distances are so great that it is very difficult for the P3 to get down there. From memory, the only aircraft in the Australian Air Force inventory which can get down there is the 707 or the C130s. The Antarctic requirement, as it is developing, is for an air link between Hobart and the Australian Antarctic stations. The only aeroplane which would do the job and which is of commercial sense is a C130 based aeroplane—it is an L100-30. That aeroplane can carry internal fuel, which means it can quite happily go from a southern port down to Heard and McDonald Islands, carry out surveillance and come back again. We have investigated the aeroplane. What we do know is that an SV1022 radar, which is the same as we have on the Dash 8, with a smaller antenna, can fit into the nose of an L100. That does not give a 360-degree search, but it will give a 240-degree search, which is quite okay for surface surveillance, but by combining both Commonwealth government requirements it appears to us that there may be an ability to kill two birds with one stone.

Mr COX—I want to go back to the business of tactical versus strategic flying. Have you noticed any fall-off in the effectiveness of the strategic flying effort as a result of using 20 per cent of the time tactically?

Mr Patterson—There is a fall-off in the strategic program with all tactical tasks, but the nature of Coastwatch's set-up is such that that is the case. It is an accepted principle within Coastwatch. Coastwatch does not have unlimited resources and the Coastwatch operations sections spend their day, basically, analysing and responding to a continually changing threat analysis and directing resources to the higher level of threat. That is the nature of Coastwatch operations. When you have an antidrug operation, obviously that gains the highest profile and the highest resources. There will always be a back-off in the strategic flying program to handle that sort of high profile threat.

Mr COX—Say a drug operation goes on for five days: is that going to lead to a five-day hole in the strategic surveillance program, which might be enough for that to occur?

Mr Patterson—Not an entire hole, but there will be a diminution of the strategic surveillance operation for that five-day period and for some time afterwards as you recover from that high level of activity during that five-day period. A typical drug operation will probably go for several weeks and end up, in the last 24 to 48 hours, having an aircraft airborne 24 hours a day. It will take in the vicinity of five or six crews and sometimes two or three aircraft to handle that sort of tactical operation.

Mr COX—So it would greatly increase the risk of either a suspected illegal entry vessel or an illegal fishing boat reaching our shores in another location?

Mr Patterson—It would certainly increase the risk. The level of risk increase would be a question I could not answer.

Mr COX—Significant?

Mr Giles—The area where the assets are taken from for the tactical operation is chosen with a high degree of judgment on behalf of Coastwatch. One of the things that they would not do is take assets from an area where their intelligence is showing them that it is a high risk one. They would take them from a low risk area. It is very difficult to answer the question except in terms of general principles. The general principle would be that the tactical operations would diminish strategic surveillance effort but that the area in which that strategic surveillance effort would normally be flown would be seen as lower risk in the overall scheme of things.

Mr COX—Nonetheless, a heightened risk as a result of less surveillance?

Mr Giles—Correct, yes.

Mr COX—In terms of these tactical operations taking up time, do the drug ones take up the longest time? If you said that there were a whole lot of threats, drugs, illegal immigrants, illegal fishing—the things you get diverted from general surveillance to go and do and which take the longest time—would drugs be first?

Mr Patterson—Drugs tend to be for short periods of high intensity. You could say that, in terms of illegal immigrants, we have been on an illegal immigrant tactical operation for almost the last 18 months. It is a varying level of threat. It is very difficult to give a black-and-white answer to something that is evolving on a day-to-day basis.

Mr Ollerton—For instance, we have been involved in following drug boats for periods of three weeks and, depending on Coastwatch intelligence, we may get tasked to look at one which is only a day away from the coast. So obviously it is nowhere near as intensive. Obviously, the longer the period is what stretches the resource.

Mr COX—Say the contract were being changed to give more resources to sustain the general surveillance effort. If the physical limitation were crews and if Coastwatch were effectively paying for more crews to increase your capability, what proportion of availability would there be? For, say, every 10 per cent increase in availability that you would get, what would be the proportion of increase in the cost? If you were getting 10 per cent, wouldn't it be less than 10 per cent?

Mr Patterson—Sure. Can I take that on notice? Crew cost is certainly a significant portion of the overall cost of the operation of Coastwatch. Off the top of my head, it would be in the vicinity of 20 per cent of the cost of operation. By far the greatest cost of operation is the variable maintenance cost of operating the aircraft and the capital cost of the assets involved. So, yes, you will get a disproportionate incremental increase in capability for money spent on more crews.

Mr Giles—It will actually be spent on crews and spares, mainly avionics spares. When a contract is tendered for, it is around a rate of effort and a number of flying hours, so you tend to set up all of your support base for those sorts of things. As the increases occur—the initial one we have talked about so far is the crews—shortly behind that we are going to start running into spares capability—which is: how many spares do we need to hold on the shelf; how many spare bits of avionics equipment do we need just to keep the operation running? It is something that is a bit difficult to give an immediate answer on, but we are very happy to take it on notice and give you some more definitive advice.

Mr COX—I would be grateful if you would do that.

Senator HOGG—Following on from that, what role will UAVs, satellite technology and the like play in reducing your reliance on direct flights in the Dash 8s and so on—not cutting them out but complementing what you are doing and thereby reducing their rate of effort? Is that likely to happen?

Mr Patterson—This is a subject that has exercised our minds over the last couple of years because, at the end of the day, we see ourselves as being in the surveillance business and, currently, fixed-wing aircraft are the technology of choice, but it may not be so in the future. So when we look at those sorts of questions, we are very much looking at outcome as opposed to the technology itself. We certainly see that they are emerging technologies that will certainly assist in the Coastwatch program and that they will increase the efficiency of the Coastwatch program, but we cannot see any emerging technology that is an entire replacement for the current operation.

Senator HOGG—Can you give us some idea of how you see a mix emerging—not necessarily in the short term; it might be in the medium to longer term?

Mr Giles—I will come back to the UAVs and then creep up on it a little. One of the things we can see is that probably the most substantial gains out of the present system are done by incremental changes to the sensors on board. In our submission we talked about inverse synthetic aperture rate, ISAR, which will give us the ability to actually do some rough classification on targets that are a long way away. Behind that, we have advanced electro-optics, which will enable us to have a look at the contacts at a closer range. If we can get an ISAR classification at 50 nautical miles, we can probably do something pretty good with advanced electro-optics at about 30 nautical miles. Systems like that will actually stop the aeroplane from having to close the target. So that distance we do not have to fly in and, consequently, fly out can be readily transferred into a greater search area along the line. It is hours of flying time that we have on the aeroplane that we can use to search somewhere else, which will increase the effectiveness we are getting out of it.

Mr Crowe—I will just give you an example there. I have been doing surveillance down the west coast of Australia. Our brief normally in a Dash 8 is to go out to 50 miles. We have had a contact pretty much on 50 miles. I guess in our heart of hearts we know it may be a merchantman because that is where you would see a merchant vessel, which is of no real interest. If we had profiling radar we could say, 'There is a merchant vessel,' and we do not have to go that 50 miles there and 50 miles back. That is 100 miles; that is 33 minutes. That is a goodly percentage of the mission time. With those sorts of technologies you can get a bigger bang for your buck and, probably, the bigger the bang is proportionate to the money you are going to pay to get those sorts of technologies.

Mr Giles—The thing is that you can do that internally on aeroplane. But when you start looking at external systems, our conclusion is that the law enforcement operation is very much a 'whites of the eyes' operation. Whether you do it whites of the eyes with an advanced EO sensor or you actually fly alongside—sometimes you need to get down low to actually have a look at what you are actually looking at—one of the problems with law enforcement flying is that there is always a contextual situation that you have to take into account: what else is in the area? What is going on? Things like highflying UAVs are terrific queuing systems. You can actually queue an aeroplane in to go and have a look at what is going on. Our view is that, because of the sensors they use—they generally tend to use a ISAR with an EO sensor—they are not really going to present the whole solution to the surveillance problem. They will help but they will not present the whole problem.

As you come down to the lower flying UAVs, there are control problems with them in that they are down there mixing it with all the other aeroplanes around the place, plus the vehicles are smaller, the sensors have become smaller and so their usefulness becomes smaller. I suppose as a blanket statement I would say that there are lots of technologies around but there is no single technology that will do the whole job. The principle we look at is that it is a matter of finding the compatible technologies to get the best overall solution.

Senator HOGG—I accept that, but how do you see the mix changing from what it is now? I understand you are fairly much dependent on your Dash 8s and the other aircraft that you have. Do you see that changing much over time—incorporating UAVs or more sophisticated satellite technology or whatever else might be around? Is that mix going to change in the foreseeable future? Or are you reasonably tied into where you are now?

Mr Patterson—We see the majority of the new technologies providing a queuing system for the fixed-wing aircraft operation. The queuing system is a mix of technologies. The first one is Intel—as good Intel is always the best queuing system—followed by over the horizon, Jindalee or JORN, potentially HF surface wave radar and potentially highflying UAVs such as Global Hawk. That is the world looking 10, 15 or 20 years out—that these new technologies will form the queuing system that better directs the whites-of-the-eyes surveillance. We cannot see that any of the emerging technologies that will cater for the whites-of the eyes type surveillance which is the most important aspect of civil maritime surveillance.

