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Proof Committee Hansard

JOINT COMMITTEE OF PUBLIC ACCOUNTS AND
AUDIT

**Reference: Review of Auditor-General's reports
second quarter 1997-98**

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JOINT COMMITTEE OF PUBLIC ACCOUNTS AND AUDIT

Monday, 22 March 1999

Members: Mr Charles (*Chair*), Mr Cox (*Deputy Chair*), Senators Coonan, Faulkner, Gibson, Hogg, Murray and Watson and Mr Andrews, Mr Brough, Mr Georgiou, Ms Gillard, Mr Griffin, Ms Plibersek, Mr Somlyay and Mr St Clair

Senators and members in attendance: Mr Brough, Mr Charles, Mr Cox, Mr Georgiou, Ms Gillard and Mr Griffin

Terms of reference for the inquiry:

Review of Auditor-General's reports second quarter 1997-98

WITNESSES

ASKER, Commodore Eoin Michael, Director General, Undersea Warfare Systems, Defence Acquisition Organisation	138
GAIREY, Mr Mark Christopher, Director General, Acquisition Planning, Defence Acquisition Organisation	138
LAMACRAFT, Rear Admiral Richard, Head Systems Acquisition (Maritime and Ground), Defence Acquisition Organisation	138
MUIR, Mr James Gregory, Director, Acquisition Review, Defence Acquisition Organisation	138
OHFF, Mr Hans Jurgen, Managing Director, Australian Submarine Corporation Pty Ltd	138
OXENBOULD, Rear Admiral Christopher John, Deputy Chief of Navy, Royal Australian Navy	138
OXLEY, Mr Brian William, Government Liaison, Australian Submarine Corporation Pty Ltd	138
WATTERS, Mr Gilbert Michael, Director General, Acquisition, Finance and Reporting, Defence Acquisition Organisation	138

Committee met at 10.04.

CHAIR—I open today's hearing which is the second follow-up hearing to examine further the Auditor-General Audit report No. 34 1997-98: *New submarine project*. The committee has received one public submission from the Department of Defence in relation to the audit report.

I must ask the participants to observe a number of procedural rules. First, only members of the committee can put questions to witnesses if this committee is to constitute formal proceedings of the parliament and attract parliamentary privilege. If other participants wish to raise issues for discussion, I would ask them to direct their comments to me, and the committee will decide if it wishes to pursue the matter. It will not be possible for participants to directly respond to each other.

Second, I remind witnesses that the hearings today are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. The giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. The evidence given today will be quoted by *Hansard* and will attract parliamentary privilege.

Finally, I refer any members of the press who are present to a committee statement about the broadcasting of proceedings. In particular, I draw the media's attention to the need to report fairly and accurately the proceedings of the committee.

[10.06 a.m.]

ASKER, Commodore Eoin Michael, Director General, Undersea Warfare Systems, Defence Acquisition Organisation

GAIREY, Mr Mark Christopher, Director General, Acquisition Planning, Defence Acquisition Organisation

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OXLEY, Mr Brian William, Government Liaison, Australian Submarine Corporation Pty Ltd

OXENBOULD, Rear Admiral Christopher John, Deputy Chief of Navy, Royal Australian Navy

CHAIR—Welcome. Firstly, I would like to say that we have had a new order of complexity put into this brief inquiry. We all understand that we first had the audit report which led to this series of hearings broken by an election. Secondly, it is our understanding that Defence has provided a summary of where we are to the minister. Thirdly, we undertook this inquiry which we hope to complete very shortly. Fourthly, the minister has announced an independent inquiry to be conducted separately. For the last two, we have no knowledge of the direct report of Defence to the minister, but I would hope that our report and the independent report would say the same things about the same issue. If the independent report wishes to pursue issues beyond those that we have pursued, that is a matter for them. But on the issues that we have pursued so far, and which I hope we will cover again briefly today, you can understand that we would not want to be placed in a position where our report said one set of things and the independent report said something else. In a sense, I am saying that it is to everyone's benefit if we get it right today and we get off this thing and get on with other issues for the committee and for the parliament. Is that accepted?

Mr GEORGIU—It really does not matter whether our report differs from the other report. What matters is that we get the same information on which we may base different conclusions.

CHAIR—Our conclusions may be different. Basically, I think Mr Georgiou is correct. As long as we have the same information to start with, I would have thought we are unlikely to reach different conclusions, Mr Georgiou.

Mr GEORGIU—I will suspend judgment on that one.

CHAIR—Following on from previous hearings, do any of you have any brief opening statements that you would like to make today?

Rear Adm. Lamacraft—Mr Chairman, if I may make one brief statement: at the last hearing a number of questions were taken on notice and some preliminary material was provided last Friday—and I see you have it in front of you. I have seen it this morning, as has Commodore Asker, and there are a number of presentational issues in there which we would like to fix before we provide it to you to be studied in some detail. There are some things which could appear to be misleading; there are some things where numbers are compared and perhaps the underlying assumptions are different. We were conscious of the meeting today, so it was provided in a hurry. It has not been staffed as fully as we would like, and there are some aspects which I think you will find confusing.

CHAIR—Would you like to withdraw this submission?

Rear Adm. Lamacraft—That would probably be the simplest way to do it.

CHAIR—Is there any problem with that?

Mr GEORGIU—Mr Chairman, I do have a problem with that. We asked for specific data; we were committed to specific data. I have had a look at the material, and I almost got out a magnifying glass to distinguish ‘accepted into naval service’. What is the technical term?

Rear Adm. Lamacraft—Accepted into naval service.

Mr GEORGIU—Yes, accepted into naval service. I could not make head nor tail of it, but I am unhappy about the submission being withdrawn and replaced. I would just like an explanation today of what the situation actually is, and I do not think that should be too difficult.

Rear Adm. Lamacraft—No, I certainly think we could talk about it in general terms. But as I say, the presentation as it is at the moment is misleading—not intentionally.

Mr GEORGIU—No.

Mr GRIFFIN—What do you propose to do then? Do you propose to drop the submission and provide another one at a later date, or do you want to talk to it?

Rear Adm. Lamacraft—The neatest thing, it would seem to me, would be to withdraw it and for us to replace it with a clearer presentation.

Mr GRIFFIN—When?

Mr GEORGIU—I would like the stuff outlined today. It is quite simple.

Rear Adm. Lamacraft—We can cover the material.

CHAIR—Can we leave it on the table today and withdraw it at the end of the hearing to be replaced?

Rear Adm. Lamacraft—That is fine.

CHAIR—Is that all right, Petro?

Mr GEORGIU—Yes, as long as we get an explanation of what we want to know.

CHAIR—That procedure is accepted.

Mr Ohff—I would like to thank the committee for inviting me to this hearing. I understand the hearing is not, strictly speaking, into the Australian Submarine Corporation, but it gives me an opportunity to answer questions the committee might pose to me. I believe the project has been unjustifiably criticised. In many ways this has done great harm to the Australian submarine community and, in particular, to the Australian Submarine Corporation. The criticism that particularly has been levelled in the media over the past two or three years is very hurtful to the many employees of the Australian Submarine Corporation and to the 7,500 engineers and managers that have been involved in this project over the last 10 years. I am very proud of my employees for what has been achieved. I hope I can answer some of the questions that still may be outstanding today.

CHAIR—Thank you very much. To put it back in perspective, since this is the first time that you and Mr Oxley have attended one of our hearings, there are altogether six issues that we have concentrated on. One of those we have quit inquiring into because we cannot get any further with it. But the six, in no order of importance but as I recall, are the cost to complete, safety, noise—

Mr GEORGIU—The weapons system.

CHAIR—the weapons control systems and capacity—that is, the phase-in/phase-out of the Oberons and the Collins class. The sixth issue, which we have quit trying to find any more about, is the issue surrounding the cancellation of the insurance. Those are the issues that we are discussing, that we have discussed and that we will try to finish today. Have we any more information about the cost to complete?

