

W1128 254/00 RMB-G1

NEW SOUTH WALES STATE CORONER'S COURT

STATE CORONER: J ABERNETHY

THURSDAY 27 JULY 2000

5

5/98 - EVENT OF THE 1998 SYDNEY TO HOBART YACHT RACE

INQUEST INTO THE DEATHS OF JAMES MICHAEL LAWLER
 MICHAEL BANNISTER
 BRUCE RAYMOND GUY
 PHILLIP RAYMOND CHARLES SKEGGS
 JOHN WILLIAM DEAN
 GLYN RODERICK CHARLES

10

15

Mr A Hill assisting the Coroner
 Mr R Stanley QC with Mr Santamaria for the Bureau of
 Meteorology
 Mr R Weber for the Cruising Yacht Club of Australia
 Mr A Colefax for Mr Lew Carter

20

PART HEARD

25

<EDMUND ALAN GREEN(9.37AM)
 SWORN AND EXAMINED

HILL: Q. Sir, would you give the inquest your full name?

A. Yes Mr Hill, my name is Edmund Alan Green.

30

Q. And your address sir?

A. My address is Elm Lodge, Elm Road, New Malden, Surrey,
 in the United Kingdom.

35

Q. Your qualifications?

A. Did you say my qualifications, Mr Hill?

Q. Yes, your qualifications.

A. I was for 30 years the director, the race director in
 effect, of the Royal Ocean Racing Club. I am also the
 chairman of the Offshore Racing Council's special
 regulations committee and I'm involved in a number of other
 similar committees.

40

45

Q. I think you've made a 15 page statement dated 19 July
 2000, is that correct?

A. I did sir.

Q. Do you have a copy of that with you?

A. Yes, if I can find it.

50

Q. If not, I can supply you with a copy.

A. Thank you, I think I have it here sir. Thank you.

55

Q. There's nothing in there that you want to add to or
 alter or anything like that?

A. The subject is such a broad one sir that there may well

be areas of interest to the Court which were not covered in the statement but I hope the statement was comprehensive enough to be useful as it is but I shall be pleased to add to it if requested.

Q. What we'll do is we'll start at the beginning, go through to the end and if you want to add something to it, then we'll go from there. Now, I see by paragraph number 2 you say for 30 years up until January 2000 you were a staff member of the Royal Ocean Racing Club and you say my term at the Royal Ocean Racing Club has included 12 years as secretary of that organisation and 30 years effectively as director of racing and special events. Can I ask you what your actual qualifications for that are? I mean is there any training or is it simply experience? That's what I'm trying to find out.

A. It was in fact simply experience. I was employed in the Civil Service for some 10 years during which time I acquired considerable experience of offshore sailing and also took an examination as an offshore yachtmaster, which I passed except for the eyesight test. The examination in those days was very similar to that for a full master's - commercial master's certificate. I then became involved in yacht race management in a voluntary capacity and was invited by the flag officers and committee of the Royal Ocean Racing Club to go and help them with administration and as a result of that invitation I began working with them and stayed there for the period mentioned in the statement.

Q. I note that you there set down the various races that you've raced in and been involved in. Have you actually sailed in a Sydney to Hobart race, that's what--

A. I never have sir, no.

Q. I just wanted to--

A. I would have liked to have done but haven't yet.

Q. You say that you're currently an independent consultant in offshore race management?

A. Yes, that is correct.

Q. And at paragraph 4 you say I'm chairman of the special regulations committee of the Offshore Racing Council and have been chairman of the special regulations committee of the Royal Ocean Racing Club for the past 10 years. Now, the special--

A. Both of those positions are current in fact.

Q. The special regulations committee, what are special regulations, just so that we understand?

A. Special regulations are in layman's terms really safety regulations. They govern minimum equipment and construction standards which are applied in offshore yacht racing internationally.

Q. What about setting the rules with regards such things as the safety aspects, a yacht will carry so many lifejackets and things like that?

