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JOINT COMMITTEE OF PUBLIC ACCOUNTS AND AUDIT

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JOINT COMMITTEE OF PUBLIC ACCOUNTS AND AUDIT

Tuesday, 24 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 Hogg, Gibson and Watson and Mr Charles and Mr Cox

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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Committee met at 9 a.m.

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, on its review of Coastwatch. This is the fourth in a series of hearings which will examine Coastwatch clients and Coastwatch contractors as potential suppliers of high-tech hardware and surveillance systems. The final hearing is planned for Canberra in November. The committee has already heard from Coastwatch and its clients. Recently, the committee has taken the opportunity to visit various Coastwatch hot spots in northern Australia, including the Torres Strait. Of concern to the Commonwealth government is the ability of Coastwatch to undertake effective surveillance of activity in the Torres Strait. Monitoring the strait is vital to combat the potential illicit movement of people and illegal goods and to prevent the entry of exotic pests and diseases into Australia.

At today's hearings the committee will take evidence from Kingfisher Unmanned Aviation Systems, which plans to produce, develop and operate unmanned aerial vehicles for Australia's airborne surveillance and remote sensing market. UAVs may provide a useful additional surveillance platform for Coastwatch operations. At this point I repeat a comment I made earlier that the committee does not have the technical expertise to be able to recommend the use of particular surveillance technology. Nevertheless, the committee is interested in how such equipment could assist and enhance Australia's surveillance capability.

The committee will then take evidence from Reef Helicopters, which contracts its services to Coastwatch. 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 Reef Helicopter's response on this and other matters concerning how it meets the needs of Coastwatch under its contract.

The hearing will conclude with representatives from the Island Watch organisation. Island Watch advocates the introduction of high-capacity telecommunications links between the islands of the Torres Strait. This, Island Watch believes, would enhance the effectiveness of the Commonwealth and state agencies which operate in the strait. The committee will be interested in how Island Watch sees itself assisting government agencies in combating unlawful activity in the strait.

Before swearing witnesses, I refer members of the media who may be present at this hearing to the committee's 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 staff present at this hearing. I have to say on the record that I am disappointed that the Queensland government, which has made a submission and had planned to attend, finally decided that it would not appear before the committee, and we, of course, have no capacity to require it to do so.

[9.04 a.m.]

BALE, Mr Peter James, Director, Kingfisher Unmanned Aviation Systems Australia

HILL, Mr Peter Roy, Director, Kingfisher Unmanned Aviation Systems

CHAIRMAN—Welcome. We have received your submission, for which we thank you. Do you have a brief opening statement you would like to make to tell us about what it is that you propose?

Mr Bale—Ladies and gentlemen, thank you for the opportunity to make an input into this inquiry. What is Kingfisher? Kingfisher is a limited shares company. It is a company which plans to provide under contract specialised aviation services utilising unmanned aerial vehicles which have many suitable applications to meet the growing Coastwatch needs. Kingfisher is an established company and will be operational early to mid 2001. We have now entered into a contractual negotiation for a designated unmanned aerospace centre. The airfield will support plans to service the civil, commercial and military markets in Australia and to be deployable regionally. Kingfisher, in unison with a leading global military UAV manufacturer with 30 years experience, will be offering in Australia a medium altitude endurance system that has a 5,000-plus hours proven unscathed operational track record. Numerous overseas defence forces are currently using this system.

The system we know of can assist and enhance Coastwatch in many ways. It has a 20-plus hours endurance. It is capable of cruising at and around 20,000 feet. Its avionics payload can be configured up to a 150-kilogram payload. It has a loiter speed of 55 knots. The following sensor packages are on offer: stabilised, gimballed, colour day/night electro optical system, forward-looking infra-red, synthetic aperture radar, which is easily able to observe targets from in excess of 7,000 feet. The system configuration comprises a two-person flight operation. The system is capable of a two-aircraft coordinated flight from a single ground control station. An example of this is that as one machine is leaving the target area another will replace it, making sure the area is positively monitored and controlled during the handover phase.

All flight critical components are fully redundant. An example of this is that all flight controls have dual actuators, or motors, thus encompassing a full redundant system. It is a fully autonomous system, with manual override options. Overseas trials have shown that any mission profile in excess of 2,500 kilometres can be completed successfully with this system. The system is capable of disseminating raw video and data from in excess of 200 kilometres from the ground data terminal launch position in real time. This system is capable also of recording and storing 10 hours of footage and data, which gives the customer the real-time/near real-time option. On return to the defined real-time boundary the system will download automatically to the ground station. Data and footage will then be dispersed from the ground control station to the decision making cells of the individual client agencies via a communal communication medium.

The capability exists for remote video terminals to be provided for initial response teams. For example, it could be positioned on naval or Customs assets, giving commanders real-time remote observations. It is a compact and easily deployable system which can be moved by any transport means.

In summary, this project has involved extensive system and market research over a four-year period. Both directors—Peter Hill and Peter Bale—are ex-military, with 24 years collective aviation experience. Kingfisher has developed extensive flying instructions, a draft concept of operations and a building block standard operating procedure document. Kingfisher's directors believe that these futuristic aircraft will not replace current manned aircraft but act as false multipliers and capability enhancers, fulfilling many of the tedious and costly operations that the Coastwatch fraternity endures.

In closing, the future of aerospace and coastal surveillance is going to surprise everyone. We sit on the edge of a whole new age of airborne platforms. At Kingfisher Unmanned Aviation Systems Australia we are committing ourselves to this cause—a cause that will see manned aircraft and unmanned platforms working together. Kingfisher will give Coastwatch a global leading edge in its surveillance needs.

CHAIRMAN—You have told us a bit about unmanned aviation systems, but you have not told us what you propose for a platform.

Mr Bale—The platform is currently being used overseas.

CHAIRMAN—But what is it?

Mr Bale—It is a—

CHAIRMAN—This is not secret, is it?

Mr Bale—It is not secret. It is a platform for which we are currently in negotiation with the overseas company, and it is a trial proven platform in an overseas sense.

CHAIRMAN—So you do not have a contract yet?

Mr Bale—We are in negotiations with the overseas company to—

CHAIRMAN—That is what I said—you don't have a contract.

Mr Bale—Not as yet, no. We are meeting with them to go into a joint venture with approval to go into flying early next year with this company.

CHAIRMAN—Have you talked to Coastwatch?

Mr Bale—We spoke to Coastwatch in March this year giving a directors' brief in Canberra at AMSA. We spoke to them extensively. They know of the package that we are talking about and they were interested, but they indicated that, due to a lack of resources, they would be unable to fund any research and development in this area.

CHAIRMAN—Have you spoken to Defence?

Mr Bale—We are currently in negotiations with Defence in regard to a project known as JP129, which is the over-horizon unmanned surveillance system at the moment. My partner, Peter Hill, will be meeting with the project on Thursday.

CHAIRMAN—As I understand it, before cabinet pulled the plug—temporarily, anyway—Defence had all but signed off on \$2 billion worth of platforms, support services and personnel.

Mr Bale—We find the way Defence is now moving is that the private finance initiative is more viable for Defence to procure these devices, and that will be the line of negotiations that we will be approaching the military with. That is what they have indicated is a viable source for them to procure such equipment, before a tendered agreement would be in place.

CHAIRMAN—Am I right that the development of unmanned platforms was largely for military purposes; that is, to find the pilots of downed aircraft? They were largely an attempt at remote search and rescue.

Mr Bale—Yes.

Mr Hill—Unmanned aircraft have been around since the First World War.

CHAIRMAN—We know all of that, but I am talking about recently.