Mr Muir—I could give some updates on our situation as far as the estimate to complete is concerned, but since Mr Ohff is at the table he may also be able to add some contributions from the company's side. You will recall that I was present at a committee hearing last year and we discussed in some detail at that time a surveillance review that we had conducted of ASC's cost schedule control system and a view that we had at that time of

the estimate to complete. That was updated and reiterated at the last hearing of the committee.

Since that time ASC has been providing to the Commonwealth some reports from their own value system, or cost schedule control system. Those reports show data, including estimates to complete on our production effort. That data is provided in terms of man hours rather than in terms of dollars, but it does give the Commonwealth a good view of the company's performance on the remaining production work on the submarines and how that is projected out over the rest of the life of the project.

We do the surveillance reviews of the cost schedule control system on an annual basis. The next review of that in fact is planned to occur in May of this year, and that will follow a comprehensive estimate to complete conducted by the company planned for April of this year. At that time we will have a more complete up-to-date view of the estimate to complete and where it is headed. However, the data that I mentioned we have been getting on the man hours does reinforce the same view that we had last year in terms of where the estimate to complete is for the company overall. Those figures, I think, were mentioned last time in camera, so I will not mention them here in the public hearing. But the data that we have been getting from ASC is consistent with those estimates to complete figures that were mentioned last year. When we do another full review in May, we would expect to see a fairly similar picture to what we saw last year.

CHAIR—Thank you for that. At the last public hearing, Mr Garry Jones, Deputy Secretary, Acquisition, Department of Defence, said:

In summary, our view remains that adequate financial resources are available to the company—

that is, ASC—

to complete the work as currently contracted, and I would go further to say that, from the point of view of the Department of Defence, it is our current expectation that we also have current funding approval to complete the project.

Do you concur with those statements?

Mr Ohff—Entirely, Chairman. We are 95 per cent complete with the project. We have a slight overrun on the actual production hours, and we would probably spend an additional seven per cent of the total available revenue to complete the project. The project will be completed by June 2001, that is, within budget as I have budgeted, and it is also within schedule. There is a general misconception, I believe, that the project is some 18 months to two years late. I entirely disagree with that position. The submarine is precisely on time. In fact, we are to deliver in June of the year 2001, but I believe that we will actually deliver ahead of time.

CHAIR—Can we address the timing issue a little further along. I go back to the costs to complete. I would refer you back to the JORN issue which the committee inquired into—a major inquiry. Of course, while Defence was able to say in terms of the JORN issue that contractually the Commonwealth was not going to spend any more money than the contracted amount plus maintenance and other variations, in fact the Commonwealth had a

liability through its 100 per cent ownership of Telstra nee Telecom, and I would remind you that the Commonwealth is a major shareholder in your company. So I ask: do you believe the Commonwealth will experience any liability by the time this project is finished?

Mr Ohff—There is always a liability as long as you have a project of this magnitude. Having said that, the budgets provided, in my opinion, are well in excess of what is required to complete the job, that is, cash reserves. Also, we have in place bank guarantees and shareholder guarantees. One shareholder, of course, is the Commonwealth, so we have shareholder guarantees in place from both the Commonwealth and the other shareholders. We also have in place guarantees from our subvendors. Overall, we have some \$400 million to \$500 million in sureties in place, which I consider well in excess of what is required to complete the job.

CHAIR—So you would expect the Commonwealth not to be out of pocket more than the value of the contract plus variations?

Mr Ohff—Absolutely. However, I have to put a caveat on this. The Commonwealth is a strong driver in actually pulling dividends and fees out of the project, and my other shareholders are quick to oblige. A degree of discipline of course needs to be exercised, not to draw funds out of the project unnecessarily.

Mr GEORGIU—Mr Chairman, could I pursue one question? I do not want to forget things later. Mr Ohff, you said that the subs would be delivered precisely on time. I do not understand that.

Mr Ohff—I actually said that in my opinion they will be delivered ahead of time when the last submarine is completed.

Mr GEORGIU—Sorry, I thought you said precisely on time. So there is no delay on the subs? What we have been told about 18 months to two years delay is an exaggeration?

Mr Ohff—It is not an exaggeration. It is an incorrect statement.

Mr GEORGIU—Admiral Oxenbould, do you agree that the subs are being delivered, at the very least, precisely on time or, even better, ahead of time?

Rear Adm. Oxenbould—Not with the schedule that we were working to. It might be better to ask the project to respond to that question, though, because it is a project and acquisition matter.

Mr GEORGIU—In a situation in which there have been a variety of statements made which need to be examined very closely, I do want reassurance that there is consensus that subs that have left us with an operational capacity of one submarine accepted into naval service is what was intended and what was agreed.

Cdre Asker—If I could speak in respect of that, Mr Georgiou: what we have here is, I guess, an attempt to provide different interpretations on delivery. When we went into contract in June 1987 there were contracted delivery dates. There have since been subsequent

contract amendments. These have affected the delivery dates, and I believe what Mr Ohff is referring to is the currently contracted delivery dates. That is the contract that exists between ASC and the Commonwealth.

Mr GEORGIU—Not to put too fine a point on it, you are saying that the subs are being delivered and are coming into operation as you expected them when you entered the contract?

Cdre Asker—No, that is not what I am saying. What I am saying—and I believe Mr Ohff would like to say a few words on this—is that there has been a shift in the delivery dates of the submarines between those which were contracted back in 1987 and those which are currently contracted by the latest contract amendment.

Mr GEORGIU—So the appropriate part of Navy does accept that there has been no delay in this project, that the submarines are being delivered precisely on time or ahead of time? At that stage I get a little confused. The fact that you have entered into contract variations is not quite the same as saying that they were delivered as they were contracted for.

Rear Adm. Lamacraft—I think that statement you have just made is rather misleading. The point we are trying to make is that we started off with a contract which specified some dates. Those dates have been changed by contract amendments. So when we are talking about delivering on time now, we are talking about the current contract as it is written at the moment. That is, they are not the same dates as originally contracted for.

Mr GEORGIU—So my statement is misleading because I said that, according to those first contracts you entered into, it is now running of the order of two years late? Your response is, ‘No, that is not so because we have altered the delivery dates,’ and my statement is misleading.

Rear Adm. Lamacraft—Yes, it would be.

Mr GRIFFIN—Can we clarify this? I am getting a bit lost here. What exactly do you mean?

Mr Ohff—It is very simple. When you enter into a contract you would always have a force majeure clause as part of your contract—for acts of God, one of which is weather. Our submarines are being trialled over a period of at least 12 months. When weather prevents us from carrying out these trials, we are entitled to a time extension. Our submarines have been trialled against assets provided by the Commonwealth, such as aircraft, other naval assets, et cetera. When these assets are not available, then we have an entitlement for an extension of time. Under the contract we are entitled to extensions of time when there are circumstances by which we cannot perform the work, such as strikes which are outside our control—strikes which are national or which are imposed upon us by other than our work force. There are many of these circumstances which have given us entitlement to over two years extension to date. Therefore, under the contract, I am entitled to and have been given time extensions. Therefore, this project is on time.

Mr GRIFFIN—On that issue: is it quite typical, from what you are saying, for these contract extensions to be required in the conduct of a major acquisition project like this. Is that right?

Mr Ohff—Not only like this; that is a standard clause, not only in Defence—

Mr GRIFFIN—I know it is seen as being a standard clause. To be blunt, what I am trying to get at is this: we were given dates, or an understanding about what the original dates were in the contract. We are operating on the expectation that that was about where it ought to be. What you are suggesting is that the nature of the extensions required is quite typical in an operation of this manner. Therefore, I would argue that the dates that we were originally given, or were led to believe would be the case, were in fact quite misleading.

Mr Ohff—No-one can predict an act of God.

Mr GRIFFIN—No. I have had trouble with that myself. But it is not unusual, I am saying, for these sorts of things to occur?

Mr Ohff—No, because you cannot predict them. Therefore, you have this clause in your contract and the contract is amended accordingly.

Rear Adm. Lamacraft—I think at the last hearing Mr Jones made the point that we create a rod for our own back by creating an expectation that the products will be delivered as originally contracted, when the reality is that that is most unlikely to occur.