Mr Giles—The answer is yes, there will be technologies that come out. For the life of this contract, they probably will not be sufficiently proven to do a major change. The question will be: would you change with five years to go on the present contract? The answer is probably no. The problem that Coastwatch will have is to determine over the next couple of years where the value is and, with the advancing technologies, to try to set themselves up for the future because, as the technology does become more and more proven, there will be trade-offs around. It could possibly end up with the situation that we have broad area search systems like a Global Hawk, or a satellite system which then queue in a fixed-wing aeroplane to go and have a look at it. All that will give greater efficiency.

Senator HOGG—That will also change the percentage of strategic to the tactical as well.

Mr Giles—That is correct. What you would end up doing is virtually all tactical because the broad area of strategic surveillance—where you can actually get coverage from another vehicle or system—will do that for you. But I think one of the conclusions—which is not correct—that can be very easily formed is that a highflying or a satellite or a land based strategic system will provide the complete coverage that is required. What it will do is give you an idea of where to go and fly and have a look at things; it is not going to do the identification in a lot of the time.

Mr Patterson—Probably a practical example is that you have 300 Indonesian type 2s or type 3s sitting out there. Most of them are there legitimately. The one that, say, provides the quarantine threat is the one with the chook or a dog on board. There is no emerging technology that we can see bar whites-of-the-eyes surveillance that is going to determine that threat from a group of 300.

CHAIRMAN—Yes, but by the same token there is no technology, is there, that would tell the difference between a type 2 and a pleasure yacht which might be full of drugs?

Mr Patterson—Exactly.

CHAIRMAN—There is no technology that is going to tell you the difference, is there?

Mr Patterson—No.

CHAIRMAN—We saw that when we flew the Dash 8.

Mr Crowe—Another example is a type 3. They were being used for people smuggling. They have a canvas awning at the back. You have got to look sideways in under the canvas awning. If there are seven people, he is a fisherman; if there are 70, he is probably a people smuggler.

CHAIRMAN—We are going to have to move fairly quickly. There are a couple of things I need to ask before we close this up. You said in your submission:

Customs Officer training and experience is of limited relevance to the operational control of the aviation assets employed by Coastwatch. Hence these officers have been provided with a short internal course on aircraft resource management.

What are you trying to tell us? Are you telling us that the Customs officers are not properly trained?

Mr Patterson—It was not meant as a criticism; it was meant in the light of increasing the efficiencies of Coastwatch. Whatever experienced stock you bring into a position will always be augmented by better training. We see that there is an opportunity in increasing the effectiveness and efficiency of the Coastwatch operation by providing an increased level of training to the Customs officers who are involved in the operations.

CHAIRMAN—I cannot go into detail, but we had a confidential submission that indicated—I think I can go this far—there might be some real problems with Customs officers in terms of their air experience. When we travelled around the north, everywhere we went we asked the people what sort of experience they had. To a man, they all were either ex-Air Force, or ex-you or somebody else, with heaps of flying hours, observer experience and operational experience of operating radar systems. I do not understand what the point is.

Mr Giles—The point we are trying to make is that the system works and works well. But, like any system, you can finetune it. One of the mechanisms for finetuning it would be to give the aircraft controllers—the people who basically control us—more skills in things like search planning. There are courses available—

CHAIRMAN—I am sorry, my ears are all stuffed up. I cannot hear you.

Mr Giles—I will go back and start again. What we are saying is that the system works and works well. But, like any system, it can benefit through finetuning. One of the mechanisms for finetuning is to increase the level of training to better equip the people to give us more and more sophisticated tasking. There are courses around to do this. The search and rescue organisation, AusSAR, carry out search planning courses—just across the road from Customs. As we say, it is not a criticism; it is a finetuning suggestion.

CHAIRMAN—My last question is: do you know of any overseas countries that outsource their coastal surveillance operations?

Mr Giles—Yes. Canada and England.

CHAIRMAN—No-one else?

Mr Patterson—Not that I have a full knowledge of. Those are the ones we are aware of, but we have had many inquiries from various other countries which are seeking to do the same thing, and Coastwatch has hosted many different countries from time to time which are seeking to do the same thing. We had some people from Norway out last week, the Malaysians were out here earlier on in the year, and there have been people from Thailand and the Philippines—all

looking at the way Australia conducts its current operation. The US Coast Guard was out here eight or nine months ago and was looking at the way we do business here. They were particularly interested in the way that we use commercial aircraft in order to reduce the costs. The current Coast Guard Deepwater Project, which seeks to replace many of its assets, is very much focused on using commercial assets to bring down the cost of conducting operations.

CHAIRMAN—Like the Bay craft versus the Fremantle, for instance?

Mr Patterson—Correct.

CHAIRMAN—That is a very dramatic example. I have one other thing. The CPSU was highly critical of contracts with your aircrew. Do you have any comment to make about that? Does that relate to the high turnover? Are you not paying well enough?

Mr Patterson—I am not surprised by the CPSU's comment, given their position on Australian workplace agreements. I would reject their comments on the basis that we provide significant employment opportunities in areas where there are traditionally few. We provide significant training opportunities to people in those areas where there are traditionally few. We provide a career advancement scheme right from the visual observer through to electronics right up to base management level. We are a Defence Force/Reserve friendly employer. We encourage the employment of indigenous Australians. Our terms and conditions are in excess of the general aviation award, which is the general industry benchmark. I suppose the point is—and I stand on the record—that when the AWA was offered we ended up with a 94 per cent take-up of the AWA in the first round, and I think that speaks for itself.

Mr LINDSAY—Your staff have told me that, while they normally work for Surveillance Australia, their pay slips come from National Jet Systems. But people in National Jet do not get the same conditions as those in Surveillance Australia. Do you have a comment on that? Do you detect that your staff are unhappy about that? Do they need to be concerned?

Mr Patterson—Surveillance Australia is a wholly owned subsidiary of National Jet Systems but is, in its own right, a separate company. It has its own management structure, its own air operator's certificate, its own culture and its own way of doing business. We are very much a surveillance operation, oriented towards the surveillance product, and not an airline operation. Yes, there are differences—necessarily so.

Mr LINDSAY—If anybody in your operation sees a good idea on how the service might be improved—and that might be something quite small or it might be some new capital expenditure or some new technology that is available—what is the mechanism that you use, if any, to feed that into the system to try to get it adopted? Is the system responsive to that?

Mr Giles—Is that all the way up to Coastwatch?

Mr LINDSAY—Yes.

Mr Patterson—At the end of the day, our people are out there conducting the surveillance on a day-to-day basis.

Mr LINDSAY—They are on the ground.

Mr Patterson—Yes, they are on the ground. That is where the majority of good ideas generate from. We certainly encourage people to push them up through the system. At the same time, there are also emerging technologies which need to be considered that the people on the ground may not be aware of. So we certainly take a very keen interest in those emerging technologies. At the end of the day, we have a contract with Coastwatch, and that is fairly specific. We certainly push ideas and new technology—

Mr LINDSAY—Are Coastwatch responsive to that or are they bureaucratic? Would you rather not answer that?

Mr Patterson—They very much listen. We have a good interchange with Coastwatch on emerging technologies. There is certainly no silver bullet out there that is going to be the answer.

Mr LINDSAY—Is my memory correct that this radar that you do not have at the moment is going to be fitted to the new aircraft?

Mr Patterson—No. Basically, it is an incremental increase in the existing radar. It is basically another board. It gets slotted into the box and there is a new load of software and you have the capability. A demonstration set has been provided gratis by the manufacturer for Coastwatch to trial for a period of time.

Mr LINDSAY—Is that a situation where you think that the technology is very good but Coastwatch will not pay to have it installed?

Mr Giles—No. When we negotiated the contract with Raytheon for the new radar, we pushed them for a demonstration unit because we believe it is that good. We also appreciate that Coastwatch have got a budget to work within. We can make suggestions but, if they have not got the money to pay for them, well, that is bad luck. We believe so strongly in the ISAR that we twisted the arm of the manufacturer to get this in. I guess our hope is that, once Coastwatch have it for 12 months, they will never get rid of it.

Mr LINDSAY—I have one more question. The RAAF people who run the Orions tell me that they do not particularly want to do the job that they do. Are you aware of that?

Mr Giles—Again, if I can speak from my background, the question is one of training value. Civil surveillance operations for a 20-year-old in a P3 is not the most exciting job around. What the Air Force tend to do is to look at it with the degree of training value. The 250 hours per annum deal that was done was, in those days, the Air Force's assessment of the amount of training value they actually got out of civil operations.

Mr LINDSAY—So your evidence is that it would be a win-win situation for everybody if your organisation took up that 250 hours and the Air Force dropped out of what they currently do?

Mr Patterson—Yes. You can look at it from a 250 hour basis or the costs involved in running the P3 for the 250 hours.

Mr LINDSAY—You would rather the latter?

Mr Patterson—Absolutely, yes.

Mr Crowe—The point is that the Dash 8 is a much better coastal surveillance aircraft anyway. The Dash 8 is not only cost effective but, in absolute terms, a better coastal surveillance aircraft.

Mr LINDSAY—But you do not need a magnetic anomaly detector or sonar buoys or whatever?