A. Yes, exactly that sir. Those are the subject which the special regulations do cover.

Q. Am I correct in thinking that if the AYF, the Australian Yachting Federation, brought to you a recommendation that said that they wanted for argument's sake 20 flares on board a vessel, you would look at that, if you thought that that was a reasonable and a valid idea, you would then make it into a regulation? 5

A. Can I just explain for the benefit of the Court sir the process in a bit more detail? 10

Q. If you would, yes.

A. You use the expression you, which could mean singular or could mean plural and of course such a request would be dealt with by - initially by the special regulations committee which includes a number of members from the 32 odd countries which comprise the Offshore Racing Council. The committee would consider that request, assuming it to be properly formally brought to the committee. The committee with its experts from different countries would decide on its view about that request. That would then be put before the council of the Offshore Racing Council, usually at the end of the week, the conference week, and the final council meeting would then consider the report of the special regulations committee and would endorse it or otherwise. So the expression you which you quite rightly used sir does involve quite a lot of people. 15
20
25

CORONER: Q. From quite a lot of countries? 30

A. From quite a lot of countries sir.

HILL: Q. I see there in paragraph 5 you say I took up my appointment as secretary of the Royal Ocean Racing Club in 1979, just before the 1979 Fastnet Race was sailed. You were in charge of running all aspects of that race, being responsible to the flag officers and the committee. 35

A. That is correct sir.

Q. That race of course had a fairly wild storm as well and then there was an inquiry about what had happened, is that correct? 40

A. That is correct, Mr Hill.

Q. Was that a judicial inquiry as such? 45

A. No it was not, sir, it was an inquiry which was established by the National Authority for Yachting in Great Britain, the Royal Yachting Association and the Royal Ocean Racing Club jointly. The inquiry was decided upon as the event was being concluded. The government authority naturally took a close interest in what was happening and upon learning that the inquiry was about to be put together by these two authorities, the government's view at that time was that the inquiry which the RYA and the RORC were putting together would be likely to bring in all the expertise that was appropriate and the government therefore decided to take no action itself pending their satisfaction that the inquiry was properly conducted. 50
55

CORONER: Q. Which arm of government would have had an interest in the United Kingdom in a matter of yachting? The Department of Sport or--

A. Your Worship, forgive me if I can't recall whether it was then known as the Department of Trade or the Board of Trade or the Department of Transport.

5

Q. One of those, alright.

A. They keep changing their names but it was the equivalent department.

10

HILL: Q. The inquiry and I think we have the Fastnet - 1979 Fastnet Race Inquiry Report, that's the report?

A. That looks to me like a copy of the original documents sir of which I have a sample.

15

Q. Was it an inquiry that actually had - was the evidence tested or was it simply looked at by experts? And by tested, I mean were people examined and questioned, or was it a different sort of inquiry?

20

A. People were certainly questioned, there were a considerable number of interviews carried out and indeed a certain amount of research done to look into the various aspects. But it was not carried out in an open public inquiry forum--

25

CORONER: Q. Like this one?

A. --such as the present one.

HILL: Q. So there was - if I can put it this way, during that inquiry, there was no if you like people who would test from various points of view what the person whoever it was was saying, such as you saw yesterday with Mr Purcell?

30

A. Not in a public way sir, though I have no doubt that in the course of the various interviews with the parties concerned the interviewers would have been experts in the field rather than simply people who were there to take notes and that they would have made every effort to ask appropriate questions, albeit that these questions would have been conducted in a private area, not a public arena. But I would say sir that the results of the inquiry of which you have a copy were of course very widely published and I have no doubt that had there been any questions in the minds of anyone, particularly government officials, about the manner of the conduct of it and indeed the presentation of data, then questions would have been asked very promptly. But to my recollection none were asked and the inquiry results were well received.

35

40

45

Q. I dare say as well that not only would there be scrutiny from a government point of view but of course among your peers and by that I mean other yacht enthusiasts, they, if there was anything incorrect in the findings, they would have presumably written to their magazines and pointed out errors as they saw them?

50

A. I think that's a very fair assumption, Mr Hill.

55

Q. Yes, they do tend to do that, I think?

A. They do indeed sir.

Q. You then go on in paragraph 6 and you say - you describe your job and in the second sentence you say my team at the Royal Ocean Racing Club was responsible for receiving the entries, putting together sailing instructions and like administrative functions. How many were on this team? 5

A. I had an administrative staff sir of about seven in those days that worked in this particular area. 10

Q. How many yachts did you have in the Fastnet?

A. Three hundred and three on that occasion sir.

Q. Was that more than usual, or was that about the average?

A. No, it was in fact the maximum number that had ever been in a Fastnet, the numbers have been gradually increasing over the years. 15