CHAIR—Let me quote you, Mr Jones, from the last public hearing so that we clear this up. Mr Ohff is saying that contractually the submarines are on time because of extensions of time. When asked by Mr Griffin about the time, Mr Jones said:

One way to express it to you is that, on average, we are running about 20 months late.

Mr Ohff—Against the original contract date, that would be a correct statement, Chairman.

CHAIR—You are talking contractually, but as a practical matter the subs are 20 months late—later than expected.

Mr Ohff—Not in my interpretation.

CHAIR—We have got a problem here, then. Navy tells us that we have an overlap problem, that we expected the Collins to be operational. We are down now to one Oberon and that is all we have got accepted in full service by Navy, and that is all we are going to have until around January 2000. We never expected we would be down to one fully operational submarine. Mr Jones has said on the public record:

One way to express it to you is that, on average, we are running about 20 months late.

Full stop. Nobody is backing away from that statement, are they?

Rear Adm. Oxenbould—No, Mr Chairman. I think it just reflects the different perspectives.

CHAIR—That is what I said. I just wanted it accepted that Mr Ohff is talking about contractual time and what Mr Jones was talking about is real time for use of the subs.

Rear Adm. Lamacraft—Perhaps current plan versus the original plan.

Mr GRIFFIN—I do not have a problem with that. My problem is with the expectations built by the original proposal—

Mr GEORGIU—Contract, not proposal.

Mr GRIFFIN—Yes, contract, versus the question of what has been the reality. I accept Mr Ohff's point about the question of the fact that according to the contract the ASC is on line and doing the right thing. But what I am saying is that, when you look at the question of your forward planning around the question of operational capability and expectations, et cetera, a very different picture has emerged. It is part of the problem.

Cdre Asker—Clearly, Mr Griffin, if we had our druthers, we would have lengthened the transition time from the Oberons to the Collins to cover just what has happened in fact.

CHAIR—It is like when I built buildings: if I had to have a school built for a school opening on 1 February, regardless of force majeure, acts of God, rain, strikes and everything else, I might have extensions of time to take me down to March or April; nonetheless, the school did not open and the building was late. Contractually it was not late and I did not pay liquidated damages, but the school was late. There is no question about it. We are all agreed now; the subs are 20 months late.

Mr BROUGH—But not by contract.

CHAIR—But not by contract—is that fair enough?

Mr BROUGH—We accept that there is only one submarine at the moment that is operational, and that that is below our expectations and is really not an acceptable standard of submariner defence for Australia.

Mr Ohff—I disagree with that statement.

Rear Adm. Oxenbould—I think it is something that I should respond to. I do accept that we are down to one operational submarine which has been fully accepted into naval service, and that is the remaining Oberon, HMAS *Otama*. We also have two Collins class which are in commission at the moment; they have been provisionally accepted and there is a level of capability provided by those two submarines. But it is below the minimum level which would allow us to deploy that submarine across the full range of a submarine's capabilities.

Mr BROUGH—Did you want to comment on that?

Mr Ohff—Admiral Oxenbould certainly has corrected that statement. There are currently two submarines handed over by the Australian Submarine Corporation and we will hand over the third one inside the next few weeks. By the end of this year we will have handed over four submarines to the Royal Australian Navy. Under my contract, I do not have a clause of provisional acceptance. That must be a clause between the acquisition office and the Navy. It is not a clause which refers to my contract.

The contracts have been conditionally accepted. There are outstanding items which still need to be corrected and they are contained in a so-called TI338 list. We are addressing these issues. These are known, normal contractual conditions which are being handled between the project office and the ASC.

Mr BROUGH—My next question then is that if we have only got one or two or three, but one that is actually operational, which is what I am concerned about at the moment—

Mr Ohff—There are two operational, I am sorry.

Mr BROUGH—There is only one that has been accepted currently into service and that is an Oberon that is operational and ready for all contingencies. That is according to Navy.

Mr GEORGIU—You cannot say you do not accept that—that is the situation. According to the Navy there is only one submarine that is accepted into naval service, and that has been accepted, I assume, for some time: the Oberon, whatever name Oberon it was. So you cannot just say no.

Mr BROUGH—The question I have is in relation to the slippage of 22 months or whatever else which has been agreed to. That obviously did not happen in one 22-month block, it happened over a series of contractual changes, I take it. Is that correct?

Rear Adm. Oxenbould—Yes.

Mr Ohff—Correct.

Mr BROUGH—When were the first changes, when were the incremental changes and when were the decisions taken by Navy in order to ensure that we did not get into the position we are now?

Rear Adm. Oxenbould—I can answer that question in part. Certainly the changes and the slippage have occurred gradually. We had some contingencies in place which would allow us to still retain a submarine capability should such slippage occur.

Mr BROUGH—Sorry, can I just ask a question there. What was the minimum that you set? Did you have a minimum point?

Rear Adm. Oxenbould—Yes. We initially expected that we would come down to a submarine force of about three submarines. That was the initial expectation when the contract was signed in about 1987. So there would have been a gradual degradation in the Oberons and then there would be a build-up. And we needed to dip down to that; we could

not maintain the force of six submarines operational at all times because we did not have the people to do that and we had to take the crews from the Oberons and retrain them for the Collins class. So we had to accept a dip. What we were planning was for a dip down to about three submarines and then that would build up to the mature Collins fleet of six Collins class submarines.

Through this 20 months slippage, or the slippage in the order of 20 months from when the contract was first set, we have had to bring in and to execute a couple of contingency plans. Principally, we have extended the Oberons. Otama, which is the remaining Oberon class submarine, was due to go out of commission initially around March of last year but we had the flexibility to extend that through and it has the possibility to run right through until the end of the year 2000, if necessary. We have executed that contingency by putting Otama into a mid-cycle docking and allowing her to extend. Similarly, we have run on Onslow from October 1997, when it was initially planned to be decommissioned, and she decommissions this month. So we have been able to extend those. That allowed us to keep some submarine capability so that we never got to the point where there would be none at all.

We have been able to provisionally accept and commission two of the Collins class submarines. We have a third one which is just about to be delivered and we will have a fourth one delivered at the end of this year. They will be commissioned. We are then able to use those submarines for training; we are able to use them to assist the surface ships in training and antisubmarine warfare; we are able to commit those submarines to exercise and do a lot of the things that we normally do in peacetime with submarines. We could also deploy them to some limited forms of operations, but we could not deploy them across the full spectrum at the moment. We believe we will be in that position, where we could deploy them across the full spectrum of their operations, by the end of the year.

Mr BROUGH—When you determined that you were going to go down to a minimum of three submarines, in the original plan, how did you arrive at that number of three? Is that a strategic, tactical sort of reasoning?

Rear Adm. Oxenbould—I am not sure because I was not involved in those decisions around that time. I should imagine that the strategic situation would certainly have been one of the considerations which would have been taken into account. But that would have been difficult because the gap was 10 years in advance. When they signed the contract in 1987 they were expecting that to drop down to three submarines in 1995-96, so it was eight years in advance that they were talking about. It is hard to predict eight years into the future. Things were a little more sanguine in 1987 than they are at the moment. I think it would be very hard for us to predict eight years into the future now and say what would be an acceptable level of submarine capability.

We have been monitoring this project, right throughout, very closely. I know the specifics of that over the last couple of years, since I have been the Deputy Chief of Navy. We have looked at the risk and at one stage we looked at whether there was a need to put another Oberon class into refit and then allow us the option of running that through for another five years operations so we would maintain the submarine capability. As I mentioned at the last hearing, that is a very expensive option. The refit can take up to two years and we would expect it to cost in the order of \$120 million.

We looked at it very closely, we looked at the predictions of when the Collins were coming into service, we looked at what the strategic forecasts were and we thought that this was a reasonable way to manage the risk. That is the way it has turned out at the moment. We know we are down to one fully operational submarine. We have some operational capability in the other Collins class which are in service and commissioned at the moment, so it is better than just a single submarine capability that we have at the moment. When we were looking at that over the last two years we addressed that as being satisfactory, or acceptable, I suppose, would be a better word, in our current strategic circumstances.