Mr Crowe—They may help in some situations, but our radar, for example, is much better than theirs.

Mr LINDSAY—Yours is streets ahead.

Mr Patterson—I will give you an example. If you take the argument down to a cost per square nautical mile covered, the all-up cost for the current Dash 8 operation is about 21c per square nautical mile; for the P3 it is about $3.30 per square nautical mile. It is a relevant point too when we are talking about incremental increases. If you fitted, say, ISAR to the radar and maybe if you put an improved EO device on the aircraft, you would have a small incremental annual cost increase, but you would have a huge increase in area coverage and the cost per square nautical mile would be reduced below that 21c level. That is the incremental change argument, which is very powerful.

Senator HOGG—I want to ask a question about your costings of the 21c per nautical mile as opposed to $3.30. If you were to extend the Dash 8 to the same area as the Orion, would the cost be a little bit higher and if so, by how much?

Mr Giles—No, not really. It is done on a surveillance ratio, and basically it is set out for an offshore patrol platform like a Dash 8. We spend about 20 per cent in transit and 80 per cent in the search area. So it does not matter where you go, that ratio will always stay about the same. The other equation, which is a bit pessimistic for us and optimistic for the Air Force, is that we work on real operating costs of the P3 of $30,000 an hour whereas I think the reported ones were closer to $40,000 an hour. That is the real cost of the aircraft. We know it is one of those figures which tends to change with the speaker, but it is somewhere between $30,000 and $40,000.

Senator HOGG—That is why I asked the question. I just want to make sure that, at the end the day, we are comparing apples with apples.

Mr Giles—It is the real cost of flying an aeroplane that takes everything into account.

Mr COX—Are you looking at any aircraft to replace the Islanders?

Mr Patterson—Absolutely. That is a difficult question because there is no obvious replacement of a twin engine type aircraft. The Islander aircraft is the only civil aircraft of that size and type that is currently in production in the world. What is the most appropriate aircraft that you replace it with?

Mr Giles—There are not many twin engine options, especially if you are looking for high wing. The argument—and, again, I think it is something that Coastwatch will probably have to come to grips with—is whether the reliability of a single engine, turbine powered aeroplane will be enough to satisfy their OH&S policies. The only reason we have ended up with twin engine aeroplanes is that in the past those statistics were not high enough—so people wanted the comfort of twin engine aircraft in remote areas. Now turbines have proved to be very reliable, so maybe it is time to revisit the argument.

CHAIRMAN—Are you happy with the contract?

Mr Patterson—Absolutely.

CHAIRMAN—Thank you very much for coming here. We have had a good session and we thank you for, we hope, frank and honest answers. We will send you a copy of the report when we table it.

[12.02 p.m.]

HIBBLE, Mr Barry Raymond, Consultant, Consultant, Telstra Applied Technologies

MORRISON, Mr Malcolm Les, National General Manager, Telstra Applied Technologies

CHAIRMAN—Thank you for your appearance, gentlemen. We have read your submission and we have overflown your installation on Bathurst Island. Would you like to make a brief opening statement?

Mr Morrison—Thank you for giving us the opportunity to appear today, to answer any questions and to elaborate, where we can, in this environment on what has happened with the installation. For some considerable time we have been in the business of wide area surveillance or different surveillance technologies. The technology that we have referred to in our submission is seen as an enabling technology—that is, it fits into a particular scenario of floodlighting areas where there are activities that Coastwatch, as well as other government departments, are interested in—and provides perhaps another level of granularity in the total intelligence picture that needs to be put together.

From our perspective, this technology was originally developed in the defence, science and technology area. Since 1996 we have been commercialising this with a view to offering it to a variety of government departments, and Coastwatch forms one of the significant planks. During our trials that we have been conducting since July this year, we have not only been providing live datafeed into the military through Headquarters NORCOM but also that has been reticulated to the new National Surveillance Centre which Coastwatch operates today.

The type of information that has been gathered has been done on the basis of: 'Let's see what this radar can actually see out in the area that it is floodlighting. Let's see how it fits into the picture of providing a better intelligence picture in terms of being about to correlate with other sensors that are available to Coastwatch, Customs, Defence and other agencies where correlation occurs. Let's see if this radar doesn't also highlight other targets, across a 24-hour period, that can be seen in these areas that the radars could be deployed into.' The intent of this radar was that it would form the basis of a network of radars around selected choke points—selected, obviously, by the customer community in Australia. It was not so much the intention of this technology to sell assets to a customer; the intent was to in fact collect data and sell that data onwards to customers.

CHAIRMAN—I understand you are about to close it down, dismantle it and take it home.

Mr Morrison—No, there are two parts to this in terms of closing it down and dismantling it. The current radar up there is colloquially known as SECAR-O. It was a preproduction model. We have had it deployed up there to go through the acceptance trials from our prime contractor, Daronmont, to us and, at the same time, to demonstrate to the user community what it can do. The user community have participated in that. The sale of the ongoing technology and the build of these radars is currently subject to a privately financed initiative—primarily a Department of Defence initiative in new acquisition type technologies. That submission goes in next week, which is consistent with what we have said. We have now agreed to extend its time up there to fit in some additional trialling activity that is required ostensibly by the Department of Defence.

My understanding is that there is significant input from Coastwatch in terms of confirmation of types of targets and the circumstances under which they can be seen with that.

We have, through our contractor Daronmont, said that the radar could remain in situation and continue to operate. Obviously there is a cost associated with that. We have given an opportunity to various users to contribute towards those costs. At this stage in the current budgetary cycle they have not been able to find the necessary funds to underpin the ongoing deployment of this until the PFI has been evaluated. In those circumstances, I think we have to take a prudent commercial decision and hope that we have now presented enough data and used it. I might say that we have had testimonials from the users—Headquarters Northern Command, in particular. I cannot speak on their behalf but, in the testimonials to us, they have said that they have had the best intelligence and surface picture from the advent and the enabling technology that came from this radar. That, of course, is being transmitted through to the various users.

CHAIRMAN—But you are dismantling it and bringing it home?

Mr Morrison—What we are going to do is take the equipment of Bathurst Island. In its current design, in its containers, you cannot just switch it off and leave it unpowered if nobody is using it, purely because of the environment of humidity, et cetera at this time of the year. It is deployed to withstand cyclones, et cetera at the moment, but in the evolutionary cycle we will turn it off unless some money is found to support the ongoing operation.

CHAIRMAN—Are you taking the antennas down, too?

Mr Morrison—That is a decision I have not taken yet.

CHAIRMAN—We did a tour around the Torres Strait, and it was during that tour that we saw the installation. We have also been to Longreach and seen the transmitters and receivers and all that stuff. So we have some rough idea of what you are on about. If Defence, Customs, Coastwatch or any of your potential clients wanted to take advantage of that technology in a significant sense, I understand there would be great difficulty through the Torres Straits in deploying the equipment because of native title.

Mr Morrison—In our first endeavours to look at a site to trial this and provide meaningful data, we certainly looked at deployment of Torres Strait for its obvious choke point activity where you formed a giant scoop because of the beam of the radar. During that period of time we held discussions with Torres Strait Islander people and, until the last period of time, we thought we had reached agreement. We had actually had some informal assistance from Customs representatives who had negotiated and also from Defence, who had tried to negotiate the same sorts of access up there without invoking anything else. We spoke to the Queensland state government and, at the eleventh hour, there were some entirely unreasonable demands made upon us in a commercial sense to wear an area of just a few hundred square metres for which they wanted an annual rent in excess of six figures. So it was not necessarily the wish of the elders but we certainly had other people who appeared at the meetings and put these demands on. So for the purposes of demonstration we did not pursue that, because we had a time line issue in deploying the radar to demonstrate it to other areas.

Mr LINDSAY—Gentlemen, the way the radar is deployed at Bathurst Island, it looks in a sort of a fan?

Mr Morrison—Correct.

Mr LINDSAY—It is not a 360-degree radar; is that right?

Mr Morrison—No, by virtue of the basis of surface wave technology it needs to be very close to the coastal environment so, by definition, it could never be anything more than 180 degrees. In today's technology, getting distance and what have you, the beam is somewhere between 90 degrees and 120 degrees, depending upon what configuration you put it in. That gives you the distance you require in the surface wave operation. Remember that surface wave not only looks at the surface picture; it looks at an air picture as well. So the fan is an arc of about 120 degrees out to the distance at which it can detect targets various.

Mr LINDSAY—I am thinking of Ashmore Reef. Is there enough land for it to work on Ashmore Reef? What follows that then of course is the 360-degree question: can you electronically steer the picture?

Mr Morrison—That is part of the evolution of the technology that exists with surface wave radar. Right now, we are using the split sights, and you saw the receive and commander control site on Bathurst Island at Cape Helvetius—the transmitter is on the mainland at the moment just purely for convenience. That is called a bistatic radar. In the Ashmore Reef area as it exists at the moment, as part of the ongoing technology and some of the ongoing research we are continuing to do with DSTO there are two parts: I will call it a monostatic, a radar where the transmit and receive are in one geographical area and therefore there is also now the opportunity to get the greater 360 degrees. Whilst there has been some experimentation done with that, I would not put my hand on my heart and say that we could get the ranges—that the technology to do 360 degrees exists. It is making sure you get the range that makes this a valuable floodlight type of sensor that adds to your overall picture. There are some other deployment scenarios for an area such as Ashmore Reef: it is said that we could perhaps have one that is on the Australian mainland and there are a couple of other islands coming more to the west of where it is and that if you were to have that you would have, again from this particular sensor's capability, an area to floodlight those areas of interest.