Q. And you had an administrative team of seven. Full time?

A. That's correct sir, yes. I should explain though that during the course of our operations of running races we would habitually draw upon a large core of volunteers being usually club members who would give their time in order to help the sport and so a core team of seven were the paid administrative staff but that was enhanced by quite a large number of volunteers. I believe this kind of way of working is fairly usual. 20 25

Q. I'm then going to skip to paragraph 13, because the intervening paragraphs you talk about how the inquiry was conducted and you've explained that. You say rescue services, the coast guard in the United Kingdom is the coordinating search and rescue authority for maritime rescue. Prior to the 1979 Fastnet and indeed prior to subsequent Fastnet races, no special action was taken in respect to search and rescue beyond informing the coast guard of the fact that the race was about to take place. 30 35

Can you give us just an overall view of what the coast guard is like in Britain? I'm quite sure we've all seen these pictures of these lifeboats that are there and they slide down and things like that. What's the situation? 40

A. Yes Mr Hill, the coast guard in the UK I think is slightly different to that in other countries. Although coast guard services are no doubt broadly similar, they do differ in detail. In the United Kingdom the coast guard is the statutory authority for looking after safety of life at sea. They maintain - they used to maintain, let me start, by having visual lookout stations pretty well all around the coast. This way of working was replaced in the last 20 years by shutting the visual stations and moving the staff to control centres, largely due to the fact that modern communications meant that in the view of the coast guard service they could better operate their facilities in that way. The coast guard is essentially a coordinating organisation. They run these maritime rescue centres on a 24 hour basis but they have relatively few vehicles, by which I mean seacraft, land vehicles and aircraft, they have relatively few of those actually directly owned by them. 45 50 55

The seagoing units which look after marine rescue around the shores of the UK are put there by the Royal National Lifeboat Institution, the RNLi. This is quite separate from the coast guard service. In the United States, the coast guard service actually operates cutters, coast guard cutters, and it has a lot of vessels. In the UK that is not the case. In the Fastnet report you may have noticed that there were some 18 lifeboats altogether disposed to assisting in the rescue operation. These were all directly provided by the RNLi. The RNLi is one of the UK's most famous charities and runs entirely on voluntary subscription. The RNLi and the coast guard obviously work closely together. The coast guard being the statutory authority has the responsibility for directing a search and rescue operation and it may call into service the lifeboats, it may call in assistance from the Royal Navy, the Royal Air Force and so on.

Q. I think that the lifeboats that you've talked about, they seem to be basically all along the coast, is that correct? 20

A. In a general way of speaking, yes, it is correct sir.

Q. So it's not as if - they're not hundreds of miles apart or anything like that? 25

A. Not in the south coast. I think perhaps in some of the more remote Scottish areas that may be the case.

Q. So what would be the distance between them on the south coast, because I understand it goes - the race, the Fastnet race, goes from I think from the Isle of Wight along the coast past Cornwall and then to the tip of Ireland where the Fastnet Yacht Rock is, is it, and then it comes back and into Plymouth? 30

A. That's absolutely correct, Mr Hill. 35

Q. What are the lifeboat facilities along that area of the coastline?

A. Along the coast I suppose there's probably a lifeboat about every hundred miles. The lifeboats possibly in those days but certainly nowadays tend to vary in type. We have some all weather very fast long range craft, similar to those that are used by the Americans and we also have a number of small inshore craft which are usually inflatable boats with bit outboards and self-righting devices which are more suited for going to rescue windsurfers and that sort of job. 40 45

Q. Did you say they were about every hundred miles spaced?

A. I'm trying to think of the distance between the larger lifeboat stations. It may well be that I've stretched them out a bit far there, perhaps there are really more. 50

Patently if there were 18 boats out perhaps the division doesn't work quite like that. Could I just add also sir that although the Republic of Ireland is a different country, curiously we do share some institutions and the RNLi operates also in Ireland and so there were lifeboats also positioned around the south coast of Ireland under the 55

control of the RNLI.

Q. So how many actually were involved in the Fastnet?

A. Eighteen boats I think is the count of those who attended.

5

Q. Any aircraft that you can recall?

A. Yes. In particular the Sea King helicopters which are dedicated maritime search and rescue aircraft, which were based at the Royal Naval Air Station at Culdrose in Cornwall but I believe also some fixed wing units were deployed. I can't remember if these were Canberra or what but I'm quite sure Nimrods possibly, I'm quite sure there were several of those also deployed. These are in fact listed at the back of the report.