Mr Hill—Recently, there are many tasks. In Kosovo they are being used by the United Nations to search for mass grave sites with their multispectral, hyperspectral sensors. There are some trials with overseas police forces for pursuit management. We have some interest from some mining companies in Australia for mineral and oil exploration. From our understanding, the US Coast Guard is looking at UAVs. There is a wide range of applications and it is unlimited—from the Internet to mobile phones.

CHAIRMAN—I hear all that, but the question was: in the modern sense, weren't they really developed to find downed aircraft and pilots?

Mr Hill—They could be used for that. They were purely designed to protect human pilots from being shot at. If a remote aircraft can do a bombing mission without risking the life of a pilot, yes.

CHAIRMAN—The question then is: these things have been developed largely for a strategic purpose—which is a high-risk in-out operation—while what you are proposing is a continuous operation, so what indications have you got regarding reliability?

Mr Hill—It has 5,000-plus proven hours in operational situations.

CHAIRMAN—What do you mean by 'proven'?

Mr Hill—We are bound by a commercial-in-confidence agreement not to tell you the country and the defence force. But they have used it and they are currently using it in a hostile area.

Over the years it has had 5,000 proven operational flying hours without being shot down or crashing.

Senator WATSON—Can you retrieve it?

Mr Bale—The system takes off from a runway as per a normal aircraft and returns to its home base as per a normal aircraft. It uses a differentially guided GPS, so it can land back in its take-off position within a couple of metres of accuracy for its particular role. Back to your question with regard to whether it is purely used for retrieval or finding shot-down aircraft—

CHAIRMAN—No, I did not say ‘purely’. My understanding is that that is what it was developed for. There are lots of potential uses, but the question is largely: is this thing ready for civilian operation and how reliable is it?

Mr Bale—It is ready for civil operation. The machine we are talking about has a ceiling of 20,000 feet. It is capable of 20-plus hours endurance with various payloads, giving you an all-weather capability and around-the-clock surveillance situational awareness.

CHAIRMAN—With a 20,000 feet—minimum?

Mr Bale—A 20,000 feet maximum.

CHAIRMAN—What is the minimum?

Mr Bale—The minimum is 500 feet AGL—500 feet above sea level—and 500 feet above the nearest obstacle, or as the CASA requirement states.

Senator WATSON—Are they more economical than a manned aircraft?

Mr Bale—Absolutely. They are more economical in that there are no aircrew redundancy problems as with the two-pilot type operations. It has a single pilot. It also has much lower fuel consumption than, say, a Dash 8. This particular machine we are talking about uses 11 litres of fuel per hour at a loiter speed. It is very economical and very light. The machine weighs 450 kilos all up. That is why it is able to achieve its endurance and its range capabilities.

CHAIRMAN—It is 450 kilos. It would be a bit tough if you were flying a 747 and ran into one of these little buggers, wouldn't it?

Mr Bale—They do have a TCAS warning system and also will be fitted with, as per the CASA requirements, a mode 4 and a strobe system. So they will be fitted with the civil requirement for IFR flight.

CHAIRMAN—One of the difficulties with this kind of platform, as it is unmanned, is that it is impossible to look under the awning on a type 4, isn't it?

Mr Bale—Sorry, I do not understand that question.

CHAIRMAN—In relation to a suspected illegal immigrant vessel wandering around between here and Indonesia, and perhaps over the 200-mile limit or perhaps within it, the radar can tell you what is there, because it is big enough and it has enough mass for us to pick that up, but you would not know what was under the awning. You would not know whether there were people, coal, fish or whatever there.

Mr Hill—Because of its endurance it could loiter above that 7,000 feet and watch them for 18 hours. You could then relay that back to patrol boats or helicopters.

CHAIRMAN—That is one advantage of the manned Dash 8. They can fly around and have a look—have a peek.

Mr Hill—That is why we have said—

CHAIRMAN—And if radio contact is available they can talk to the people on board.

Mr Hill—That is why we have said that these would work together with them. They are not going to totally replace your manned assets.

Senator HOGG—Are they wholly developed overseas or are they partly developed in Australia?

Mr Hill—With the contract, we are in negotiations to develop engines and avionics in Australia through our unmanned aerospace centre.

Senator HOGG—Do they need to be modified for Australian conditions? That is what I am trying to get to.

Mr Hill—No, but we are going to put an Australian designed engine in it, just purely for the better rate of effort for cost that that provides, and for endurance.

Senator HOGG—I note in your submission you provide us with a diagram of the northern part of Australia where there is a major threat, but there is also the issue of the Southern Ocean. How would they operate in that sort of environment? There are a number of illegal fishing vessels there. What sort of endurance would they have to be able to travel the extremely large distances there?

Mr Hill—I could not give you a technical answer without us doing a trial first, but it has been proven overseas to do the ‘any mission’ profile of 2,500 kilometres.

Senator HOGG—Could you take that on notice and give us some sort of assessment as to their capacity to operate there? We are looking there at fairly cold and quite severe conditions compared with the conditions that would operate in the northern part of Australia—where there are severe conditions, of course, when you get cyclones and so on. So could you give us some assessment of that.

Mr Bale—If I could briefly let you know, in interim discussions with the overseas company we have spoken about extreme weather conditions and its anti-icing/de-icing capability. It does have one, which can be implemented into each machine for a specific purpose such as that in a southern environment.

Senator HOGG—What is the rough cost of these on an hourly operating basis as compared with, say, putting up a Coastwatch plane or some other form of platform?

Mr Bale—Compared with your Dash 8 aircraft—which on the last audit I think was \$8,000 per hour; I do not have the document with me—we will be looking at roughly one-eighth or one-tenth of that cost per hour. It is very competitive and we plan to offer the system on tiered systems, meeting requirements of an hourly surge rate that Coastwatch will require. That is, if they require a small surge of between six and 12 hours, we have a costing to suit that. As the requirement gets greater, then the cost actually reduces.

Senator HOGG—So this would be a general surveillance platform, rather than something that would do very close scrutiny of the illegal entry vessel. Is that the type of system you are operating? Then, having spotted it, you would have to put another platform out to do greater reconnaissance?

Mr Bale—No. You can be tracking numerous targets with this machine. Once you have identified them and they then become targets of interest, you can then reallocate the machine to investigate and go in for a closer look. The ideal situation we see with this is that, in the international water type scenario, it can watch and record the data of vessels coming in and out of Australian territory, fishing, going back out, waiting, coming back in and fishing. They then have the evidence to arrest on the international charge. You have data available to prove that they were fishing in Australian waters. That can then be disseminated, as I said earlier, to the Coastwatch headquarters, and then tasking of an apprehending vessel can be sorted out at director level.

Mr COX—What sort of sensors would be doing that?

Mr Bale—As we spoke about, we looked at FLIR for day and night. We also have a colour CCD which is able to automatically track and look at vessels, down to the point where we can read side numbers and things like that on ships. We are looking at hyperspectral, multispectral radar for this machine as well, and also giving just the day colour video option. It will purely be an operator's choice or a client agency's choice of the package that they find meets their requirements.

Mr COX—They would only fly one package at a time?

Mr Bale—Yes. You would fly one package at a time.

Mr COX—If you were using the sorts of packages that would be suitable for identifying a particular boat in court, would that package really be suitable for wide area, strategic surveillance?

Mr Bale—How we plan to do the surveillance is much along the lines of how the military conduct themselves in their search patterns and areas, which we will then narrow down from intelligence reports. We will have weather reports as well. We will then be able to determine, through our system operators, which package will meet that requirement for that mission. If we know that there is movement between a day and night time or an early morning scenario with fairly inclement type weather, then we would obviously opt for a FLIR type package for the day, which would then give you that redundancy of weather and also the night-time option.