Mr LINDSAY—With this technology can you in fact detect these small Indonesian wooden boats?

Mr Morrison—To answer your question I do not want to go down to the degree we can go to or I would have to ask that we go in camera, because we are currently doing that at the moment. The answer is that we have just recently clearly demonstrated with some wooden boats that have been coming into Darwin in the last few weeks that we have been able to track them for a significant distance out. Part of the reason for doing the trials is that they are broadly categorised into types 1, 2 and 3 vessels—which I am sure you are aware of. What we are actually doing now is determining the environmental conditions—that is, thunderstorms, sea state, and all of those other bits and pieces that exist out there in the distance. But we can detect them provided they are not totally wood.

Mr LINDSAY—These stations are not really portable, are they?

Mr Morrison—They are relocatable. All of these stations are designed so that they can be packed up into a C130—to use something that we are all familiar with. They have been specifically designed to be packed up and relocated into a C130 aircraft, and that includes the receive and the transmit antenna—if you happen to have seen the transmitter, which is a large antenna. We have already tested much smaller antennae which have the same performance as the large one. That was used as a matter of convenience.

Mr LINDSAY—Is the system frequency agile? Does it change frequency depending on the time of day?

Mr Morrison—There is a necessity to change frequency, and, yes, the system is frequency agile. It does not hop in the same way that you may have seen other sensors do, because that is not the requirement. Our main requirement for changing frequency can be because of type of target and it can also be because of interference—particularly up in those northern latitudes where there is a bit of interference.

Mr LINDSAY—How many of these stations would be necessary to cover the north of Australia?

Mr Morrison—This is based on discussions that we have had with potential users. We would estimate, at this point in time, that five or six of these stations—looking out over the variety of choke points, approaches, the concentration area where you would get the best value from this type of sensor integrating with the others—would be ideal. Perhaps you could do it with four, with one that was always on stand-by to be flown into a particular area.

Mr LINDSAY—Have you got any evidence on the cost effectiveness of this rather than other technology?

Mr Morrison—We have done some calculation on price, and I might let Barry give you some more on that. The cost effectiveness of this type of technology is no different from some of the other sensors, by virtue of the fact that it is available 24 hours a day and covers a significant area. Assuming that it is doing its job in the overall intelligence gather and sensor, what is important about this, in our opinion, is that it adds and builds to the picture and then lets the user make a better determination on how to use his particular other, if you like, pinpoint or spotlight type sensors. I would use the example of an aircraft. The strategic versus tactical discussion, which is an ongoing one, is that, if this type of sensor, in certain areas, relieved them of having to do some of the types of strategic flying they are doing, they may be able to use other assets to go out further and look at a larger strategic position and have a better use of it. Barry, do you have anything to add?

Mr Hibble—I do not want to say anything more than what is already in the paper, for commercial reasons, but it appears to us, certainly in pure area of continuous surveillance, that this is significantly less cost. It will never replace eyeballing, as has been said in previous submissions, but it will enable someone to go and look for a specific problem. I think that when we start talking about satellites and unmanned aircraft flying at 3,000 feet or whatever it is, you are talking about significant investments, and, as the previous company explained, potentially

with not the same significant improvement in performance. A satellite is an extremely expensive piece of kit, and so is an unmanned aircraft flying around. I do not say that a surface wave radar is cheap, but in comparison with the air flights they are cost effective.

Senator GIBSON—You quote a figure in your submission of so many dollars per day, and yet in an earlier submission to the PM's task force there was a different number.

Mr Hibble—Yes. And the number will continuously change if we get different people to do it. Regrettably, we had two different people looking at the way in which you would operate a surface wave radar. In the parliamentary accounts submission, I believe the number is—

Senator GIBSON—It is a lower figure. It is a three to one ratio.

Mr Hibble—But it is simply a matter of the way in which the radar is being operated and where it is located. As I say, the initial approach was a very straightforward, very fundamental radar. The radar has been developed quite significantly since that time.

Senator GIBSON—Perhaps you should consider giving us more details about the assumptions behind those calculations.

Mr Hibble—As we said in the submission, we would be happy to do that, but in a closed session, if you would not mind. It is commercially sensitive.

Mr Morrison—We are happy to write to the committee under normal commercial in confidence, purely because those figures are sensitive, but that order of magnitude of cost of it operating 24 hours a day, 365 days a year, is what underpins the cost effectiveness of this type of floodlight sensor.

CHAIRMAN—The question that comes to my mind is: why it is so expensive?

Mr Hibble—Expensive? Possibly there is a problem with the submission. I would have thought the first question would be: why are they so cheap compared with an aircraft. There are two things about the aircraft—

CHAIRMAN—Hang on. It is just a transmitter, a receiver and a bit of wire.

Mr Hibble—The transmitter, the receiver and the bit of wire are probably as good as it gets in the whole world. DSTO has done a pretty good job on the technology, which we have developed. The pieces of equipment are off-the-shelf pieces of equipment. Compared with radar—the type of which you mentioned is in Longreach when you were talking about close to $1 billion—we are not even talking about what the interest rate would be for a year for one of these. I am not sure how you are doing your comparison.

CHAIRMAN—You said in your submission that to operate a single station 24 hours a day would cost $3,000 a day.

Mr Hibble—Yes. I am not sure what the figures would be at Laverton, for example, but I am sure it would be considerably more than $3,000 a day to operate. The operation of these pieces of equipment 24 hours a day for safety reasons could take six men. If it were developed to the next stage where it was remotely operative—as it is with the other sensor that you mentioned earlier on—you could get it down to three men a day. It would depend on the operational scenarios being used in the location—the more remote it becomes the more difficult it is initially to put in the remote equipment, the telephone lines and the infrastructure.

CHAIRMAN—You do not need to sit at the receiver site to operate the equipment.

Mr Hibble—No, we do not believe you do. The next stage of development would have to be remote operation of the equipment. At this stage, that has not been done.

Mr Morrison—Let me clarify one point. This is on the basis that the customer is not going to own the asset. There are a couple of things here. Whilst we use one radar—obviously when you use a number of radars the price does not go up—just by adding on $3,000 a day, there is economy of scale. This is on the basis that under the current acquisition, the government—being the main user of this—perhaps does not wish to own the asset, which happens to be something that the government itself is saying that it does not want to do. Secondly, factored into that are all of the manpower costs associated with providing data which comes into a form which is immediately useable by the user community. So they already do not have those on-costs.

They do not have any of the costs of developing or maintaining any of the infrastructure in the remote area. The information is basically provided to them in near real time, if not real time. How they actually use that with their other bases is something to be calculated. It floodlights the area over a 24-hour period, 365 days a year. I do not wish to pick on it for any other reason but, if you take into account an aircraft cost, the only time that it is looking at a target is the time that it is over the target within the operating range of its sensor on board. Once it goes home, it is not looking in that area, so you cannot really make that comparison. If you want to do that sum, this is on a broad comparison of how much it costs per square kilometre, or you can take how much it costs to operate the total radar.

CHAIRMAN—I hope you are not maintaining that this is a stand-alone asset that does more than simply floodlight and say you think you know what is there.

Mr Morrison—Of course. It does much more than that.

CHAIRMAN—You cannot look inside the boat.

Mr Morrison—No, and nor can anybody else without an eyeball, to be quite honest.

CHAIRMAN—That is the point I am making

Mr Morrison—We absolutely agree that you cannot look inside the boat, but there is a cost of going out and perhaps finding the boat by flying enormous hours and then looking inside the boat. One of the things that we contend is that, in the area of floodlight and interest, you would argue that we would know that most of those targets were out there through correlation of other

sensors. It would be my understanding that you would accept that we would know what 90 per cent of them were through correlation.

If I can use some basic figures to do that, in the trial that we conducted—which is independently assessed, so they are not my figures—during the month of August, in the area where you overflew, one particular set of data identified in excess of 700 targets in that area in the surface mode. Of that, in excess of 300 were correlated by other sensors available to other people and other reporting mechanisms. It was recognised that the rest of the targets were bona fide targets, and there were in excess of 300 that nobody had the wherewithal to go out and work out if they were targets of interest. We make an assumption that 90 per cent or more of those targets are in bona fide business. We do know that a number of them are not; therefore the effectiveness is in at least saying to the user, 'Here is a picture of your particular area and here is what has been correlated by other things. You may have other intelligence that you may want to look at a correlated target, and/or you may wish to go out and do something about these other targets. It is an option that comes to the user, in my opinion.

CHAIRMAN—It did strike me during that trip—and also thinking about what JORN will ultimately produce—that if we deployed enough assets we could get to a situation where we had literally too much data. As you travel through the Torres Strait, there is all kinds of legitimate activity every day. There are fishing boats, transport vessels, pleasure craft—all kinds of stuff. Somewhere in there, there may be something that is illegal. Knowing everything that is there may make it very difficult to find the one vessel that should not be there.