Mr GEORGIU—Mr Ohff, you opened up an issue between the Navy's definition of accepted into naval service and your contractual obligations. That is a general issue. Could you elaborate on that?

Mr Ohff—In bringing in a submarine to acceptance in accordance with our contract, we have to fulfil a number of conditions. These conditions are defined in achieving licences, which is licence 1 through 5, all of which have to be attained in order to get the submarine ready for handover.

The other conditions that we will have to meet are the category of testings, and they are categories 1 through 7. We have to comply with categories one through five. Categories 6 and 7 are categories that have been addressed by Navy and only after 6 and 7 have been completed can the submarine be commissioned.

Mr GEORGIU—Have categories 6 and 7 got anything to do with ASC?

Mr Ohff—No.

Mr GEORGIU—Can I have an elaboration from Navy on that?

Cdre Asker—Categories 6 and 7 trials are carried out by Navy once the submarine has been delivered and is operating under the Australian White Ensign, under naval control. The purpose of categories 6 and 7 trials is to define the outer edges of the performance envelope. You have to understand that in terms of delivering this submarine there are contractual performance specifications that Mr Ohff and his team deliver the submarine against. We test the submarine against those, we accept the submarine, and then we take it out again and put it through our own trials, naval trials, which go beyond these trials, to determine the outside performance envelope.

CHAIR—So you are trying to see how much further you can push the envelope.

Cdre Asker—Yes, to see how many more bangs for the buck we can get.

CHAIR—Thank you.

Mr GEORGIU—To put it crudely, categories 6 and 7 have got nothing to do with ASC. Does Navy expect the subs to have complied with stages 6 and 7, or whatever we are calling them, to be accepted into naval service?

Cdre Asker—The purpose of categories 6 and 7 trials is to establish that outer performance envelope. There is not a go, no go, on many of these trials.

Mr GEORGIU—What level does a submarine have to achieve in terms of operations, in terms of categories 1 to 5, and 6 to 7, to be accepted into naval service, which as I understand it and we have been backwards and forwards on this one, is the defining point at which the submarine is regarded as being operational?

Rear Adm. Lamacraft—Perhaps I can answer that one and we might fill in with more detail if necessary.

Mr GEORGIU—I think you got the guts of the question. I am not good at taking in heavy detail so you will have to bear with the limits of my ability.

Rear Adm. Lamacraft—To get to this point that we call acceptance into naval service, these categories 6 and 7 trials must be completed, but the point is there is not a performance level specified in there which might have to be satisfied. You would have to complete the series of trials. Some of them will take a protracted period of time and some I would imagine, and I will be corrected if I am wrong, will involve using the submarine in sort of simulated operational situations.

Mr GEORGIU—Okay, so ASC's responsibilities are discharged when they get to category 5, and from then on it is your problem. Is that correct?

Rear Adm. Lamacraft—Correct.

Mr GEORGIU—How many of the submarines have actually achieved level five?

Mr Ohff—Whenever a submarine has been handed over it will have achieved level five, otherwise it would not be handed over. Therefore, Collins and Farncombe, submarines one and two, have attained category 5 tests.

Mr GEORGIU—So your problems with those, as far as you are concerned, are over?

Mr Ohff—With the exception of outstanding items which are contained in the so-called TI338 list.

Mr GEORGIU—Does that include the integrated weapons system?

Mr Ohff—Yes, there are some issues on the integrated weapons system which are contained in the TI338 list.

Mr GEORGIU—My problem is that I understand that in 1997-98 you gave an unequivocal assurance that the integrated weapons system would be fully operational by 1998. I will find you the quote because it is a good one. Your statement was that this was a categoric assurance. You said:

The submarine will be fully operational from a combat system point of view in nineteen hundred and ninety eight.

Q: You can be categorically sure of that?

A: Categorical, categorical.

What has happened?

Mr Ohff—Could you say where I made the statement?

Mr GEORGIU—That was on the *Sunday* program. It is on the top of the document.

Mr Ohff—Certainly that was the information I had available at the time. Even Mr Gates, who made unequivocal assurances that his Windows 95 would be available in 1992, could not meet such a promise. I have grown a great deal wiser and I have resolved not to make unequivocal statements on software development in the future.

Mr GEORGIU—You also suggested that the Auditor-General should be sent to Harvard to learn a little about business!

Mr Ohff—Yes, and I am quite happy to make a statement on that as well, but I believe it should be left to a different question.

Mr GEORGIU—Okay. So, basically, at what stage is this—

Mr COX—It is a different auditor now.

Mr GEORGIU—No, we are talking about development. At what stage is the weapons system at?

Mr Ohff—We have completed the interim delivery, which we call release 1.55.6, which is the delivery point to which we are currently contracted for submarines 1, 2, 3, 4 and 5. We believe we will be in a position to have the final contracted combat system, release 2, installed on the submarine on either 5 or 6.

Mr GEORGIU—Okay, and this is the originally contracted for integrated combat system, the one that you were so categorical about?

Mr Ohff—No, it probably is not. Combat systems today look significantly different from what they did in 1987, and there are amendments made to the technical specification.

Mr GEORGIU—Is there going to be an integrated combat system that takes in every single part of the combat system—the sonars, the weapons, the periscopes and the communications suites—and puts them all into one computer system? This is what we were talking about when you referred to Ferraris. Is that what we are going to get? That is what we contracted for, although I now realise that contracts are redefined. That is what we contracted for. That was a significant source of delay, apart from weather and strikes and the fact that the Navy did not provide you with appropriate testing facilities. Is that the system that we are going to get?

Mr Ohff—The system will be integrated and, in fact, is integrated to a significant degree today. Whether all that will be integrated in the end, or whether they will be stand-alone capabilities, is a matter for my client to decide.

Mr GEORGIU—You were very categorical, within your level of knowledge, that the fully integrated system would be in operation in 1998. It is now 1999 and we seem to have what I regard, as an outsider, as fairly fundamental problems in delivering to these specifications. Indeed, reading between the lines one would say that those specifications are about to be thrown fundamentally out the window.

I would like to know what are you going to actually deliver. Are you going to deliver that system or some other system? The key to this was that it was to be fully integrated—and I will come back to this with Navy later on—which has implications for staffing and for the ability to stay out on patrol. Is that system going to be delivered or not?

Mr Ohff—The system will be highly integrated. It will not require additional staffing to operate. It will be as good a system as industry is capable of delivering to date.

Mr GEORGIU—Will it be contract compliant with the original specifications?

Mr Ohff—Please let me finish my sentence. We have as subcontractors the Boeing organisation of Seattle—and with Boeing we have Raytheon as a subsubcontractor to Boeing—and the CSC organisation of the United States. These are three of the most significant software houses in the world. It is this capability I rely on in order to deliver you the best possible combat system that I am currently capable of building.

Mr GEORGIU—Will what we get be compliant with the specifications laid down when the subs were ordered and that we have been told throughout, until very recently, would actually be compliant with?

Cdre Asker—If I could answer that, Mr Georgiou. We are in a situation of transition. When the statement that you earlier referred to was made back in 1998 there was considerable risk in developing that fully integrated system, and you are teasing this out a little bit. We agreed—

Mr GEORGIU—Choose another word, please, because categoric is pretty categoric, and repeated twice it is very categoric.

Cdre Asker—Yes. It has been my assessment, and the assessment of others that the risk in pursuing a totally integrated combat system is too high. I have not been willing to accept that.

Mr GEORGIU—When did you reach that decision?

Cdre Asker—About mid-1998 or a bit earlier. We had considerable reassurance from the American companies that Mr Ohff referred to that the program was achievable. My investigation and assessment was that we ran a considerable risk in moving further right on delivery of the combat system. To this end, we have instituted a change in the scope from

the totally integrated system to a lesser integrated system, reducing the risk but providing a similar level of capability to my customer, the Navy, at less risk.

Mr GEORGIU—What was the cost of the original system that you contracted for?

Cdre Asker—In the order of \$800 million.

Mr Ohff—It is a matter of commercial-in-confidence but it is very substantial, probably about 28 per cent of the total contract value.