Mr COX—We did a Coastwatch flight about six weeks ago. We covered a vast area. We saw 160 vessels. Three of them were where they should not have been—type 2 Indonesian fishing vessels. It strikes me as difficult in that scenario with a FLIR type system to keep an eye on all of those targets, or even 50 per cent of them in a limited area, determine which ones are doing things that make them suspect and actually keep an eye on them over a long period of time.

Mr Hill—That sort of situation would come into mission planning. If we flew over the same mission profile as the aircraft you were on board, we would enter that 160 and prioritise two, then obviously we could then monitor or stay aloft of the highest priority target for however long you like. Don't forget, we can have two aircraft coming inbound with a 24-hour capability so the UAV can track it to within a helicopter's or a patrol boat's range and then it hands over and flies and watches priority No. 2 target. That is the capability.

Mr Bale—It has a multiple target tracking capability. This thing is primarily being used in a military role for target spotting.

Mr COX—How far apart would the targets be?

Mr Bale—Targets can be a couple of hundred metres apart and it will track them quite easily as per a normal weather radar type system, no worries at all.

Mr COX—But that is not very far apart when you are talking about—

Mr Bale—I am saying for a close proximity. I would have to go back to the company for spec data on how far apart for you. I could give you that information if it was required. I do not have that information with me today.

Mr Hill—Obviously we do not realise how big the Coastwatch need is. We have only just researched it with the public information available. Obviously once we got one in the country we would then work on a trial and then come up with a concept. If it was required to watch two targets 200 kilometres apart, we would come up with the best solution and the cheapest solution. Instead of having two manned aircraft watching two targets at \$8,000 an hour, you could have one manned aircraft and one UAV at a third the cost. That is an option—or satellites working in with the UAV.

CHAIRMAN—At 450 kilograms, they are pretty small.

Mr Bale—No, the machine is not small. It has a 10-metre wing span and it is six metres in length, thus giving it its high weight to lift ratio. Therefore it is able to stay aloft using minimum power and minimum fuel burn.

CHAIRMAN—But you could still carry both a microwave radar and a FLIR?

Mr Bale—Yes.

CHAIRMAN—You are talking about an application for detecting ships, not for detecting aircraft.

Mr Bale—It can detect aircraft with its radar.

CHAIRMAN—But it couldn't do all three.

Mr Bale—I don't know. I would have to again go into talks with our—

CHAIRMAN—Four hundred and fifty kilograms. It seems to me to be pushing the envelope.

Mr COX—You could only do one at a time.

CHAIRMAN—Well, you couldn't do all three at once.

Mr Bale—No.

Mr Hill—Just on that, the overseas defence force have used these systems with AEW&C aircraft. There is no research or trial down the bottom. We could have our video remote sensors in a Dash 8, so you have it out 200 kilometres in your Dash 8 and they work together as a team—a hunter and a searcher in a pack wolf type team. You can fit them into packages, or work with a Customs maritime asset or a Navy patrol boat with a video. It is working on the water and it is controlling its airborne surveillance asset over the horizon. That is a capability as well. So there is a wide range of packages. When we bring one out here we can work on what the overseas company have worked on. Their aircraft has flown and they have tracked helicopters and aircraft flying below it. They have tracked tanks and soldiers in urban warfare and counterterrorism type stuff in the cities and so on. We are bound by commercial-in-confidence; we cannot discuss too much on that.

Mr Bale—We are fairly interested in letting the committee know that Kingfisher believes this is a very viable and, as we have stated, an enhancing IT property that would be ideal for the Coastwatch need, noting the vast expanses up north and, as Senator Hogg stated, down to the south with our problems down there with illegal fishing. If we can relieve half of the resources that we currently have to go and focus more on these trouble spots, noting that we are providing a security blanket with a UAV capable of these packages, then that is going to enhance vastly the current situation that Coastwatch faces at the moment.

Mr COX—What about the capacity to remain covert while you are watching an individual target?

Mr Hill—At 7,000 feet they are not going to see you.

Mr Bale—At 7,000 feet away—three or even two miles—they are not going to know it is there.

Mr Hill—It is a military system. It is designed to watch someone without being shot down by small-arms fire and without the bad guys seeing it. It fits in perfectly in a civil environment.

Mr Bale—From the overseas application, it does not paint a very pretty radar picture at all. As you know, with some of the current weather radars some of the fishermen now use they are able to adjust the radar so they can go above the horizon and actually look for aircraft on the way in as another method of detecting Coastwatch and surveillance aircraft. This does not paint a picture at all for a radar print.

CHAIRMAN—Why?

Mr Bale—Purely because of its shape. It is cylindrical and rounded, with no real leading edges as such.

Mr Hill—It comes back again to the military concept. They want to be able to sneak up on the bad guys without them finding it. They did a trial with an aircraft carrier. For two weeks they were inside the aircraft carrier's radar, its AEW&Cs and fighter jet patrol, and the carrier did not even know. The admiral did not believe them until he saw a picture of him having a coffee on the bridge. That was a trial that they showed us.

Mr COX—One of the things that you might want to look at in doing your market research is that we had some evidence at a previous hearing at which Coastwatch was saying that the search capacity they are required to have for, for example, suspect drug vessels or illegal immigrant vessels uses up a lot of capability over, often, a number of days or even more than a week, and they are using quite expensive assets to do that. A UAV operating in the mode you have just described—covertly—might be quite a cheap way of filling that gap.

Mr Hill—With our market research, we were working on a figure of five per cent of the Coastwatch market. It has to be realised that we are going to operate from a specialised airfield with our military, our civil and coastal customers. Two aircraft are deployable on a five-tonne truck, by rail and by ship. If Coastwatch knows about an activity coming two weeks in advance, we could deploy it down close to the area of operations and then deploy it from there. Our teams work on self-sustained operations for up to 14 days with 14 hours per day and one search period of 24 hours a day in that 14 hours.

Senator GIBSON—How good a strip do you require to get this off and back?

Mr Bale—The purpose-built strip we will be using in our designated area is a tarred strip, but any of the old disused runways up to the north are quite suitable. It actually arrests itself on a cable, which is purely a piece of chain dragged across a dirt strip for an arrester hook. Any dirt strips, a blocked off piece of highway, et cetera, would be quite suitable.

Mr Hill—It takes approximately one hour to set the machine up and then take off. So you can pull up to a piece of the highway up north, block it off, take off and do your mission.

Senator WATSON—What are the areas in Australia in which you believe it would be most useful—a Thursday Island type operation where there are lots of movements or a remote area?

Mr Bale—Particularly up around Ashmore Reef, around that area. Because we have designed a purpose-built system that is deployable, we are going to negate a lot of the costs involved with accommodation for air crews, support crews and things like that. We will be a purely deployable package and we will give you a 14-day self-sustained package in an area that you require—Ashmore Reef, up around Torres Strait, New Guinea, all that type of area; down in through Weipa—

Senator WATSON—How would you get out to the Ashmore Reef? It is a long way.

Mr Bale—Watching the movements as they come down through there.

CHAIRMAN—You are not talking about deploying the aircraft from Ashmore.

Mr Bale—No.

Mr Hill—Wherever there is a strip on an island you can deploy it by boat or air. It fits into a Caribou C130. You can then watch that whole area out to 3,500 kilometres for up to 14 days.

Senator HOGG—Whilst it is not part of this inquiry, I have a question about search and rescue. What is its capability there?