Mr Morrison—We absolutely agree with you, Mr Chairman. In fact, one of the real challenges—and that is why there is no one sensor that answers this question—is knowing everything that is out there and being able to discard those things that you believe to be bona fide. Some of those do show up in the way that they operate: they sail, they are known, and there is a whole raft of other background information which the user has available to him. The radar certainly sees some characteristics of these boats and comes up with a high degree of probability as to the type of target it is. That is one part of the information. Secondly, whilst it has not been tested in a court of law yet, there is some belief that these tracks would operate under the laws of pursuit of a particular target, where you do not have to maintain contact with the target all of the time. This sensor—and other sensors as well—has shown that, in some cases, there have been some interesting meetings of bona fide targets out in that area. When that information is provided to the user community, the user community, who have other bits and pieces of information, take a decision to use those assets that they have—and I believe that even today it is fairly meagre; you have seen the size of the area—and take a tactical decision about whether to go out and do something with that information that has led them to say, 'There is something out there that I might want to have a look at.'

Senator HOGG—There is just one issue I wanted to raise, and that is the issue we have heard about black flights. How does the radar perform in the tension of the so-called black flights, given that invariably they are going to be smaller aircraft that operate those flights—and the evidence that there are very few of those that operate?

Mr Morrison—I have been advised to use the term 'unauthorised air movement' because 'black flight' has a slightly different connotation. But you are talking about, particularly, light aircraft—singles, twins, that sort of thing—that may be low level and potentially driving

towards the Australian mainland. They could then do something on the Australian mainland and disappear again. How the user interprets them and what he does with that information is something that we cannot comment upon.

We have been testing with a variety of aircraft from Twin Otters through to Twin Cessnas. If you have been up north, you would know that Air North flies their twins up to Timor. We are quite capable of tracking those aircraft in a variety of speeds and very close to the surface. There are some other very good sensors around that do that as well, but we certainly have been detecting them and, where there have been other sensors in the area, they have been correlated. So it does detect a number of those. As to whether they are unauthorised air movements that have criminal intent, I do not have those statistics available to me. But, yes, it does detect those types of movements, and they are fed in real time into the displays which are then reticulated to the various agencies.

Mr Hibble—Mr Chairman, I would like to come back to a point that was made before—that is, the point of too much information. It is a conundrum that we have thought about for quite some time. Simply put, we do not believe there is enough information right now to catch, for want of a better term, the bad guys out there—be they many or few. As we understand it, statistically, if one quarantine incident were to break through, we are talking multihundreds of millions of dollars of potential damage to Australian agriculture. The Prime Minister's task force had a look at some of the areas of interest. When we put together our numbers, we thought about what the Prime Minister's task force was looking at. The issues the Prime Minister's task force was looking at included the more efficient use of its assets and how to get the best bang for its buck while also looking at the future way in which it might improve on that. On the few areas that we knew about—the use of satellites and the use of unmanned aircraft—it appeared to us that, if the Australian community were to continue along the path of buying satellite time, buying unmanned aircraft, buying AWACs and putting in more over-the-horizon radars, you would be spending so much money on coastal surveillance and gleaning information that the economy would grind to a halt in a very short space of time. What we have offered up is an Australian technology. Sure, they exist in other parts of the world, but we believe we have a good one. We believe it is economical. But we have said no more than that it will assist in cueing the assets that already exist, and we do not believe it drives the economy out of whack by buying them. Indeed, trialling one of these radars for 12 months to absolutely prove all of the questions that we have been asked by various sources would cost significantly less than one of the tenders that you might ask for for AWACs. That is the sort of economy of scale we are talking about.

CHAIRMAN—Thank you very much for your submission and for coming today. As I said at the opening of today's proceedings, we are not technically competent to comment, nor will we be making recommendations about technology in our report—I can assure you of that. That is not what we are about. But it is helpful to us to understand the kind of technology that is available and the kind of information that Coastwatch might have available under certain budget circumstances. Thank you very much and good luck with your radar.

Mr Morrison—We are going to leave with you a couple of videos. They are not a hard sell; they actually describe the technology, the way that it applies and the cost-effective use of that.

CHAIRMAN—Thank you very much. If we have any further questions we will put them to you in writing and you can respond confidentially if you like.

[12.35 p.m.]

JOFFE, Mr Morris, Chief Executive Officer, Aimbridge Pty Ltd

KRONGOLD, Mr Lionel Myer, Executive Chairman, Krongold Group of Companies

RANICAR, Dr Jeremy Hugo, Director, Oceanic Solutions Pty Ltd

CHAIRMAN—Thank you for your submission. Do you have an opening statement to make to tell us about your technologies?

Mr Joffe—Thank you, Mr Chairman, for the invitation to give evidence to this committee and to make this brief opening statement. Our original submission suggested the possibility of privatising the services of Coastwatch and noted that our group had secured the right to use the products and systems of Elta Electronics Industries in giving effect to our proposal. In particular, we drew attention to Elta's advanced coastal surveillance radar. In a second submission we provided more details of Elta's synthetic aperture radar capabilities.

We wish to elaborate on our privatisation proposal. It is privatisation of the system and not the parties within the system. The methodology to be used by us is best described as the 'manager of managers system'. We will be the manager of each of the managers of modalities within the overall system. It is a system that has been used effectively in other fields of activity in which we have been involved, such as corporate finance and the IT industry.

A major advantage of the manager of managers system is that it ensures that there is no conflict of interest between the parties managing the system and those doing the actual work, which could be a shortcoming in the existing system. It provides both control and flexibility within the same system. Accordingly, agencies such as Defence, Surveillance Australia, Australian Search and Rescue, Australian Quarantine and Inspection Service and Australian Federal Police would still provide assets and services as required but, by using our system of management, which would be supported by a technology system proprietary to us, we would manage the overall Coastwatch function in an efficient and effective manner.

Business will be done in a transparent manner which will ensure, for example, that the providers of aircraft and helicopter services are the most efficient available in operations, technologies and cost. We will also have the resources of Elta, and through it its parent company, its associated companies and its international connections, on a non-exclusive basis, to ensure that we are fully attuned to what is available to make Coastwatch that much more effective. As an example, we believe that the Dash 8 radar performance can be improved by installing the Elta 2022A radar to allow the aircraft to operate at heights that enable savings in fuel in the order of 10 to 20 per cent.

Maintenance costs and availability of equipment are also very important factors that should be assessed. The RAAF has recently upgraded the radars on the P3C Orion maritime patrol aircraft with the Elta EL/L 2022A model. The radar is manufactured in South Australia under licence by British Aerospace Systems Australia. Given that, in addition to Australian

manufacture, spare parts, training, test equipment and software modification capability are also available locally, it would make sense to equip the Dash 8s with this radar.

The EL/L 2022A provides state-of-the-art capabilities to the RAAF including synthetic aperture radar, inverse synthetic aperture radar, radar signature, Doppler beam sharpening and constant synthetic aperture radar. With these features the radar provides automatic target recognition and thereby enables the operators to concentrate on the most important targets. Currently, the operation of Coastwatch aircraft is based on two major sensors, namely radar and infrared. We understand that the radar may not automatically cue the IR camera. This could result in an inefficient, time consuming operation leading to extended surveillance times. This equates to higher costs and/or missed detection and identification opportunities. Search time may be further reduced by adding a zoom capability to the electro-optical cameras. We understand that the civilian aircraft currently subcontracted to Coastwatch do not have electronic support measure equipment. In particular, operators of the aircraft cannot intercept or track any radio transmissions made by suspect ships and aircraft. Communication intercepts can be used to detect and localise emitting platforms at ranges of up to 400 kilometres, if the receiver is at sufficient altitude, thereby minimising the search area and maximising the efficiency of the response to incursions. In addition, communications intelligence allows recognition of the language spoken and may significantly add to the effectiveness of the search. British Aerospace Systems Australia and Elta are providing the RAAF with ESM systems that cover the communications band. We believe that Coastwatch aircraft should have this technology and that, as with airborne radar, they should take advantage of the benefits of commonality in training systems and through life support afforded by using the same systems as the RAAF.

Another important issue is that Coastwatch resources are not connected via satellite communication and data links to RAN and RAAF platforms. Without data fusion and effective control of surveillance, the situation could arise where many platforms are searching on a random basis. With a more integrated function, such as could be provided by us, each of the available assets could accept cueing information from each other and concentrate on dedicated targets.

In summary, our group of companies, which are totally Australian owned, would consider making available to Coastwatch a management system with full technological back-up which would ensure Coastwatch's effectiveness by the proper management and assessment of existing, new and emerging technologies. This would ensure a coastal surveillance system that operated efficiently in peacetime and during conflicts and war. We are more than willing to answer your questions to the best of our ability now or else to take them on notice.

CHAIRMAN—Thank you for that. I was a bit surprised by one of the things you said. You said you understood that the Dash 8 did not have automatic cueing from the microwave radar to the floor. I certainly saw it operating. It was operating automatically when I was watching it.

Mr Joffe—Jeremy Ranicar will address that for you.

Dr Ranicar—I had that discussion this morning with the representative of Surveillance Australia. As a result of that, I am inclined to agree with you. It is not a fully automatic process, in that I understand that the operator still has to press a button, but it is pretty good.