10

15

Q. Perhaps you could tell us how many aircraft were involved. The reason I'm asking this question is because we've had evidence from AMSA which is our maritime safety authority that they were starting to run out of rescue equipment and facilities. I just want to compare, because obviously in Britain there are far more people and far more resources.

20

A. I don't know how quickly I can give you the answer you want from looking at the paperwork sir but in annex 5 Alpha on page 75 you will see a list of the SAR units involved. There are Nimrods. I'm not sure whether the list here comprises sorties or individual aircraft. Then of course you can see the helicopters also listed. I'd be perfectly willing to try to clarify that for you as a matter of record, though it may be difficult to do that immediately.

25

30

Q. Alright, thank you. So that lays out the facilities that were able to be called out, to perform these rescues during 1979?

35

A. That's correct, Mr Hill.

Q. Then going on to the communications and you say in 1979 there was no tradition in English and indeed in European waters of fitting HF or even VHF radio transceivers to yachts. Why? What was - just hadn't been thought about or what was the situation?

40

A. I think probably it was a question of need and response to need sir. The waters of the UK and western Europe are those in which there are plenty of ports of refuge relatively close. There's also been an ethos for complete self-reliance and there was never much need expressed by anyone for small craft to carry this kind of communications equipment. And by anyone, I mean both those who participated and indeed also the statutory authorities.

45

50

Q. You also go on to say that it was not an official requirement although 66 per cent of vessels in the 1979 Fastnet race had VHF included in the Admiral's Cup fleet for whom it was compulsory. Why was it compulsory for them?

55

A. It was compulsory for the Admiral's Cup simply because this was a high profile sporting event which the club was keen to report to the media as thoroughly as it could and in

a 600 mile race as you will understand sir the boats leave the starting line and don't arrive at the finishing line for perhaps three days, until a period of some three days has elapsed. Now, if as we were trying to do to build up the event as an international event, then patently it was important for us to provide information to the media about the progress of the event and without some kind of communication system we couldn't do that. Therefore we made the carriage of communications equipment, in this case VHF in that date, mandatory for the Admiral's Cup fleet. 5 10

Q. You then go on to point out that the Sydney to Hobart race as you understand it has a history of organised radio communications dating back for more than 30 years. Was that ever explained to you why that was so, why they insisted upon having some sort of radio communication? 15

A. I knew that in this part of the world the carriage of HF or MF radio was quite the norm. In my mind that was related to the rough open waters which you encounter as soon as you leave the coastline here, unlike the English Channel you don't venture into a relatively protected, I use the word relatively as an important qualification, relatively protected waters. You are out into the open ocean and also I understand that the ports of refuge on the Australian coast are probably much further apart than they are in the UK. So I think the use of long range radio is perfectly understandable. 20 25

Q. Now you say in paragraph 16 in the wake of the 1979 Fastnet race it became clear that VHF radio telephones on competing yachts had the capacity to be of considerable assistance. In what way? 30

A. The initial impact of the value of VHF was in the rescue phase, Mr Hill, that is to say when a lifeboat or a Sea King helicopter was approaching the scene of a position where there were boats or boat in need of assistance then for detailed tactical purposes it would clearly have been advantageous for the rescue unit to be able to speak to the unit - to the craft which it was trying to rescue. 35 40

CORONER: Q. No notification of distress as well as rescue? 40

A. Not with VHF sir, because the range is so short. There is some value in that certainly but as a principal means of attracting attention it's less effective but the tactical communications is highly valuable. 45

HILL: Q. What is the preferred method, if I can use that, around Britain and Europe for attracting attention in distress, what do you use? 50

A. Of course we are still in the era of visual signals to an extent, pyrotechnic flares are still part of the required distress attraction method on commercial ships and also in yachts, at least they certainly are in our regulations. But of course VHF does have some application. As I have just said to his Worship the range is short, a maximum of 30 miles and that's probably to a shore station rather than ship to ship. I think currently by far the best method of attracting attention to a distress is by a satellite beacon. 55