Mr Bale—With the synthetic aperture radar they are currently employing overseas, their technical people believe it can have the capability of picking out a head in sea state 3 to 4, at a range to be defined. It is ideal in a search and rescue type situation. It would be a command and control vehicle for the search and rescue coordination team. Instead of directing a civil flight to an area to loiter and hold with 300 people inside, watching someone in a raft, you would have an asset that could stay there for 18 hours with a retrans beacon type set-up. You would then be able to establish a comms network with the appropriate person in the raft on 243 or 1215 on the frequencies. If you were using a FLIR package or anything like that, you would then have a live video link with it. You could watch the whole scenario unfold. That is, you would have footage of the rescue taking place. You would be able to direct the incoming aircraft—either the raft deploying asset or the helicopter asset—to a differential GPS position which was within the five-metre range to that raft.

CHAIRMAN—You are negotiating with the manufacturer of these platforms. You do not have a contract yet; you do not have anything to sell. If your negotiations are successful, have you got enough capital to bring a demonstrator out here and deploy it?

Mr Bale—The overseas company have shown extreme interest in Australia, for the Asia-Pacific region and the market, as well as what is out here for them to do. They have foreseen that there is the opportunity for agencies that are interested on a negotiation basis to actually accompany Kingfisher to their plant and see the vehicle in operation, in an operational sense, with a scenario base as per the user's requirement. That is an option they have given us. Peter and I will be transiting overseas at the end of next week to finish up negotiations. We are not

committing ourselves to saying we are in a contract, but we are 80 per cent towards having this vehicle out here next year.

Senator WATSON—What happens if one becomes unserviceable? How long is it going to take to get another one into service?

Mr Bale—The Kingfisher plan is to never have one fully reliable system that is our sole asset. When the package is purchased it will have two full, complete air frames with avionics and one spare shell without avionics, thus giving you a redundancy for a two-machine package. So if one is down for a bay service, for an engine overhaul et cetera, you do not lose any of your capability because it is sewn into the logistics package to always have two aircraft on line for requirement if that is what the customer requires.

CHAIRMAN—We wish you luck. It sounds fascinating. As I said in my opening statement, when we bring down our report we will not be making recommendations to Coastwatch, the Navy, Customs, Fisheries or anybody else on what modern technology to employ, but at least we will have a better understanding of what is available on the market today that might assist. Coastwatch has sat through all these hearings with us, as well as giving us access to the northern reaches of Australia and beyond. Thank you for your submission and thank you for coming to talk to us today. We will send you a copy of our report early next year when we table it.

Mr Bale—On behalf of Kingfisher, thank you very much.

Proceedings suspended from 9.40 a.m. to 9.51 a.m.

EARLEY, Mr David Herbert, Chief Executive Officer, Reef Helicopters

BIZJAK, Mr John, Senior Observer, Reef Helicopters

CHAIRMAN—Welcome. We thank you for your submission. Would you by any chance have a brief opening statement to tell us about what you do? What do you see as the way forward?

Mr Earley—By way of explanation of our background, you have all met John before, I believe, up on Thursday Island. He comes out of 20 years of Navy experience as, I think the term is, combat systems manager and operations specialist. My background is in Army aviation aeons ago, I have been a pilot for 33 years and I have some 8,000 hours of fixed- and rotary-wing experience. I came into Reef Helicopters the day after the aircraft was presented to Senator Vanstone in Brisbane. So I have been there virtually for just this calendar year.

We believe that the current effectiveness of the helicopter is one point along the path of developing it to its full potential. It is gratifying to see how effective it is, given the accelerated process of the specification and fielding. We would like to make the point that we do enjoy a good working relationship with Coastwatch. As that develops further into a partnering relationship, which we have been talking about recently, we anticipate a combining of our operational experience with client needs to further enhance the product that we are able to produce so that planning for any future surveillance requirements will be fully informed.

There were—and this refers to my original submission in June, which seems a long time ago now—significant cost overruns in the contract set-up process, and the projected move of the 412 to Horn Island is certainly not cheap, either. I do not want to labour the point, but I did make it in that report that I think it was difficult to foresee particularly the contract set-up costs. The situation now is settled and proceeding quite acceptably. It is no longer a point of strain, but it takes a while to get over a large capital outlay that was not forecast.

Senator WATSON—So you actually intend to operate on Horn Island and not an alternative site on Thursday Island?

Mr Earley—The 412 will be moving to Horn Island. We are both available to answer your questions as you deem appropriate. Obviously, I will defer to John on the technical surveillance type questions. From crewing the aircraft the day it left to go up to TI, he has superintended the development of the effectiveness that we currently enjoy with the FLIR and other on-board systems on that machine. That is probably as much as I would like to say at the moment and I will leave it to questions.

CHAIRMAN—Thank you very much for that. In your submission you said that the helicopter surveillance/response function has now operated for six months with moderate success. What is your definition of ‘moderate’?

Mr Earley—I think in June when that was written there were certainly some teething problems as we went through January to June. I did not want to overstate the case. We had a lot

of equipment interface problems which took a long time to sort out. They were basically electronic interface, where we were not able to get altitude feed presented on the GPS, we were not able to get CYCOM encrypted communication operating. A lot of that had to do with the different contractors to Coastwatch supplying equipment where we were not responsible for the actual specifications and, in some cases, it was difficult to get people talking to each other to determine how they were going to, in fact, interface.

There were assumptions made from the Dash 8 model that were not valid for the 412. It took us quite some time to determine just where those assumptions were in error and to correct the connectors and some of the technical rationale behind the interface. But since June everything has been working fine. I have here a copy of a typical daily report which lists every piece of equipment on the aircraft. On a daily basis we have to advise and send to Coastwatch whether it is serviceable or unserviceable; and if it is unserviceable, when it will be serviceable. On Friday I actually tried to find one as an example with some that were not before I came down here on the weekend. They are there, but in the time I had I could not find one because that is a normal daily report now that everything is up and running.

CHAIRMAN—But how do you measure your ‘moderate success’? Did you measure success by the fact that the systems were operating or that you are finding identified targets?

Mr Bizjak—The FLIR system and the radar have been operable since day one. We have had no major problems except for position feeds from the GPS, which is one of those problems which was associated with equipment that was not designed for the helicopter but rather for the Dash. But all those problems have been sorted out. On success, obviously as the operators gained more experience, our hit rates were a lot better. I dare say nowadays it is better than moderate. We are quite capable. Our teams are checked and assessed regularly, and we have had a check and training officer up there for the last two weeks. Their scores have been quite good—well above average.

CHAIRMAN—But again, one of the things you talked about in your report was that the civilian commercial organisations can provide government agencies with assets and with personnel to provide a service at a very competitive price; that is, you are talking about 50 per cent. You said:

This is further evidenced by the fact that many other countries are coming to the same realisation. An example is the USA where the military search and rescue helicopter units are being disbanded in favour of private contract organizations with 50% savings being quoted.

Is that anecdotal, or do you have hard evidence of that?

Mr Earley—That is pretty much anecdotal at the moment. One of our directors, Brigadier Bob Miller, is here, too. I was asking Bob if he could remember where we actually got that because the report was done back in June. I was thinking it was probably something that was passed on to me by one of the US Coast Guard people who were visiting Cairns. One of the questions that they were talking to us about was the whole issue of civilian contractors providing resources. They were thinking about it for the US. I think it was out of that conversation that that comment came, but I cannot remember specifically. Certainly in Australia the Air Force search and rescue contracts have hard evidence on the savings available here in this country.