Senator HOGG—It was pretty automatic.

CHAIRMAN—I would suggest we are getting really pedantic, gentlemen. Which countries use your coastal surveillance radar?

Dr Ranicar—I will take that on notice. The integrated coastal surveillance radar, being the one that is on the ground; it is a ground station—is that the one that you mean? Okay, I am only aware that Israel uses that at the moment. The airborne inverse synthetic aperture radar is used by a number of countries including our own, Australia.

CHAIRMAN—But not the coastal surveillance radar? It has not been used yet?

Dr Ranicar—Australia does not use the integrated coastal surveillance radar.

CHAIRMAN—I know we don't, but does anyone?

Dr Ranicar—I said Israel is the only country that I am aware of, but I would like to take that on notice.

Mr Joffe—At this point we should point out that Chaim Shachar from Elta would like to have been here today but because of the situation that is currently occurring in Israel this has not been possible.

Mr LINDSAY—We should talk about Townsville.

Mr Joffe—I would be very happy to meet you in Townsville to talk about that.

Mr LINDSAY—How long has your company or group been operating in Australia?

Mr Joffe—At least 40-plus years.

Mr LINDSAY—Where are you based?

Mr Joffe—Here in Melbourne.

Mr LINDSAY—I asked Telstra about being able to detect wooden vessels. What is the capability of your radars? Are you able to say that?

Dr Ranicar—No.

Mr Joffe—This would be answered easily by Elta's director but, as I said earlier, Mr Shachar could not be here today. We will certainly take that on notice and we will be able to respond in writing to you.

Mr LINDSAY—Have you had discussions with Coastwatch in relation to what you are able to offer Coastwatch?

Dr Ranicar—Yes, I have had a meeting with Coastwatch. They referred me to Surveillance Australia to discuss the technologies, and we are doing that. I have also made tentative arrangements with Coastwatch to give them a briefing on the performance of the radars and the communications intelligence equipments and so on, and the electro-optical equipments, possibly in November. We had hoped that the technical expert would be with us today and we would go to Canberra to do it tomorrow. This was not possible, but at the working level I have made tentative arrangements for a briefing in November.

Mr LINDSAY—You may choose not to answer this, and I respect you if you do: have you found Coastwatch or Surveillance Australia excessively bureaucratic in their approach?

Dr Ranicar—Not at all. I should perhaps qualify it: I had 23 years as a public servant in DSTO myself, so I guess it is exactly what I expect. I found both organisations so far to be very helpful.

Senator HOGG—That does not answer the question!

Mr LINDSAY—Are they open minded? Are they forward looking?

Dr Ranicar—Yes. Again, I understand that Coastwatch has formed a small group to look at emerging technologies. I have spoken to them, and they referred me to Surveillance Australia. Again, I found them receptive to the idea. I agree with the evidence given this morning about the need for perhaps incremental improvement in these technologies.

Mr LINDSAY—As an Australian company trying to do business with the government, are you happy with the reception that you get?

Dr Ranicar—So far.

Mr LINDSAY—In your view, should the government be doing something else in facilitating doing business with the government?

Dr Ranicar—I find that very difficult to answer, because most of my work is with the Department of Defence. I was asked a similar question in the lead-up to tomorrow's industry policy consultative forum. I think the issues are the same. Yes, I think government—

Mr LINDSAY—The Defence acquisition process is probably much more cumbersome than perhaps Coastwatch or Surveillance Australia?

Dr Ranicar—I cannot answer that. I have no knowledge of Coastwatch acquisition policy at all.

VICE-CHAIR (Mr Cox)—You were probably listening to the earlier evidence from Surveillance Australia about the average cost per square kilometre covered. Do you have an indicative estimate of the average cost of the synthetic aperture radar?

Dr Ranicar—Yes. The number given to me by Elta was that a bare radar is of the order of $US1.5 million; that is without the installation costs and the non-recurring engineering. The number I was given for the communications equipment can range from, say, $US500,000 to $US1.5 million per aircraft.

VICE-CHAIR—That is not quite the question I was asking. I was asking whether you have an indicative cost per square kilometre.

Dr Ranicar—No, I do not.

Mr Joffe—But we will take that on notice and get back to you. I found sitting here this morning from 9 o'clock fascinating in the sense that, having listened to parties that have given evidence this morning, there were aspects of what they said which certainly assisted our thinking process. What I would like to add to what I have already said is that, in looking at the process that you are following, the system that we are proposing is in essence fundamentally what this particular committee is doing except that it is being done on a daily basis as part of the business. A lot of the questions that are being directed to us are questions that should be answered in the ordinary course and should not require a committee of this nature to actually ask the questions.

Senator GIBSON—But you are suggesting that with the equipment that you can provide the aerial surveillance currently done under contract by Coastwatch could be done more efficiently at lower cost?

Mr Joffe—Absolutely. And we are adding that it is not necessarily Elta that would provide the solution; it is a question of ensuring that what will be provided will be the best and the most cost effective. That is why I say that, having sat at the back of the room today, I found this exercise extremely interesting because fundamentally what we are proposing is to have an exercise such as this being ongoing as part of the process. Again, having regard to the number of inquiries that have occurred to date, one just imagines that that is where the shortcoming does exist—otherwise you would not require these inquiries.

Dr Ranicar—Could I come back to Senator Gibson's question with a back-of-the-envelope sort of sum; perhaps it gets a little closer to your question. If the cost of operating an aircraft is, say, $10,000 an hour; if you have eight aircraft each operating 1,000 hours per year; if you can then save, say, 20 per cent in the cost of operating the aircraft, I believe that equates to $15 million. Hence the reference in the opening statement to 'if you can fly the aircraft at 5,000 metres instead of 1,500 metres and survey a much larger area'. We believe these are then the sorts of numbers you could come up with.

Mr COX—How wide is the path that you can survey from, say, 30,000 feet?

Dr Ranicar—I would have to dive into the brochures; I am afraid I do not have that; I am an old undersea warfare man.

Mr COX—Is it feasible, if you are using a Learjet, to go down and have a close look?

Dr Ranicar—I would have to ask the operators of aircraft about operating heights for Learjets. I have a brochure which shows a picture of the inverse synthetic aperture radar installed in a Learjet.

The other observation I would make from sitting at the back of the room is that with communications intelligence that provides one small window of being able to 'look under the awning', as the chairman suggested. If the 'eyes' are speaking a foreign language, it tells you probably something about where they came from.

CHAIRMAN—Thank you for your submission and thank you for coming today. We will certainly send you a copy of our report.

Proceedings suspended from 12.54 p.m. to 2.00 p.m.

NOBLET, Captain Trevor Albert, Managing Director, Pacific Corporate Aviation Services

CHAIRMAN—Welcome. We have received your submission, for which we thank you. Would you by any chance have a brief opening statement you would like to make, or shall we go straight to questions?

Capt. Noblet—The general observation I would like to make is that I am aware of the coastguard surveillance operation. From my background—I was a military pilot for many years, flying F111s, Phantoms and surveillance aircraft with the RAAF, and have since been out into commercial business—over the past 12 months I have written to various state governments regarding my concern about a hole, I guess, that I saw in the surveillance capabilities of the current Coastwatch operation. It is really along those lines that I make the submission. It is really a complementary submission to the current Coastwatch surveillance capabilities. To me, what we are offering basically fills in those holes that currently exist in the Coastwatch capability. What I am presenting is basically a solution to that, and one that perhaps I should reflect on.

CHAIRMAN—Why don't you tell us about the holes.

Capt. Noblet—It seems to me that at the moment the way we are looking at it is that we are taking it as a broad-brush coastal surveillance, virtually from the west coast right around to Brisbane, ostensibly. That is provided, as I understand, primarily by the de Havilland aircraft, which are very sophisticated aircraft and do an excellent job, obviously. They are large aircraft and noisy aircraft, but they also have a global capability. It seems to me that what is missing, to complement the Navy side of it and the land based forces—the Navy is of course a slow-moving task force; it takes it quite a while to get on-site, for example—is a highly mobile covert capability which consists of an amphibian aircraft, three or four people who are dedicated and trained to be able to position out to the various remote areas and to work in those areas for two or three days at a time. No-one knows where they go or how they operate; it is sort of clandestine, inasmuch as it can also be used for drug detection and that type of thing.

It is that highly mobile, covert capability that we currently do not have. A de Havilland Dash 8 takes off from Darwin and of course everyone is aware of it, because of the noise of it as it turns left and heads towards Western Australia. There are people on the coastline who have a vital interest in knowing where these aircraft are. Witness what happened some 18 months ago when a group of people landed to the west of Darwin: they were there for three days before anyone realised they were there. Also of course on the east coast, and particularly around New Guinea and the Top End, where we have close proximity to New Guinea and Irian Jaya, the traffic going backwards and forwards there is highly mobile. I am suggesting that the gap is basically in providing that capability to move quickly, to position to remote areas, and to operate self-contained, but to complement the current global capability that the Coastwatch has.

CHAIRMAN—You talk about the force. Are you talking about your company being another contractor or subcontractor to Coastwatch?