Mr GEORGIU—Ten per cent is five and that is \$1 billion plus—

Mr Ohff—No, it is not that much.

Mr GEORGIU—The original contract was \$5 million.

Cdre Asker—From memory, it is around \$800 million but that is not all the hardware or all the software. There are management fees and that sort of thing.

CHAIR—To put this in perspective, there were a couple of articles in the *Bulletin*, one in November and one in December that, as I recall, talked very extensively about the weapons control system. Does my memory serve me right?

Cdre Asker—Yes, I think it is around then.

CHAIR—I do not have the file with me. The articles, as I recall, implied that the hardware that was utilised was before modern PCs and did not have the memory capacity to do the job that a modern PC—

Cdre Asker—This is an entirely misleading article by a journalist by the name of Bell, who was implying that the processing capacity of our combat system was reliant on 286 or pre-286 types of processors. What he totally ignored was what was actually required to do the job. If we can get away with a 68,030 or a 68,040 Motorola processor, so be it. There is not a lot of sense in upgrading the processors to a Pentium III, or something like that, if you do not need the processing power. These are the sorts of judgments which he failed to bring out in his article.

CHAIR—Rear Admiral Oxenbould, on this issue at the last public hearing, said:

We can fire weapons from the submarine but we cannot use all the information which is available through the submarine sensors and do the analysis of the targets that the sensors provide, and nor can we develop the fire control solutions and pass all that information to the weapons. The combat system, at the moment, has problems in doing that to the extent that we would want if we were going to commit that submarine to operations.

Does that make sense to you, Mr Ohff? Is that a fair statement?

Mr Ohff—The entire combat system situation has been deliberated upon from so many angles that, in the end, I am not quite sure what is right and what is wrong. What I can tell you is that the two submarines and the third one, which is being delivered in a couple of

weeks time, have a combat system which allows a submarine to operate efficiently. Whether, in the end, it has all of the capabilities that were initially envisaged, I cannot tell you.

CHAIR—Let us be a bit more blunt then. There is no sense in me going through the minutes to quote passages but, essentially, the department and the Navy tell us that there are two reasons why they do not have fully operational subs accepted into naval service: firstly, the weapons control systems and, secondly, noise. Is that fair? They tell us there is no problem whatsoever with the structural integrity of the hull—notwithstanding that there is some weld wear work—but they absolutely guarantee these subs are safe; there are no structural problems with the hull that would mean they would have a shorter lifetime than might otherwise be the case. That is what they tell us, absolutely.

They say there are two problems remaining. Firstly, noise is a problem in some operational conditions. I will not go into details because some of the information we have is in camera, but some of it is on the public record; I can say what I have said because that is on the public record. They say that, under some operational conditions, the subs do not meet the specifications they were expected to meet. They also say that they cannot fire the weapons in the way they want to and so, in effect, they cannot put them into a full combat situation. They would not send them to war. Is that fair?

Rear Adm. Oxenbould—Yes, that is a fair statement.

CHAIR—Do you agree with those statements?

Mr Ohff—I am not a war strategist, so I really cannot answer the question. What I can answer questions about is where we sit on the combat system vis-a-vis the contract, where we sit on signature vis-a-vis the contract, and where we sit on the integrity of the entire submarine vis-a-vis the contract. Taking the latter point, which is the easiest to answer, the submarine is of very high integrity. It is a very safe submarine. Some misleading—in fact, mischievous—statements have been made by the media that the submarine is unsafe, that the submarine endangers the lives of the crew who are operating the submarine, et cetera. That is absolute nonsense.

CHAIR—We have accepted Navy's statement on these issues—absolutely.

Mr Ohff—I am glad that I could put this on the record too, Chairman.

CHAIR—Thank you very much.

Mr Ohff—Secondly, on noise, there are two—possibly three—issues with which we are dealing. I cannot go into the details, as you would know, but I would be happy to do so in camera. What I can tell you is that the three categories I am referring to concern propeller radiated noise. They are referring to patrol-quiet state and they are referring to snort noise. I believe that we meet most of those requirements, with the exception of one, on which we are still working. We have a way forward on this and that will be entirely within the contract specification when the submarines are finally delivered.

CHAIR—Let us get this clear. You said you have met—and I have forgotten what you called it—criteria 1 through 5?

Mr Ohff—Correct.

CHAIR—My understanding of the contract would be that that is not so in terms of noise and in terms of the weapons control system. Am I right, Rear Admiral?

Rear Adm. Oxenbould—Yes. I will clarify a point Mr Ohff has mentioned: when he hands over the submarines for acceptance by the Navy, there is a form TI338 which lists the deficiencies. This is a form which does list the deficiencies where that submarine does not yet meet full contract specifications. But it is to the advantage of both to hand over the submarine at some point. If we waited until the submarine fully complied with everything which was specified in the contract, we would not be able to get the value out of training and out of gaining experience in the use of the submarine and being able to use the submarines as we are now. At the same time that would not help Mr Ohff if he had to keep the submarines there, which were complete to 99 per cent but had a small percentage of the contract to complete. So that TI338 is a very important document which lists those areas which are deficient against the contract. We have accepted the submarines which we have at the moment with deficiencies listed against the combat system and against some of the acoustic signature specifications.

CHAIR—But those deficiencies, as we understand it, prevent Navy from accepting the subs into full operations service?

Rear Adm. Oxenbould—That is correct.

Rear Adm. Lamacraft—Mr Chairman, I will add that this not only is a list of the deficiencies but it will also record the responsibility or liability for fixing them. It is not that we have accepted it with some deficiencies which we are going to have to fix later on ourselves; it will record items for ASC to fix.

CHAIR—I thought that was self-evident.

Mr Ohff—The deficiency list we are talking about, TI338, is not a deficiency list unique to the submarine project. It is a deficiency process that has been established, as I understand it, within the Royal Australian Navy for many, many years. It applies to the Anzacs, it applies to the patrol vessels and it applies to the hydrographic vessels, et cetera.

CHAIR—I used to have deficiency lists on the buildings I built.

Mr Ohff—Under the categories 1 through 5, we do not have to meet every single deficiency that is written against the contract. Under the contract, the submarine can be accepted—in fact, must be accepted—with some outstanding deficiencies, if that is the case. And that is exactly where we are. So the category 5 achievements and the licence 1 through 5 achievements cannot and do not prevent the Royal Australian Navy from accepting the submarines, and that is the contractual position we are in.

CHAIR—This is not the Joint Committee on Foreign Affairs, Defence and Trade of the parliament; we are the Joint Committee of Public Accounts and Audit. Can you understand that we have a responsibility to report to the parliament on things that the Auditor-General inquires into? He inquired into the Collins class sub and he was not overly happy. He left an awful lot of question marks and his fingerprints all over that document, and that is why we are still here talking. Navy tell us that we cannot use the subs to their full designed operational capability, full stop—none of them. So we, as guardians of the taxpayer dollar—if you will—are concerned about that. You can understand that, surely.

Mr Ohff—Mr Chairman, I am guardian of the shareholders' dollar which also happens to be the government.

CHAIR—And you are putting that viewpoint.

Mr Ohff—Therefore I have a contract to which I perform—and that, in my opinion, I have done.

Mr GEORGIU—Mr Chairman, can I come back to the weapon system? We have an estimate of between \$800 million and \$1.4 billion for the weapon system as originally figured.

Mr Ohff—I withdrew my 28 per cent of \$1.5 million.

Mr GEORGIU—I am sorry, I did not hear that. What is your estimate now?

Mr Ohff—It is probably closer to the \$800 million.

Mr GEORGIU—Okay. Let's call it a billion just to split the difference between the \$800 million and the \$1.4 billion. That was for this incredibly complex, never-before-achieved, unique-in-the-whole-world system. Are we going to pay any more for the new one?

Mr Ohff—No.

Mr GEORGIU—So the new incompletely integrated one will not cost the Department of Defence—we keep on talking about Commonwealth when we actually mean Defence—any more money?