CHAIRMAN—I do not want to be pedantic, but let's go back to the success thing again. It seemed to me that some kind of measurement of performance would be the number of illegal vessels or aircraft you find or something, rather than just that the helicopter is available to fly the contracted number of hours and that the systems operate.

Mr Earley—I would have to defer to Coastwatch to measure the success of the hit rate, because if there are no illegal vessels out there over a one-month period and you do not find any, there is no evidence of success or otherwise.

CHAIRMAN—Can you imagine that there are no illegal vessels in the Torres Strait?

Mr Earley—No. But it depends on what class of vessel you are talking about. If you are talking about a tinnie that is running between islands, then you are talking about concept of operation and how you employ the helicopter and what your expectations are with that helicopter. If you go out and fly a specific track and that is determined by Coastwatch and Coastwatch operations planning, it is not something that we can be measuring our lack of success or our success by because we missed something that was outside that particular track. So it is a difficult thing for us to be aware of. We are responding to: all the equipment is working; the crews are functioning well; the CATOs that are measuring them are saying that they are up to speed and doing their job well; and the expectation is that, if there is an illegal vessel in the area that they are looking at, they have a good chance of finding it and identifying it.

CHAIRMAN—When we were there we did not fly in your helicopter for very long, but we did a very quick hop from one island to the other. So we did not exactly go looking for suspected illegal vessels of any kind, but we did fly a lot of the Torres Strait in the Falcon at 500 feet or less. There was one hell of a lot of vessels out there. It is not very far from Papua New Guinea to the first island to the second island to the third island and to the fourth island. Next thing, you have hopped onto Cape York and you are on the mainland. There are an awful lot of islands, a hell of a lot of water and a terrific number of vessels of all kind. Have you got any ideas on how we best sort out which of those really are legal operations and which might be illegal?

Mr Earley—Personally, I have some opinions, but those are only as informed as my personal experience goes.

CHAIRMAN—That is okay. Share them with us. We're big boys.

Mr Earley—We had a meeting up there just recently with Coastwatch, because we were looking at how we could most effectively employ this asset. We have a lot of motivated people up there on our crews who want to do something they feel good about at the end of the day. They do not want to be out there boring holes in the sky, getting bored and wondering how successful they are. We were sitting down with the operations people. That is what I was referring to in the opening statement. There is definitely a partnership building whereby our opinions about some of these things will start to be fed back into the operations planning in Canberra.

There are aspects there of which we are unaware. They have intelligence input, and all of that will be put together and then the final result will be a tasking plan that progressively will increase the effectiveness of the aircraft. That is why I said that where we are at the moment is one snapshot in time along a road of development, as far as I am concerned. The aircraft was put into place with, I think, possibly not a crystal clear picture in the minds of some of the people who were involved in putting it there as to exactly how it was going to be employed. Some of the expectations, I think, were unrealistic in a fairly aggressive sense. Some of them were fairly pedestrian. I think there were some people who probably thought of it as a fixed-wing aircraft that might be able to be used as a helicopter sometimes. That becomes frustrating for our crews, because they see areas where they might be able to use it more like a helicopter. There are a number of areas there that bear further examination. Coastwatch is certainly listening and talking with us and talking about partnering to develop that.

CHAIRMAN—You have two Coastwatch helicopters?

Mr Earley—Yes.

CHAIRMAN—Are they totally dedicated to Coastwatch or do they service other clients as well?

Mr Earley—The two aircraft service all of the Coastwatch clients. The Longranger services all of the AQIS, Foreign Affairs, DIMA—

CHAIRMAN—I am talking about dedicated Coastwatch.

Mr Earley—They are dedicated Coastwatch except for the search and rescue call-out, which comes through AusSAR. Coastwatch has to release the aircraft for that task. I brought a print-out, because I thought it may be of interest. We have flown 48 or 50 hours in AusSAR tasking since January, which is roughly 10 per cent of the total utilisation. Of those flights, four were live winching with winch rescues of people. That is available, if you want a copy of that. But that is the only non pure-Coastwatch task that we get involved in.

CHAIRMAN—So you have used the winch?

Mr Earley—Yes, definitely. There is another winch-equipped aircraft in the Torres—a rescue helicopter—which we are also contracted to provide to Queensland Emergency Services. This aircraft is only used when it is out of range or it is a double winch requirement, which the smaller aircraft is not capable of. If it were the only winch-equipped aircraft up there it probably would be used more than it has been. But they are very careful not to use it unless that capability is required.

Senator GIBSON—With respect to the current Dash 8 capacity—and we are still expecting another one or two to come on board soon—in the Torres Strait, would it be your expectation that the helicopters would be better tasked if there is wider surveillance for the area?

Mr Earley—It is a question of working that out in practical terms so that it works. But the concept, I think, Anthony Patterson had originally was that the Dash 8 would come in at 10,000 feet and basically work like a poor man's AEW&C aircraft to maintain surveillance over a

larger area and tactically task the helicopter to go in and identify targets of interest. That probably refers back to your question about the movement of small boats. If there is intelligence that says that these are going to be moving at a particular time, they could even watch them. As I say this, you have to understand that my understanding of the Dash 8 capabilities is only from what I have heard anecdotally.

There are a lot of assumptions in here. Some of the people who have tried to marry these two things up have been frustrated with some of the limitations of surface vessels that they wanted to involve in this process. I think the original concept was that the Dash 8 comes in over the top, identifies targets of interest, the helicopter is tactically directed to a target of interest and then determines whether the RRVs will come in with a response team. They found that the RRVs could not work at night. There were some reasons why some of this fell over before I came on the scene. But there is, I believe, a lot of scope for that kind of development tactically to exploit the capabilities of each piece of equipment.

Senator GIBSON—So your expectation would be that when Coastwatch does have this greater capacity of aerial surveillance from Dash 8s the deployment of the choppers that you operate for them will be more effective?

Mr Earley—Yes, I would think that is a fair statement.

Mr Bizjak—Yes, in a response role it would be more efficient and effective.

Senator GIBSON—Could you explain that? Do you mean in a direct response technical sense?

Mr Bizjak—In a response involving taking officers out there for apprehension or identifying the vessel. The Dash 8 has an identification limitation with height. And we can get a bit lower than the Dash 8. Therefore, if they cannot identify it with their FLIR we would be asked to respond to that.

Mr Earley—Mind you, if the government buys AEW&C aircraft in the meantime you might not have a poor man's AEW&C up there but a very effective AEW&C coverage up there.

Senator GIBSON—If that were available, how would you expect your tasking to be affected?

Mr Earley—It is dreaming a little bit, but I would expect that there would be situations where there could be some very specifically tasked response targets. I probably should not speculate much further here. But in relation to black flights and things like that, if they know where a flight is terminated, you can get a response team to that point relatively covertly with a helicopter.

Mr COX—Would you say that the helicopters could be better used if they were able to be directed in that way for actual response rather than for surveillance?

Mr Earley—If I can come at that indirectly, out of that meeting that we had on Thursday Island with operations people, I think all of us on the Reef side became aware of considerations

that were present in the Canberra tasking that we had previously been unaware of. It helped us appreciate why some of the tasking was being done the way it was. To answer your question, it is difficult to do so from just our perspective, because there are a lot of other intelligence and concepts being used in Canberra that I think supplement what we can see. There is a sense that we need to have a bit of trust, too, in the thinking behind some of that tasking.

Mr COX—But is it your impression that some targets are not responded to because of a lack of response assets—whether they are boats rather than helicopters?

Mr Bizjak—That has happened on one occasion where there have not been boats available. We actually have detected a vessel inside the fishing area but, due to no assets being available, I do not believe there was any response.