Capt. Noblet—Not really. It is really complementary. It could be, or it could work very closely with Coastwatch. It is part of the jigsaw, in my view: it could very well be another capability that Coastwatch has. It is a low cost option. It is a case where we can use current people with the Coastwatch and customs department and police, to support this and to crew this operation. It would be an integral part of the current Coastwatch operation but it provides that additional capability that I do not think exists at the present time.

CHAIRMAN—I notice in the information our secretary has downloaded from the Internet that we are talking about a single engine craft.

Capt. Noblet—That is correct. The aircraft we are looking at is called the Seawolf aircraft. It was actually developed from the Lake amphibian aircraft, which has been around for 30 or 40 years. It is the only single hull monoplane, single engine aircraft that is built today. There is a new model coming out in a few years time, which is a turboprop aircraft. It is the sort of low cost option that you want. The aircraft itself is unique inasmuch as it can operate from open seas to waves up to three or four feet high—that is quite within its capability; it can operate off beaches or off any inland waterways. It is highly mobile. That is what it was designed for. Currently, it is being used very successfully in South America by the US drug and immigration departments. The American government have two of the aircraft. From the success they have had in stopping these activities, the confiscation and sale of those boats and other types of things, they have actually paid for the aircraft. It is a single engine aircraft. The thing that distinguishes it from the civilian version is its rugged construction. It also has underwing pylons, and the wing has been strengthened quite considerably. The underwing pylons can carry such things as infra-red detection systems, auxiliary fuel tanks, SAR—search and rescue—equipment, search lights and video systems. So it is a platform from which, within an hour or so, you can configure the aircraft for a certain mission.

Mr ST CLAIR—What sort of speed does this thing do?

Capt. Noblet—It is around 140 knots. With the auxiliary fuel tanks on, it has endurance of about 12 hours. So the aircraft could ferry up to 12 hours or 900,000 miles. More importantly, the way I would see the operation is that the aircraft—and it would be a force of aircraft; there would have to be several aircraft—would be based, say, primarily in Darwin. You would have one or two aircraft based, say, up the north coast, the north-west coast and up the top around Carpentaria. What would happen is that these aircraft would go out on a mission and remotely position themselves. They would talk to the police authorities, to the Aboriginal communities and to others about an activity going on that people cannot explain or that needs to be looked at. The aircraft would go out and be stationed there. The crew would be self-contained; the aircraft can certainly be self-contained. There would be a pilot, an observer and some sort of police or Customs person—three people on the aircraft—and they would basically go out and operate from an area for three or four days. They would patrol at night or during the day to look at this activity. There again, it would be highly mobile—and that is the secret. When they do detect something, they have the ability to land, whether it be on water, inland waterways, the beach or dirt strips, to actually effect some sort of apprehension activity.

That is what is missing at the moment. We have light aircraft which basically can patrol at low levels, but, there again, unless they are helicopters, what do they do when they suddenly see someone with five people in a boat, on a reef, 200 yards from the shore? What do they do? You

cannot land most of the aircraft today unless there is a prepared strip, or some strip, 10 miles from the beach. How do you apprehend these people? Do you call in the police? The police may be 400 miles away. The Navy is out to sea. How do you do it? The answer is: you land the aircraft. You land it on the beach or you land it on the water—and you are right there. So you are within the vicinity to actually apprehend these people, and that is the secret of it. In my view, the illegal immigrants coming in are not sophisticated. But the drug runners, et cetera certainly are; they are becoming more and more sophisticated, and they are highly mobile. The experience in the States has shown that the secret is to have something, a force, that can be moved quickly, unannounced, so that no-one knows where it is going, so that it can operate clandestinely but is linked to the other organisations which come under the umbrella of responsibility for Coastwatch.

Mr ST CLAIR—What is your view on most people coming here illegally actually want to be found and, therefore, they are going to go to a reef and stay on that reef? What are you going to do when you land with your people?

Capt. Noblet—Obviously, the answer is to contain them. The aircraft does have the ability to go out and land at the reefs out there. These aeroplanes are designed to land in protected waters out on the reef area. You can go very quickly out to one of these reefs, land the aircraft and at least be there to control the situation, et cetera, particularly of people coming back onto the shore. I know that has caused concern for the Northern Territory government. People landed outside Darwin sometime back unannounced; it is that sort of capability that we are looking at trying to combat. No-one is trying to replace Coastwatch. It is simply augmenting that capability. It is simply a matter of time, the time in which you can detect and apprehend these people. They get onto the beach, get onto the land and can disappear. I have read several reports that perhaps there are people on the coastline of Australia who actually are involved in these activities and may well be orchestrating them. That potential is there. I assume there is enough money involved to do that, so that is another aspect of where people are watching what is going on.

Mr LINDSAY—The summary of your submission says that what is desperately needed to support Coastwatch surveillance activities is ‘a covert, highly mobile amphibious aircraft force’ operating day and night. What do you see as the benefit of a covert force? In your view, why is that needed?

Capt. Noblet—I think it concerns the way this operation is effective. Perhaps I am also going to the drugs side of things as well, which is something that needs to be addressed in concert with Coastwatch. People could potentially come to Australia and land at night, and we would not know. It has happened in the past many times. People have actually come to Australia, disappeared into the bush and have wandered around. I am suggesting that perhaps this is a way of stopping that or of having a better opportunity to catch these people. I think where it does pertain more is up around the York Peninsula, up into the territory where we are close to Irian Jaya. With Indonesia now and the problems of Irian Jaya, the instability in that area and also the political problems in New Guinea, I can see also the same sort of thing generated rather than from Indonesia and the Middle East. This is going to be something that will move forward in the next few years. I think that potentially, with such a close distance between New Guinea and Australia, that is where a highly mobile force has to be available.

Mr LINDSAY—Other witnesses have given evidence that unidentified air movements—landing at night—is largely folklore. Do you have any evidence to indicate that perhaps it is not?

Capt. Noblet—My experience, having flown fighter aircraft and aircraft up around north-western Australia and Canberra aircraft, surveillance aircraft, is that there is enormous opportunity for people to come into this country. Although I do not have any evidence, I am quite sure that people do. The coast is basically unprotected in a lot of areas up there and I think that, if not at the moment, it will increase particularly, as I mentioned, from Irian Jaya and those places.

Mr LINDSAY—You made the point that the Dash 8 aircraft is relatively noisy, operates from major airports and has predictable flight patterns. Then you went on to say that the force that you are suggesting would be deployed in units of two aircraft from bases in, say, Darwin, Broome and Thursday Island. Isn't that major airports and noisy conditions?

Capt. Noblet—They need a base to operate from. It could be Darwin. But what I am suggesting is that these aircraft would be based to spread the force or the aircraft there. From there they would operate remotely. These aircraft are quite capable of operating, say, 800 miles out from those bases, and they can go out for two or three days at a time. No-one would know at all where they would go. They would just leave and they would go out at a low level over the sea and no-one would see them.

Mr LINDSAY—Others have given evidence that there is a lot of comfort in running twin engine aircraft—yours is a single engine aircraft—particularly over the sea. Do you have a response to that?

Capt. Noblet—If you have a problem, you land in the sea.

Mr LINDSAY—Fair enough.

Capt. Noblet—I have flown in single engine aircraft in the military. With respect, these aircraft, providing they are well maintained, are as safe as any twin engine aircraft.

Mr LINDSAY—You talked about endurance of 12 hours or so. There is not a lot of space in these aircraft, whereas in the Dash you can get up and walk around. Do you have a response to that?

Capt. Noblet—Not at all; I would not expect the aircraft to stay airborne for 12 hours. What I would expect is the aircraft to go out to a river, an inland waterway or on the beach. I would expect it to land there. They would set up a tent or stay there—

Mr ST CLAIR—With the crocs!

Capt. Noblet—Obviously you are going to pick your areas. I am suggesting that is the capability the aircraft has, and why not use it? The secret is: if you do see activity, how do you get there? Do you call our a Dash 8 to do it? Do you call in the Navy? Do you call in a light aircraft? The light aircraft may see something, but what do you do then? Do you now wait for five hours for an aircraft to depart from Darwin, head off at 120 knots and eventually get there? When it gets there, what does it do? It can see them on the ground; it can see a dozen people wandering around. Do they wait for a helicopter to arrive or the police to arrive by overland truck from the nearest mission station?

Mr LINDSAY—Okay.

Capt. Noblet—You are right about the crocs; I would be a little bit cautious about that!

CHAIRMAN—You said in your submission that you have approached several state governments to talk about trying to sell them your aircraft. Have you made a submission or have you talked to Coastwatch or to Defence?

Capt. Noblet—Yes, I spoke to Coastwatch. Additionally, I approached the Victorian government because of the illegal fishing problems they have down at Mallacoota, and a major concern in terms of scallop fishing. It was very political at that stage; this is going back about 12 months ago. I made a presentation to the natural resources department and there was a good deal of interest. They could see that that sort of capability was needed, particularly in the fishing poaching environment.

CHAIRMAN—They did not buy it?