Cdre Asker—Under the terms of the current contract, we will provide Navy with a combat system that meets the contemporary baseline requirement—that is, today's baseline requirement.

Mr GEORGIU—But it is not an integrated system of the sort that you had wished to achieve because it has now proved to be too complex to achieve?

Cdre Asker—It will not be a fully integrated system.

Mr GEORGIU—Mr Ohff said that there will be no additional personnel required because of the change. Is that correct?

Cdre Asker—What we are delivering is continuous improvement in many areas of the submarine. In respect of the current contract, we will deliver a baseline combat system. That baseline combat system cannot stay stagnant; it must continually develop; otherwise the technological edge—the capability edge that we have developed—will atrophy; it will degrade. We have plans that are before government to further improve the combat system.

Mr GEORGIU—So you are getting a non-compliant combat system because it is not integrated. You are going back to the government for more money to improve that.

Cdre Asker—Mr Georgiou, that is the wrong impression that you are trying to convey. I said that we will provide a baseline combat system that is not fully integrated and that meets Navy's contemporary requirements.

Mr GEORGIU—The combat system issue has been gone over and gone over. Every time it has been gone over, the assertions that have been made about it have essentially focused on its uniqueness in terms of its integration. Guarantees have been unequivocally laid down that it will be integrated. We are now getting an unintegrated system.

Cdre Asker—No, we are getting a less integrated system.

Mr GEORGIU—My problem is that that was being misstated.

Mr Ohff—To the best of my knowledge, the manner in which it is integrated today is significantly further advanced than any other integrated systems available thus far in the submarine world.

Mr GEORGIU—I do not want to go into that.

Mr Ohff—I would like to make that statement.

Mr GEORGIU—You have made a categorical assurance about integrated things too. Will additional personnel be required to manage the system that you are now putting into place?

Cdre Asker—In terms of the baseline system, I do not anticipate that there will be any further requirement for additional people on board the submarine to manage the combat system. I cannot, however, guarantee that we will not require additional people for future combat system upgrades.

Mr GEORGIU—In terms of the capacity of the integrated weapon system, my impression—and you will have to correct me—is that it is not as effective as the one that you initially intended to put in.

Cdre Asker—That is misleading. When you say 'not as effective', you imply it is of lesser capability. I would put forward to you that the capability improvements that are in the

new baseline are improvements over and above what was originally contracted, just as in some areas there is lesser performance than was originally contracted. This is all covered by contract amendments such that the total contract amendment package reflects Navy's contemporary requirement. In other words, the customer and technology have moved on since 1987, and their definition of their wants has changed.

Mr GEORGIU—In fairness, what you said was that you came to the conclusion in mid-1998 that you regarded the risk of going for what you had originally intended to achieve as being too great.

Cdre Asker—A totally integrated system. The risk in terms of schedule was too great. I wanted to provide Navy with a combat system that met their contemporary requirements at minimum risk and on schedule.

Mr GEORGIU—Was that at the same level of delivery as the integrated system described as the Ferrari that you originally specified? This is not an unimportant issue. I am sorry if I keep on trying to simplify it.

Cdre Asker—Mr Georgiou, I do not think we are comparing apples with apples here. What I said to you before was that the requirements, as defined back in 1987, do not reflect the current or contemporary requirements of my customer, the Navy.

Mr GEORGIU—Let me ask you this: were the requirements in 1987 greater or lesser than they are in 1999?

Mr Ohff—In some areas they are greater. We have increased capability in this combat system, as we will deliver it, than was originally required.

Mr GEORGIU—But in some areas you are saying you have fewer requirements.

Cdre Asker—Yes, in some areas we have a greater capability, and in other areas we have a lesser capability requirement.

Mr BROUGH—Commodore, where I am a bit confused is that you have this baseline which you find will be acceptable for naval service now. But, at the same time as you are accepting that standard as okay, you are going back to government or Defence for more money to look at the next upgrade already. Is that correct?

Cdre Asker—To further improve the capability of the combat system and other areas of the submarine.

Mr BROUGH—Okay. I am trying to get my mind around why you would see that as necessary. It would seem to me that you have the absolute minimalist approach to the combat system because it is only meeting the lowest possible acceptable standard and you need to have something better immediately. Surely, this continual improvement would come further down the track and you would have something that you are accepting into service which is going to be right for a period of time. On most of your weapon platforms, do you immediately ask for additional money with which to start looking for increased capabilities?

Rear Adm. Lamacraft—Mr Chairman, just as a parallel, the Anzac ship program, in fact, already has approval for some enhancements. I mean, with these long contracts, you just cannot afford to stand still, so it is quite normal practice to be looking at keeping the capability up to speed—

Mr GRIFFIN—But you are talking about a situation here where it is 10 or 12 years since the contract was actually kicked off and so over that—

CHAIR—You are talking about an integrated compact weapons system. We understand that that means that the computer system, both hardware and software integrated, can look at a number of sensors and can consider a range of targets or a number of individual targets and also operate all of the weapons systems on board the platform?

Cdre Asker—That is correct.

CHAIR—We also understand that it was originally so designed to do all the training for personnel at the same time on the vessel live—hands on?

Cdre Asker—Yes.

CHAIR—Is there any reduction in capability in terms of the number of sensors input into the system that the system can handle simultaneously, the number of targets that it could consider simultaneously and its ability to fire the weapons?

Cdre Asker—In respect of what was originally contracted?

CHAIR—Yes.

Cdre Asker—You mentioned targets, you mentioned weapons—

CHAIR—Sensors, targets—

Cdre Asker—The sensors are the same.

CHAIR—and weapons.

Cdre Asker—Weapons—there is no change there.

CHAIR—The number of targets?

Cdre Asker—With targets—and these are contacts which we identified as threats, which we are prosecuting in terms of releasing weapons towards—I am not aware of any change in that particular area in that we can engage the same number of targets as was originally anticipated. I think our capacity to deal with contacts, because of the density of contacts—that is, the very large number that we are talking about—has been reduced but that does not mean that the system cannot cope with them in terms of identifying that they are there. But in terms of processing the course, the speed and other parameters, the system does become

overloaded, so what we have tended to do is limit the overall number of contacts that we will track.

CHAIR—Does that reduce the effectiveness of the Collins?

Cdre Asker—Probably Admiral Oxenbould is the more appropriate person—

CHAIR—Now we are getting away from the ephemeral. We are getting down to some hardcore data, aren't we? We are getting down to the real issues.

Cdre Asker—We are talking of the order of—I think it was on the record last time—in excess of 60 contacts and I think we can in theory go up to about 120 or something like that, which is quite a dramatic increase.

CHAIR—You would have a hell of a time firing on 120 objects at the same time, wouldn't you?

Cdre Asker—They are contacts.

CHAIR—You would have a hell of a time firing at 120 contacts, trying to defend yourself?

Cdre Asker—We would not have enough torpedoes for a start.

CHAIR—That had better be an awfully big sub. Do you want to add to that?

Rear Adm. Oxenbould—No, I do not really.

Mr BROUGH—Can we just go right back to the start from where you—I am sorry, to Mr Ohff's comments about the finances. Ninety-five per cent is completed or to complete—

Mr Ohff—Correct.

Mr BROUGH—as per the original contract?

Mr Ohff—Approximately 95 per cent.

Mr BROUGH—You mentioned—I was not quite sure, so I want a clarification—seven per cent additional overruns?

Mr Ohff—No, I did not say that.

Mr BROUGH—You said seven per cent something, I know.

Mr Ohff—It takes up to seven per cent to complete the job, which means we would have spent—

Mr BROUGH—Sorry—it takes up to?

Mr Ohff—Seven per cent, which brings the total completion to 102 per cent.

Mr BROUGH—Okay.

Mr Ohff—This means we would have an overrun of two per cent of the total project. If I achieve that I think my shareholders will be extremely pleased. I am positive and can categorically state that we actually will achieve that.

Mr BROUGH—You have got him excited again.

CHAIR—That is under oath too.

Mr BROUGH—So seven per cent is all that is left to be done financially?

Mr Ohff—Correct.

Mr BROUGH—Thank you.