Mr COX—What sort of vessel was it?

Mr Bizjak—It was a type 3 fishing boat.

Mr COX—An Indonesian one?

Mr Bizjak—Yes, an Indonesian one.

Mr COX—We had a bit of a discussion about this on Thursday Island, but it is probably worth getting it on the record. The committee had a confidential submission that was fairly critical of the FLIR as being an unsuitable surveillance capability. The person who put in the submission described it as being like trying to find a lost set of keys in your backyard with a pen light.

CHAIRMAN—You've got a good memory!

Mr COX—Would you care to comment on how well you think the FLIR is for broad area surveillance as opposed to locating something that you already know is there?

Mr Bizjak—I do not believe the FLIR was developed as a primary sensor. It does have a limited capability of autoscan with an autotrack function, where it automatically scans an area which we can define and also autotrack a vessel. It will autodetect that vessel as well. Obviously, that is limited due to weather, the aircraft's height and sea state. All of those variables come into the picture. We have detected merchant ships out to 18 miles. Obviously, it depends on the size of the target and the heat that is being radiated from that target or reflected from the target. There are a lot of variables in there. Obviously, dinghies are very hard to detect, with just the engine cowling being detectable. If the person is only wearing a T-shirt and shorts they are a lot easier to detect if they are standing up in the vessel. You will probably see him before you see the boat. You can detect a lit cigarette from probably 20 miles. It is a very good sensor.

CHAIRMAN—We'll ask all the illegals to smoke!

Mr Bizjak—Obviously, yachts are very hard to detect because there is not a great deal of heat. Normally, a person up on the deck would be the primary sensor there. I offer the videotape footage of the FLIR into evidence. I have been asked to bring that down.

Mr COX—Thank you.

Mr Bizjak—In summary, it is not a primary sensor, but it does have a limited surveillance capability.

Mr COX—For the sorts of things you are being asked to do, is it a pity that you do not have a radar?

Mr Bizjak—If it were purely a surveillance platform, obviously a radar would be very handy. However, with the response, the additional weight of the radar would hamper our distance. At the moment, with four crew and a belly full of fuel one additional person will degrade the distance we can travel. Having a radar fitted would severely hamper the aircraft's distance.

Senator WATSON—Do you already have what is known as tilt rotor technology on your helicopters and do you intend to have that technology? That would give you a bigger range, wouldn't it?

Mr Earley—Are you referring to my reference to it?

Senator WATSON—Yes.

Mr Earley—When we were in the States in February we met with the tilt rotor project people and the Deep Water Project staff over there, talking about where they were with tilt rotors— with UAV tilt rotors. It was more a projection that into the future they will be available and probably very useful for, I think it was, the 70 to 400 mile range offshore. Anything short of that, you would still pretty much want to be using helicopters and beyond that you would want to use fixed wing. But there was an area in there which, in future planning, if we were continuing to be involved in Coastwatch we would be looking to that technology as a possible contender for the task.

Senator WATSON—Could you describe it simply to the committee? What does it involve?

Mr Earley—What is involved in tilt rotor?

Senator WATSON—Yes.

Mr Earley—It is basically an aircraft that is capable of vertical take-off and landing with tilting large propellers that are allowed to slowly progress into forward flight and then enjoy the high-speed characteristics of a fixed-wing aircraft with reduced costs and range enhancement.

Senator WATSON—In terms of safety, how do they compare with a helicopter?

Mr Earley—At this stage, they are very comparable. There has only been one major accident, and that was not really a function of the technology. The US Marines are using the Osprey, which is a 22-passenger version of it. The one that Deep Water Project was looking at is about a six-passenger version, very similar in size to, say, an Islander. But the advantage of a tilt rotor situation like that is that you could be well offshore and not be limited to the high speeds of a fixed-wing aircraft. If you needed to, you could slow up for low-slow identification passes. They have even got a winch rescue capability.

Senator WATSON—That would be an entirely different helicopter from what you operate at the moment?

Mr Earley—Yes, very different.

Senator WATSON—It is a new concept?

Mr Earley—We are talking about something that does not exist in Australia at the moment and that is just becoming a common aircraft in US defence circles. But certainly the oil industry has already got one on order in Australia for the west coast, and that is due for delivery in about two years. It is in the immediate future and it was only mentioned as an example of technology into the future that probably everybody would be well advised to seriously consider.

Senator WATSON—You said you have now moved your operations to Horn Island?

Mr Earley—No. We are in the process of trying to do that—but not our operations, just the 412.

Senator WATSON—Will you also be landing the 412 on Thursday Island?

Mr Earley—We will be landing the 412 on Thursday Island for daytime requirements if there is a requirement to pick up clients, and we will still be landing there for response flights, where we have to pick up, say, Federal Police—

Senator WATSON—In your present location or around the corner?

Mr Earley—Currently in the present location. Around the corner has some fairly serious limitations at the moment. Until those limitations are overcome, we are not interested in—

Senator WATSON—What are the limitations?

Mr Earley—No shelter, communications, power, lights, security or water. If you are doing a configuration change—for instance, you are taking a million-dollar console out of the aircraft and leaving it on the side of the road—where they have their parties on Saturday night. It is just not an option at this stage. We have talked to some of the principal representatives of the residents there, and they are happy if we move to Horn Island in terms of the noise issue. They are happy if we move the night operation. They are happy to accept a much-reduced night landing onto Thursday Island compared with the current situation, and they recognise the limitations of the other site. But in the future that may become an option.

CHAIRMAN—On page 3 of your submission you state:

Australian Marine Pilots guide thousands of ships a year in Australian waters and their observations could provide an additional intelligence source for Coastwatch. In the Holloways beach SIEV incident last year—

1999—

a marine pilot of Australian Reef Pilots reported the illegal immigrant vessel two days prior to its landing but apparently the report was not directed to someone who appreciated the import and could act on its content.

Can you expand a bit on that? How do we overcome that sort of problem?

Mr Earley—Our sister company is Australian Reef Pilots. In my interaction with them, one of them said, ‘You realise we saw that and we reported it. Why don’t they use what we see, because we see a lot of stuff?’ So I passed that on to Coastwatch, and Coastwatch is currently working it through the system in whatever way is required to look at capitalising on that as an information source. It made a lot of sense to me. They are tracking up and down the coast in the same lanes as some of these vessels and they see suspicious vessels. Their report is probably at least as valuable as anything a passing aircraft could provide, because they are extremely knowledgeable marine people. Remember, this report was written in June. A lot of things have happened since then, but that has progressed. Coastwatch could tell you where it is at the moment.

CHAIRMAN—We just might ask them. When you were talking about moving the Bell over to Horn Island for at least part of the time, you talked about ferrying people around. If I remember rightly, when we held our discussions on Thursday Island there seemed to be a lot of requests for using these assets to ferry people around.

Mr Earley—Not the 412. John can confirm or correct this, but the people on Thursday Island are fairly careful to keep the 412 to its principal task of surveillance and response and to continue to use the Longranger for what they call the hump and dump—which is not a very nice term, but it is basically ferrying people around. They do the movement of people for all of the clients. If you are going to use the 412 for that kind of work, then you better have a very good reason for using the more expensive aircraft for ferrying people around. The operation on Horn Island is not going to result in any of that, that I am aware of, more than currently. It just means that we have to get from Horn Island to the Thursday Island pad to pick up a response team. The response team may be federal police, may be Customs people or may be AQIS. That is at this stage a once-a-month event, but we have a contractual requirement to make all that happen within 45 minutes. So the pressure is on us when we move to Horn Island to do so in such a way that that is not jeopardised.