Capt. Noblet—No, it did not. The problem of course is funding. The state governments do not have the funds for that sort of activity. Their recommendation was: talk to the federal government. That is something that could well be bought in and bought in under the Coastwatch side of it—a surveillance capability, which is this. But they did note that it was certainly something that was lacking and they saw this as a way of doing it. I also approached the Western Australian government in a similar vein and spoke to them. They also noted that it was of interest to the government. I did similarly with the Northern Territory government, through Mr Burke. Certainly, from his department and from fisheries there was a good deal of interest. It was just, I think, after the incident where the people came in just north of Darwin. So politically it was certainly something which was of interest to them. But the answer has always been: 'Go back and talk to the federal government, because they hold the purse strings, they have the money and this is a national program.' There was some feeling within the state governments that there could be some argument to develop a state capability to complement the federal capability; but that was more policy than anything. Certainly the responses I had were very positive in noting that some amphibious force like that, that had many roles, not just the surveillance role but also in fisheries, drug detection and immigration, was something that all departments could use. From a cost point of view, they saw a way of defraying the cost of the operation against the various state and federal government departments. Those were their general comments.

CHAIRMAN—Those were the state governments.

Capt. Noblet—Correct.

CHAIRMAN—But have you held major discussions with Coastwatch or with Customs, or—

Capt. Noblet—Certainly I did raise it with the customs department. It was just at the time when the additional Dash 8 was taken on board. They thought that the capabilities were sufficient at that stage. Their budget did not really lend itself to additional equipment at that time. It was really: looking forward to 2004 when the contract comes up, perhaps that is the effective time to look at aircraft, in that time frame. That is really the response I got at that stage: 'It's a little too early, but we would like to examine it a bit down the track.'

Mr ST CLAIR—Can I just go back to northern Australia. If we have a few of these little planes out there on a creek somewhere, how are you going to direct them? Where are they going to get their surveillance information from? You, more than anyone, know how big that area is out there, the physical size of it. How would you coordinate all that?

Capt. Noblet—There are some very sophisticated communication systems available. It would be by satellite. The navigation systems are on-board navigation, GPS systems and that type of thing. Certainly a discrete satellite system or communication system gives you access in any of those areas. In terms of communication, obviously it has to be secure. It could be linked into the current Customs communications, into the police or into the other organisations that are out there. I do not see the communications as being a problem—at least, not from my experience. Certainly that is the way it is used in the States; the US fisheries department uses these aircraft; the US defence force uses them for missile tracking and that type of activity. They have some covert operations in the US they use these aircraft on. They are effectively military aircraft in their design and construction.

Mr ST CLAIR—So it is 'track and apprehend'?

Capt. Noblet—Correct. Track, and apprehend, and at least to put people in the area so that they can keep an eye on what is going on, quickly. That is the whole thing I maintain is missing under the current capability: that time from detection to apprehension. Correct me if I am wrong, but I do see that as, for want of a better word, a hole.

Mr COX—How many seats do these planes have?

Capt. Noblet—They have up to six seats. They can in fact have a capability for a stretcher and things like that. They are a multirole aircraft. They can be used for search and rescue, and have rafts, et cetera, on them as well. It depends on what you hang off the pylons. The pylons are certified. There is a certain certification requirement on these pylons to be stressed for flight. Any other float planes do not have them. The secret is you can attach things under the wings and you can jettison them. To do that is a whole new certification parameter, as I am sure the CA would advise you.

Mr COX—In your submission on page 2, you say:

To enhance mission roles, the aircraft should also have the capability of carrying additional equipment such as SAR equipment or flares

Do you mean 'search and rescue' equipment?

Capt. Noblet—Yes; SAR is search and rescue equipment. The aircraft can be reconfigured, providing the aircraft is wired for these roles. There are just cannon plugs and attachments onto a standard NATO bracket, which are standard attachments on all military type aircraft or SAR type aircraft. You can configure the aircraft to an SAR role within an hour; you can configure the aircraft into a sophisticated FLIR infra-red detector with a searchlight and a video camera system. The pod simply clips on; the equipment is stored in the cockpit or the cabin; and it just bolts or clips onto the hard point. So very quickly you can adapt this aircraft to many roles.

Mr COX—If you needed the aircraft to go and track, say, a suspect illegal flight, if you put in radar equipment to do that then there would not be much room for a response team to—

Capt. Noblet—It actually fits in the propeller boss, where it flares into the propeller, which is on top of the aircraft. It is out of the cockpit completely. The only thing in the cockpit, of course, is the display unit, which is normally over on the right-hand side. The FLIR system is usually an Ultra 7000. It is a high discrimination FLIR system which has autotrack capability where you can detect an infra-red target, whether it be a boat or people or whatever. It can lock onto it and the aircraft will actually turn and you can still track it. You can turn around and the system will still know where it is. That is the sort of sophistication that you can put into a very simple aircraft. And the secret is it is simple. It is a very simple aircraft; low maintenance; operating costs are probably under $150 an hour—something like that. It is very low cost. Certainly the initial cost would have to be defrayed, but in terms of a Dash 8 or a helicopter the costs are significantly less. More importantly, there is the reliability. They may be a light aircraft but they are a very rugged aircraft; they have been militarised in terms of beefing the whole structure up, and they are very covert.

Mr COX—What sort of armaments were you suggesting?

Capt. Noblet—That is just a role they have. I am not suggesting anything at all on that. It is a capability they have. That may well go into the Defence Force. Who knows? It could well do something like that at a later time. Primarily, the way the aircraft is set up in the States is to have a fairly high definition radar system—it is not like anything in the Dash 8; it is not supposed to be—which will pick up targets, tin boats and boats at a reasonable distance.

Mr ST CLAIR—And a reasonable distance would be?

Capt. Noblet—A reasonable distance, depending on the wave, is probably 50 miles or something like that. It is that sort of capability. Also, the FLIR system is very, very accurate. The aircraft has the capability at night, for example, to detect a fishing trawler that comes in, gets past the reef and is heading towards the land. It can, first of all, fly over it. It can illuminate it with a search light. The video system can take a picture of who is on board and the identification of the vehicle. It can be data linked back, so everyone knows who it is and where it is going. This aircraft, if necessary, could stay on target for another four or five hours to see where it is going or, if the sea state is okay, it could land alongside it. That is the sort of flexibility you would have which you do not have, unless a helicopter is available and these things are not out in the middle of nowhere, but these aircraft could be.

CHAIRMAN—How much would it be?

Capt. Noblet—What we are proposing is basically a lease of the aircraft. In other words, the aircraft will be financed and simply offered fully equipped to the government on a monthly charge, plus an operating charge or something like that.

Mr ST CLAIR—As a dry hire?

Capt. Noblet—It could be. To me, it seems like an ideal vehicle where you would take a task force of police or Customs officers, for example, and specialise these people in this sort of capability and train them so they become part of the force and are involved in it. A training course in the aircraft operation is fully covered, like any new aircraft, et cetera, as part of the acquisition price.

Senator HOGG—Are they used elsewhere in the world for this role?

Capt. Noblet—Yes, they are. They are operating in South America, with the US defence forces, with the US fisheries department, and in Chile and places like that. There are a lot of them here in Australia in terms of the civilian version, so there is support here. What they do with the civilian version is beef up all the structure on it, they add the pylons, they give them bigger fuel tanks and they put the radar systems in. That is the difference; it is basically a civilian aircraft which has been adapted. So there are plenty of aircraft here, and there are people to fly them. They are not hard to fly.

Senator HOGG—I was getting more to their use. Do other parts of the world use them for a similar purpose as to what Coastwatch would use them for?

Capt. Noblet—Probably the primary case is in South America, where it is actually for illegal immigration and drug detection. They are the two primary roles for those two aircraft that were down there, and they have been very successful. As I mentioned, just in the detections and the apprehension of the people involved, the confiscation of their boats and everything else, they have virtually paid for those aircraft.

CHAIRMAN—Thank you very much for coming to talk to us and telling us about your proposal. We thank you for your submission. We should complete the inquiry before Christmas and we will table our report early next year and we will certainly send you a copy of that.

Capt. Noblet—I have some technical data which I will submit to the committee and also some videos of the aircraft in operation. I think, unfortunately, like all these things it is hard to appreciate what the aircraft can do until you have a look at it. I commend the committee to have a glance at it.

CHAIRMAN—You were not here early this morning, and one of the things I did say is that this committee is not competent to advise government, Coastwatch or anything else on the purchase of assets or high technology equipment. It is good for us to know what is available in the marketplace and particularly what new emerging technology there is to help guide our deliberations, but, as in all these things, Coastwatch and/or Defence are the clients, not us.

Capt. Noblet—Perhaps if I could make a closing statement: I see this as something that would work and would complement the current capability. It is a low cost option, but I think it does fulfil a need. I talk from experience in terms of the operating environment I have had with the Air Force up there. I think from my operational experience of some 30-odd years of flying plus flying in the military that something like this potentially could improve the surveillance capability of Coastwatch and the other agencies. I would recommend it to you.

Resolved (on motion by **Mr St Clair**):

That the following exhibits be accepted as additional exhibits to the evidence of the committee's inquiry into Coastwatch:

Public exhibit No. 10 – brochures and a video from Pacific Corporate Aviation Services

Confidential exhibit No. 4 – video from Telstra Applied Technologies

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

That the committee authorises publication, including publication on the parliamentary database, of the proof transcript of the evidence given before it at the public hearing this day.

Evidence was then taken in camera —

Committee adjourned at 4.14 p.m.