Mr GEORGIU—Can I come back to noise?

Mr Ohff—Before we come to noise, the chairman was interested in actually getting a good feeling about combat systems and I thought it referred to combat systems, computer software et cetera. What I would like to bring to the table is the outstanding success that we have attained in designing the software and the hardware and installing the total system called the ISCMMS system which is the Integrated Ships Control Management and Monitoring System. It is a system which in itself is larger than a combat system on commencing submarines to date. It has some 900,000 final codes. It was developed by SAAB, Kockums and the Australian Submarine Corporation. It is an outstanding success and it will make sure that no additional personnel is required on the submarine. In fact, I do believe the total personnel could be reduced in actually operating the submarine. That is from a non-submariner's point of view. It is an outstanding success in this instance. The third party was actually an American company which did not perform. ASC took over this activity and brought, with the other two parties, the requirements to a successful conclusion. We are very proud of that achievement.

Mr GEORGIU—Can I just pursue the noise issue? Is the Collins class submarines contract non-compliant with respect to noise?

Mr Ohff—These are areas which are very difficult for me to answer—not because I cannot but because I shall not in a public forum.

Mr GEORGIU—Can I quote you?

He says—

referring to you—

the submarines have achieved, even exceeded, noise signature requirements at their patrol quiet state of three to seven knots. "It was meant to be the most quiet submarine designed and I am proud that we achieved the signature levels, " . . .

That sort of stuff is on the record already.

Mr Ohff—Yes. I quoted this because it was quoted previously and therefore I did believe that I may go to the statement because it was in the public arena. It is correct that the information we have is that the submarine is exceedingly quiet in this range.

Mr GEORGIU—I make this point again: I am not asking for any data at all. I just want to know: is it contract compliant in terms of noise?

Mr Ohff—In some areas in this range we far exceed the contract requirements, especially—as I understand it—in an area where it is most important.

Mr GEORGIU—But it is not contract compliant across the range of movements?

Mr Ohff—I can show you a chart on this which needs to be done in camera which would explain the situation.

Mr GEORGIU—Yes. But, basically, it is partially contract compliant. Can I also quote what you said:

Reports that the RAN is concerned that the submarines are too noisy at speeds above the patrol quiet state are also dismissed by Ohff. "I do not entirely understand why they want to be very quiet when they go very fast . . . "

Rear Admiral Oxenbould, is there no issue about noise when they go fast? Is it difficult to understand?

Rear Adm. Oxenbould—I do not believe it is from an operator's point of view. I can understand why a submariner would want his submarine to be as quiet as possible at all times and even at high speeds. If he was trying to evade detection he might wish to use the speed which is available to him. He wants to be as quiet as possible so he could not be detected. Similarly, in transiting to patrol areas they would want to do that as fast as practicable and we want to do it as quietly as possible.

Mr GEORGIU—Essentially, is there a concurrence between ASC and the Navy about what the contract requirements about noise across the range actually are or is there dissension?

Mr Ohff—There is consensus as I understand it.

Rear Adm. Oxenbould—Yes. I believe that to be the case and I think, as we discussed in camera at the last session—

Mr GEORGIU—I did not actually have ASC's observations about why you guys were worried.

Rear Adm. Oxenbould—The Navy, or the Defence Acquisition Organisation, is not trying to get the Australian Submarine Corporation to produce something which is not contracted.

Mr GEORGIU—You concur?

Mr Ohff—Absolutely.

Mr GEORGIU—I got the impression from reading your comments that you thought that this was going beyond the original requirements. I will find the quote somewhere later on.

Mr Ohff—That is correct.

Mr GEORGIU—It is not going beyond the original requirements or it is going beyond? The Navy's requirements for stealth are within the context of what was originally contracted for with ASC?

Mr Ohff—Yes. I would be happy to answer that question further, but in camera.

Mr GEORGIU—No, this has nothing to do with anything. It is contract compliant, whatever it does.

Cdre Asker—There is no misunderstanding with regard to the contract requirements on either the ASC's part or the Commonwealth's part. We are working to that end.

Mr BROUGH—By June 2001 you will meet all noise requirements as per the original contract?

Cdre Asker—Based on the performance to date, I would agree with that.

Mr GEORGIU—You will require that the original contract specifications be met?

CHAIR—However, I remind you that at the last public hearing Mr Jones said:

It may be that, at the end of the day, we agree that some element of the specification for noise is not achievable in any practical way.

Cdre Asker—That is Mr Jones speaking.

Rear Adm. Lamacraft—I think he was just giving an example of where, when we get to the end of the test, we may have to make some concession. I do not think he was suggesting that that was likely.

CHAIR—He did say:

We are expecting the contractor to deliver in terms of the noise performance of the submarine.

Mr Ohff—It is an argument in semantics which can be explained quite efficiently. However, I cannot explain this here.

CHAIR—Do we want to go into camera or have we heard enough?

Mr BROUGH—I just want to touch on the issue of the welding that we touched on last time. Could we have an understanding that all the welding is complete and all the X-rays— or whatever else you do—of the welds that were not done here have been redone, the work is complete and that there is no lessening of the capacity of the service life of that submarine as a result of the work that has been done? What is the time cycle between major refits?

Cdre Asker—Seven years.

Mr BROUGH—So it is not going to be reduced below that seven years as a result of anything to do with the welds, and all work on the welding is now complete?

Cdre Asker—The information that we have been privy to to date is essentially based on the first submarine, HMAS *Collins*. As I mentioned to you, we have done a 100 per cent survey of the Swedish built sections of that submarine. We have repaired many welds in those areas that were not consistent with the standards. There were some variations to the standards that we apply for welding. They have been redone. I think there might be one weld outstanding at this particular time that is being worked on. All of the others have been—and I will not say repaired—delivered within standard and we do not expect any reduction in the life of that particular submarine as a consequence of any of the welds in the Swedish sections. I could give you a blanket statement, but I think that would be very courageous of me because I do not have the full information to do that. But I am personally confident that there has not been any lessening of the life of the submarine, based on the information we have gleaned from the first class service.

Mr BROUGH—You say there is still one weld to be completed? Can you elaborate on that? Do you mean on the *Collins*?

Cdre Asker—On the *Collins*. Was it a water transfer tank?

Mr Ohff—No, it is completed. All works are completed. The issue has been slightly exaggerated, as I see it. The submarine was never unsafe. It would not have taken away from the life cycle of the submarine over 28 years. The submarine will always undergo checks of welds during a refit and it is quite common, as Oberon specialists will testify, that during refits we actually do find from time to time a weld deficiency. We then repair it and the submarine is brought up to the standard necessary to go for the next seven years.

There has been a general statement made on work that came out of Sweden. I would like to add to the statement and that is that product delivered generally from Europe and the US has been—and this is my experience—of lesser quality than was actually attained here in Australia. I think this is a very important observation to make. The quality of our engineers and the quality of our tradesmen, the quality control and quality assurance systems that we adopt in building these submarines, have ensured that the Australian quality, by and large, exceeded the quality obtained from overseas.

CHAIR—Thank you for that.

Mr COX—Has there been any shortening in refits afterwards as a result of any welding issues?

Mr Ohff—Certainly not. The refit cycles are primarily driven by battery capabilities, and Commodore Asker is correct in saying that it is approximately seven years. It can be as short as five years. If your batteries give up on you and you would like to have 100 per cent capability rather than 90 or 80 per cent capability, then you may go to a refit after five years. That needs to be reviewed from time to time.

Cdre Asker—In further amplification of Mr Ohff's response, we are moving into an area of continuous maintenance, continuous monitoring of this. We have one submarine of which we have got a couple of years experience and, based on the experience and the result of surveys and the difficulties in terms of taking machinery out and replacing it, we will optimise the refit cycle. We have not set this in concrete because we do not have enough information. As we gather that information, we will further refine our maintenance periods and the periods to refit. We are currently working on that six- to seven-year mark.

Mr COX—Has there been any shifting of costs from the contract into planned refits?

Cdre Asker—None.

Mr GEORGIU—Have you completed a contract for the redefined, partly integrated combat system?