Mr Bizjak—Essentially the smaller helicopter will be used for day responses, whereas the 412, being all-weather/night capable, will do the night responses. As David mentioned, it is probably once a month, on average.

Senator HOGG—What percentage of your operations would be at night?

Mr Earley—Up until now I would say probably 75 per cent.

Mr Bizjak—It depends which aircraft we are talking about. The 412 would be closer to probably 90 per cent.

Mr Earley—That is possibly going to change, because it was also an item of discussion in this concept review meeting. I think as people in Canberra and people in Customs begin to develop a better appreciation of the capabilities things will change. You can fall into a way of doing things without questioning whether it is the most effective way. In that meeting there were some expressions of openness to balancing that up a little bit because of some of the advantages of the aircraft in a daylight situation. But up until now the majority has been at night.

Mr COX—I have a question about unauthorised aircraft movements. Do you have any impressions about how many there might be across Torres Strait?

Mr Bizjak—I would not even hazard a guess.

Mr COX—Have you ever seen anything that you think is an unauthorised aircraft movement?

Mr Bizjak—If we do detect aircraft, we are contracted to report those, and we do. However, all of those have turned out to be civil aircraft—just air transport.

CHAIRMAN—That is interesting. So you have not picked up any at all?

Mr Bizjak—No.

CHAIRMAN—Gentlemen, thank you very much. You have given us some material and we thank you for that. Thank you for transporting us from Horn Island to Thursday Island and for your submission and your cooperation with the inquiry. We have a roundtable meeting in November. I think we intend to pretty well wrap it up this calendar year and table the report early next year. We will certainly send you a copy.

Proceedings suspended from 10.20 a.m. to 11.07 a.m.

ARLEY, Brian David, Project Consultant, Island Watch

CHAIRMAN—Welcome. Do you have anything to add to the capacity in which you are appearing?

Mr Arley—I am a consultant with the Island Watch initiative, which was originally submitted by the Torres Strait Islanders Media Association but is now under the carriage of the Island Coordinating Council on Thursday Island in the Torres Strait.

CHAIRMAN—We have received your submission, which we read with interest. Do you have a brief opening statement you would like to make before we ask you questions about the submission?

Mr Arley—Yes. The proposal really grew, I guess, from my childhood in growing up in the region. I read a lot of war comics, as kids usually do. Looking at the needs of the Torres Strait and also what telecommunications initiatives such as Networking the Nation can do, I made that connection. Based on the old Coastwatchers from World War II, I thought it would be a good exercise and definitely fruitful for all organisations and local communities if there was something where organisations and local people had access to telecommunications to do basically what the Coastwatchers used to do way back in World War II—protect against illegal immigration, pest and disease control, Federal Police activities, defence and so on. So that is really the broad brush picture of what is behind it.

Where we are at now is that we last submitted a \$3.3 million bid to Networking the Nation in March 2000, but they have come back and given us \$100,000 to continue our consultations and to build up the business case side of the application for the next round in March next year. So that is where we are at now.

CHAIRMAN—Does the business side of the case that you have developed include acting as information to suppliers to Coastwatch?

Mr Arley—Absolutely. As most people would probably assume, in the Torres Strait there is not a lot of employment. There is primary industry activity, mainly fishing, and government work. That is the primary source of income. This application is predicated on the usage for a fee for government agencies that are under the umbrella of Coastwatch and others—the Bureau of Meteorology and others. It is definitely based on that. Part of the business case modelling is getting those organisations—Customs, Quarantine, Immigration—to basically commit to the project in a more solid way than they have up to now.

CHAIRMAN—Have you held discussions with Coastwatch?

Mr Arley—Not as a block. We have discussed this with the following: Customs, who have been very encouraging; Quarantine; Immigration and Multicultural Affairs—they were not that encouraging, but these things happen; and the Defence Force, which has been encouraging. So there has been some good feedback from some key agencies, but it is something that we need to work on.

CHAIRMAN—Did you have those discussions on the mainland or on Thursday Island?

Mr Arley—On the mainland, in Brisbane. We did invite those agencies up to Thursday Island when we had our consultative meeting in late 1999, but not many appeared. Then we had a further meeting down here in Brisbane on 6 December, and a few agencies turned up then, both state and federal.

CHAIRMAN—By the way, we have recently visited Thursday Island and met with all the agencies there. We had a brief trip on the helicopter and we did fly a majority of the strait in a Falcon at fairly low level. So we have some understanding of the geography and a minor degree of understanding of the communications problems. We were informed by the government agencies while we were there that the UHS digital radio network currently in use is an excellent and secure common radio network. In your submission you commented that Thursday Island, Prince of Wales Island and Horn Island have limited telecommunications access and the other 13 islands have little or none.

Mr Arley—This was done in 1998. So the network you are talking about was probably rolled out after that. It is there. We would ideally look at that as supplementing what we want to do in terms of access to a master broadcast and so on. So there would be gains for, I guess, both us and those other agencies.

CHAIRMAN—You said in your submission that a large number of key agencies did not respond to the survey questionnaire conducted by a commercial telecommunications firm. Do you think it demonstrated a lack of enthusiasm in what you are trying to accomplish?

Mr Arley—Basically, what we are trying to do is probably what all levels of government try to do, and that is to achieve a degree of coordination where those resources that each agency has are pulled into the one body, if you like, or the one entity. That would be usage of the telecommunications infrastructure on those four inhabited islands. We are trying to bring them all together and share their common needs, be it surveillance or whatever, but to share those needs under the one umbrella. As you guys would know better than I, the wheels of government turn rather slowly. I do not want to be too critical, but that is what happens.

Something coming from the outside, as we have, is innovative. It is new. It is contingent on a lot of federal funding which we may or may not get. I guess there is an element of uncertainty as to whether it will progress. These things come into play, but a few agencies have responded, to their credit, and we thank them for that. I guess that was probably why Networking the Nation assessed it the way they did and made the determination that, instead of giving us the \$3.3 million we sought, they said, 'You build up your business case study, get those other Coastwatch agencies and others to really commit to the project—be it through memorandum of understanding or whatever, but something a little firmer than what we have got.' I guess that happens. We accept that and we are trying our best to get over those hurdles.

CHAIRMAN—On page 4 you commented:

Local people would be employed to use the digital Island Watch equipment for daily surveillance for suspicious sea vessels.

How do you see that happening? What sort of training is necessary? To what degree are these real employment prospects?

Mr Arley—From the employment prospect side first, that would be contingent on those agencies that would choose to use local people in those situations. I think Immigration and Customs do to a degree already. There may be others, and I am sorry if I have neglected those. That would be contingent on them coming to the party and saying, ‘Yes, we think it’s a good idea. We will support local people in terms of on-the-job training to do those sorts of activities people have done.’ We have discussed similar models. It might be like Neighbourhood Watch where some incentive is given towards people being active as those Island Watch agents on the ground, if you like.

That sounds easy, but there are other factors there, too, that have to be acknowledged. One thing that we would envisage that this would do would be to create a sense of ownership where local people actually have a chance to be involved rather than the sort of fly-in agents who come in. Some of them are local people, but they are actually agents for somebody else. We are hoping it has the added effect of creating a sense of ownership and more public interface and involvement with those agencies. These are things that we will explore through that process over the next 12 months of tying it down.

Senator WATSON—How many people are you envisaging employing or having in your network? How will they be dispersed around the various islands, because you do not want them all in the one place?