Cdre Asker—Almost.

Mr GEORGIU—So it has not been specified.

Cdre Asker—We have not passed a contract amendment for that as yet. We are redefining the performance in terms of the combat system supply. That will be done through the Submarine Corporation. As far as the technical specifications are concerned, we are almost there.

Mr GEORGIU—You are sure that that will not cost any more gelt?

Cdre Asker—I can assure you it will not cost you any more gold.

Mr GEORGIU—Will it be specific as to delivery time?

Cdre Asker—Certainly.

Mr GEORGIU—Whatever that means in the current context.

Cdre Asker—No, let us step back a little bit. This is not going to affect the currently contracted delivery dates for the submarines per se. We are talking about the combat system element here; we are not talking about the overall submarine. Many of the changes we are

talking about are software driven. So, in terms of major change-outs and rejigging of this and that, we are talking about sort of slipping disks in and reprogramming things and doing a few wiring changes. It is not a mammoth job that we are faced with.

Mr BROUGH—Has the situation with the welds reduced capability in any way at all of the submarine?

Mr Ohff—Absolutely not. The designers of the submarine, Kockums, are an exceptionally conservative designer. In fact, we have very high redundancy across the total submarine. I can tell you that the original requirements of deep diving depths of the submarine were X, and Kockums actually decided to design it as X plus 15 per cent. That has not been changed. I am referring to the hull now. On top of that, we have very significant safety margins. We have adopted the most stringent codes, whether it is the military code out of the US or the British, the German, the Swedish or the Australian experience. We have always taken the extremes. It is an extremely conservatively designed submarine, and it is therefore a very safe submarine; considerably safer than the construction of this Parliament House.

Mr GEORGIU—Is that meant to reassure us?

Mr Ohff—I am talking about design faults.

Mr GRIFFIN—You are confident it is quieter as well, I take it?

Mr Ohff—Yes.

Mr GEORGIU—Basically, I have gone blind looking at this bloody thing.

Cdre Asker—It might help if you were given a coloured version.

Mr GEORGIU—That would be fantastic. Can you tell me how I can tell *Collins* is accepted into naval service. Is that the colour?

Rear Adm. Oxenbould—Yes, it is, and that is one of the concerns that we have over what has been produced at the moment. We have not had the opportunity to refine that and especially it was not refined by people who were sitting around this table at our last discussion, so the use of the term ‘accepted into naval service’ is incorrect on that graph.

CHAIR—Why don’t we let them fix it rather than go through something that is totally confusing?

Mr GEORGIU—Not a problem. So that we understand, I would like to know when, in your Oberon-Collins transition as planned, you expected the ships to be accepted into naval service in the first instance. I would also like a capacity indicator. You have talked quite a lot about partial capacities, partial operational ability. The estimate as given by Dibbs was that Collins was nine to 10 times the capacity—I was corrected last time when I said 10, so I was out a little bit. I would like to have that sort of estimate because we keep on

going in and out of partial capacities for various Collins. I am sometimes unclear, and I think that is probably one of the times that I was.

Rear Adm. Lamacraft—Are you asking for some assessment of, say, Collins as 70 per cent capable?

Mr GEORGIU—Yes.

Rear Adm. Lamacraft—That could be rather difficult for us to do.

Rear Adm. Oxenbould—I do not know how we would assess that.

Mr GEORGIU—The notion of submarines per se does not make any sense.

Rear Adm. Lamacraft—It is a black-and-white situation which is giving you a very pessimistic view of the outcome. The reality is better than you would see.

Rear Adm. Oxenbould—What we might be able to do is add a third line there. At the bottom of each of the graphs there are two lines: one is the black line, the total number of submarines; the second is a green line, in-service submarines. If we put a third line of submarines which are available for operations, or something like that, so that we could—

Mr GEORGIU—I personally do not even mind no graphs. Just say U1, U2, U3, U4. Name the things and have a number. I just want to make it simple for you. I am not into graphics. I think the committee needs to know how many of these submarines actually are operational, because the last time we were told, 1999, we had one operational and we have been told again and again that we have had one operational submarine, and now somehow we have got two.

Rear Adm. Oxenbould—I just want to qualify that statement. There is one Oberon which is fully capable across the full range of submarine operations and we have two Collins class which have been accepted and do provide us with some capability.

Mr GEORGIU—Yes, but, with respect, when I asked for an assessment, I was told it was exceptionally difficult to give an answer. The assessment also does go to the issue of the differences in the intended capacities of Collins compared with Oberons. The difference was supposed to be in the order of nine to 10 times.

Rear Adm. Lamacraft—I do not know how we can show that on this graph.

Mr GEORGIU—No.

Mr BROUGH—If you could give us the number that are fully operational and those that are provisionally, or at a reduced rate, we will have to make some assessments.

Rear Adm. Lamacraft—Yes, we can do that.

Mr BROUGH—Could we also have a risk assessment of worst case if Submarine Corporation does not deliver as per the schedule, whatever, and this will need to be done? I want a realistic sort of thing, but worst case scenario. When do you draw a line in the sand and say, ‘We have to make a decision about whether we have a capability ongoing, because we know the lifetime of the last Oberon is the end of next year’? Are you with me there?

Rear Adm. Lamacraft—Not really.

Mr BROUGH—There needs to be a point. If I was running the show, I would have a line in the sand to say that at that point we need to be absolutely certain that the corporation is going to be able to deliver, and, if they cannot give us an answer by then, we are going to have to go to the minister because we run too high a risk, from Navy’s perspective, of having nothing after this time.

Rear Adm. Oxenbould—There is a very interesting question you raise there, and we could provide some answer to it, but it would have to be in camera, because it is matters which are being put to government at the moment.

Mr BROUGH—All right.

CHAIR—Mr Ohff.

Mr Ohff—Before you close the meeting, I would just like to add to my statement I made early on in answer to the question, ‘Are we capable of completing the project?’ I have said, ‘Absolutely yes,’ and it certainly is the case. But the Australian Submarine Corporation needs to progress from just completing the submarine program. It needs to be in a position to actually maintain the submarines, which is, I believe, equally important. For that, we need to have the intellectual and physical capacities to do so.

It is of great concern to me that the government indicated some two years ago that it intends selling its share in the Australian Submarine Corporation. Since then, nothing has happened. That in itself puts a great caveat on ASC’s future capabilities. I do believe the government needs to make up its mind whether it wants to remain the major shareholder in the Australian Submarine Corporation or whether it wants to get out. I need to develop the company so that it is viable in order to look after these submarines and other naval assets over the next 30 years. I am unable to do this if the situation of shareholding is not cleared up one way or the other.

CHAIR—We thank you for that. We would remind you that we are not the government. We are, in fact, a committee of the parliament, and of both houses of the parliament, and of all the parties in the parliament. So we are a long way from being government, Mr Ohff, but thank you for your comments.

Mr BROUGH—That is why we are sitting here.

Mr Ohff—Could I also extend an invitation to your committee to actually visit the Australian Submarine Corporation, and could I extend an invitation to you personally to actually travel on one of our submarines. I believe it would give you a very strong impres-

sion of the capabilities that are in place, and would give you a very strong impression of the operators, of how proud and confident they are with their submarine.

CHAIR—I thank you for that, and I will put that invitation at our meeting on Wednesday to accept or reject. I am absolutely delighted to accept your invitation and, God willing, I will be there.

Mr GEORGIU—Declined with regrets.

CHAIR—Thank you very much, Navy and Defence, and thank you very much, Mr Ohff and Mr Oxley, for also coming along to add to our enlightenment today. As we have gone on, I think progressively we better understand the current situation with the Collins class subs, and we thank you for that. We will report and, as I said at the beginning of this session, I sure as hell hope that we do not report something different from Mr Ralph. On behalf of the committee, I would like to thank the witnesses who have given evidence at the public hearing today.

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

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

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

That this committee authorises the withdrawal of the original departmental submission.

CHAIR—You will replace that submission. Thank you very much.

Evidence was then taken in camera—

Committee adjourned at 12.20 p.m.