Mr Arley—Exactly. When we did our telecommunications survey, it really became obvious that we could not outfit each island to the telecommunications linkages they need—the digital access. We could not do it with the budget we had. So we settled on four islands to act as regional clusters throughout the region. They would work in that principle where you would have on each of those four islands a paid operator who operates full time, but local people would have that opportunity to come in and be involved with it. Those paid operators would be the first and foremost agents looking after it on the ground.

In terms of extension of it, that is something that we would have to go through after a pilot. We would have to see where we are at after two years or two and a half years and exactly what the possibilities are of it succeeding and being rolled out to other islands. That is the best answer I can give at this stage—four operators, with one on each island and supported by a staff of three on Thursday Island.

Senator GIBSON—On page 6 of your submission you say that initial revenue projections indicate that the Island Watch initiative would generate around \$2 million per year, which is based on an average usage rate and fee cost from each of the 27 agencies of \$77,000. Have you floated that proposal and that amount with the agencies?

Mr Arley—Not at this stage. We have also commissioned a telecommunications survey which detailed a lot more, and I can send that to you later on if you like. That gave us a lot more concrete costings on what our operating costs would be. Certainly we have not gone and dotted the i’s and crossed the t’s or anything with those key agencies yet. That was a ballpark figure and that is really optimistic as, I dare say, 27 agencies would not get on board. There would

probably be no time left after that. That gives us an indication of where we are at and the sorts of revenue we would need to collect to continue the operation of it.

CHAIRMAN—We understand that there is drug trade between Papua New Guinea and mainland Australia through the Torres Strait and that perhaps to the largest extent it probably occurs in very small dinghies simply island hopping and running at night and lying around during the day for a day or two or whatever and continuing to move on. Do you also understand that?

Mr Arley—Yes. We are aware of that. That is a problem and certainly local island leaders recognise that problem. Looking at the other side at perhaps some of the reasons, there is a lot of unemployment. If they had the chance to make a quick dollar some people would take that opportunity. It certainly would be something that we would like to address through the submissions—that transportation of drugs through the Torres Strait—and certainly have our local people involved with that process to try to minimise that flow through the region. But it is an entrenched problem and not something that will go away overnight. I would hope that we can make some effort towards addressing it through this proposal.

CHAIRMAN—With the greatest of respect, aren't you talking about a very complex sort of organisational structure, a very high degree of training to understand what is going on and the ability to move the information on to Coastwatch so that something can be done about it theoretically at the other end or somewhere in the middle? It almost sounds like a huge, if you will, network of people and a really huge training problem.

Mr Arley—I guess the training side of it will always be a problem for us. Initially, we will not be able to deliver that on site to people; they will have to come down to Brisbane or wherever else to get that. Down the track that can be something delivered, we would hope, through the video conferencing facility of it and also supported by sessional workshops wherever. That is going to be a problem. I guess we will address that as it progresses.

CHAIRMAN—You say in the submission that a number of local people on a few inhabited islands are employed now part time to monitor and administer immigration activity in the region. Can you tell us a bit about that?

Mr Arley—They are the MMOs, the migration movement or monitoring officers, I believe. They are under DIMA, the Department of Immigration and Multicultural Affairs, and their role is similar to the Coastwatch type thing where they actually are agents of DIMA, and DIMA could tell you more about that than I can. They operate under the auspices of DIMA and report anything suspicious in terms of movement monitoring in the region plus look at what is happening with the northern-most islands—Saibai, Boigu and Dauan—in terms of traffic from PNG and perhaps Irian Jaya and also just monitoring that sort of traffic, be it cultural, trade or whatever. That is my knowledge of it.

CHAIRMAN—Under the Island Watch model, you say illegal immigration could also be monitored by looking for unidentified vessels or suspected illegal vessels?

Mr Arley—Yes.

CHAIRMAN—I do not understand exactly how you see this model progressing. We pay people for taking on these substantive roles. I think it sounds like a terrific idea. Reading your submission, I am not necessarily convinced of the practicalities.

Mr Arley—There would be the four agents at those four islands we have discussed. In relation to the others, that is something where maybe we have to adopt that Neighbourhood Watch model where there is some sort of reward or incentive for people to be involved with it. Local knowledge counts for a lot. You go up there and you hear tales of people saying, ‘Yes, we saw the boat that they picked up at Cairns’—or wherever—‘it came past us.’ Local knowledge of tides and times would tell us that it would get to the other island at XYZ time. There is a depth of knowledge that perhaps is not tapped. We are hoping that, by providing an access point and someone locally who can access that information, that would bring that information in to be then sent on to the relevant agency—whichever that might be. That is how we envisage it working. There would be some sort of incentive system, if you like, for local people to be more involved with it and to take a bit of ownership of that particular issue, whether it be illegal immigration, drug trafficking or whatever.

CHAIRMAN—We heard from Reef Helicopters this morning, who also have an involvement with Reef Pilots, that ship pilots who operate through the Torres Strait have a really good knowledge of what vessels normally operate and are operating legally—fishing, transporting goods or transiting through, such as legal yachts that are simply sailing past or whatever. We understand that there is consideration now given to a greater contract role between the pilots on the ships and the Coastwatch organisation. You are really proposing the same sort of scenario from local people, but on the ground.

Mr Arley—I guess it could assist Reef in that scenario, too, in that, say they have digital images of a vessel, if those links are in place, then they could be at Saibai or wherever—an outer island—and they could send those images to the relevant agency digitally and then they would be picked up, assessed and what-not and maybe identification processes or detection processes could take place from there. I guess they are not meant to be running in opposition. They could certainly run in tandem and one, if you like, could be sea based and the other could be land based.

CHAIRMAN—At what level have you held discussions with Coastwatch?

Mr Arley—Coastwatch as an entity?

CHAIRMAN—Yes.

Mr Arley—None, but we have discussed that with various agencies that make up Coastwatch.

CHAIRMAN—Client agencies?

Mr Arley—Yes, but none specifically with Coastwatch as such.

CHAIRMAN—At what levels with those agencies?

Mr Arley—Customs came to our meeting in Brisbane. I do not think there was anyone from Immigration, but definitely Customs came and perhaps there was someone from AQIS; I am not sure. Customs were there. We definitely discussed it with Customs, sounded out AQIS about it and also the Defence Force—ADF. They have expressed an interest in it, but that interest is still there. The Australian Federal Police have also responded encouragingly. So those four have been pretty good in terms of listening to the idea, assessing it and then getting a response back to us.

One of the problems they have all suggested—and it is quite fair; it is quite a legitimate concern—is the security of that information transfer, and that is always going to be an issue. Again, with encryption and various data encryption methods, these things can be overcome. It is just going to be a software problem that we have to deal with as it progresses. In answering that question, yes, there has been a little bit of interest from agents that make up Coastwatch. We are hoping to build on that interest.

CHAIRMAN—Good. Thank you very much for your submission. I found it fascinating. Thanks for coming today. We are sorry about the mix-up with the time.

Mr Arley—It was my mix-up. We definitely want to consult with Coastwatch in the future. Given that Networking the Nation has supported us so far, we have a reasonable chance, subject to building a good business case study, getting infrastructure and submitting it in the next round, of securing the funds for it. At least we are not that far off it.

CHAIRMAN—We will be continuing our inquiries through November and early December and we will try to wrap it up. We will report early next calendar year. We will certainly send you a copy of our report. Again, we thank you for your submission and coming to talk to us today. The committee resolves that a copy of operating schedules and a video of FLIR operations from Reef Helicopters be included as committee exhibit No. 11. Thank you colleagues, Hansard, participants, Coastwatch and observers.

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

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

Committee adjourned at 11.27 a.m.