- Q. How far off the coast does the Fastnet race go?
A. That's a matter of choice, Mr Hill, which depends upon the wish of the navigator of the boat but however I would say that it's unlikely that the boats would be much further than 30 miles offshore during their transit along the English coast and indeed they approach within that distance of the Irish coast as they go to the Fastnet Rock. Whilst they're crossing between the Isles of Scilly and the Fastnet there's probably some 120 miles when they are further out than that.
- Q. You tell us that it was a recommendation from the Fastnet inquiry to adopt the VHF radio telephones.
A. Mr Hill, I've said it was implicit, in fact the inquiry recommended that this should be examined, it didn't actually take the decision that this was a decision made by the inquiry. It recommended that the situation should be examined.
- Q. And has it been adopted?
A. Indeed it was examined and eventually though not immediately, it was a space I think of some two or three years as I've said in paragraph 16, before VHF radio telephones were required by all boats.
- Q. HF radios are not required in the United Kingdom or in Europe?
A. They are not normally used sir, except for transoceanic voyages.
- Q. Is it because the distance doesn't really require it, or what?
A. That is correct sir, yes.
- Q. Because HF is for the longer distance. Is that--
A. Yes, that is correct, although it might be useful to consider for a moment the difference between MF and HF. As I understand it, MF relates to the frequency range up to say four megahertz from around two megahertz and then HF from four up to probably 30 megahertz. In the latter range, it's possible as any radio ham would know, it's possible to communicate around the world and at more or less any distance below that. If we go back to the development of maritime radio, before VHF was commonplace, I'm now going back about 30, 35 years, MF by which I mean two to four megahertz was commonly used as a short range method of communication. That gradually gave way to VHF for short range, whilst HF has always been a long range tool.
- Q. You then go on to point out in paragraph 17 there was no requirement in the Fastnet race even up to and including the present day for compulsory communication skeds to be held during the course of the race except for the Admiral's Cup. The Admiral's Cup did and you've explained that's why because you want to keep the interest going, you want to know what--
A. That's correct, sir.

Q. But otherwise you've never seen a need for compulsory skeds?

A. We have not sir, that's correct.

Q. Can you tell us why?

A. In deciding to do a particular thing you need to have good reasons for it obviously. It never seemed to the committee that there was a good reason to try to run a regular reporting schedule. The interest in the media was not strong enough for us to want it for that reason and the safety aspect to which you may be referring didn't seem - has never seemed to the committee of the Fastnet race to be a good reason for having regular skeds when there are plenty of other ways of attracting attention to a vessel in distress.

CORONER: Q. What about post 1979 Fastnet, that didn't change things?

A. No sir it didn't. We examined the communications methods that were used in '79 and after two or three years as I've explained we did introduce VHF but VHF as you know sir is--

Q. No good for a sked?

A. Not with skeds and VHF is a short range tool.

HILL: Q. What you went on, you say there that in the 1999 Fastnet race we resorted to encouraging yachtsmen to use mobile phones to report as they were passing various headlands.

A. Yes, that's correct sir.

Q. Who did they report that to?

A. They reported to race headquarters at Plymouth and the reason why we asked for that, as indeed was the reason why we asked for yachts on previous races in a voluntary way to use whatever communications they had to report from time to time to race headquarters, was quite simply for the benefit of the interest of relatives and friends who might like to know about the progress of the race.

CORONER: Q. Yes, I note you've used the word resorted. Why did you choose that particular word? That seems to imply that you were having problems with the existing system.

A. I'm sorry, I didn't--

Q. You used the words we resorted to encouraging yachtsmen. That seems to imply that there were problems with the existing system, is that--

A. I apologise if that implication was made, it's not intended to mean that we had problems sir. I'm sorry, perhaps I misunderstood. When I say we resorted, I was almost certainly referring to the withdrawal of the coast radio station service, because previously when we had asked boats to voluntarily report they were able to do so along the coast by calling the local coast radio station service. That was the context.

HILL: Q. Yes, I'm sorry, I've used that sentence out of context. You say in fact in the United Kingdom VHF coast radio station service has virtually gone?

A. Yes.

Q. The service collapsed in the face of mobile telephones and satcom. So prior to that, they would actually report themselves, would they, or what?

A. Yes, we invited them to report on a voluntary basis just to maintain the interest.

Q. Can I assume that it wasn't the safety aspect that concerned you in regards to a reporting schedule by the yachts because there were other facilities that took in and encompassed the safety aspect?

A. That is a correct assumption, Mr Hill.

Q. Whereas in the Sydney to Hobart there's a lot of space in between settled areas and therefore one would expect some sort of reporting schedule, is that how you would see it?

A. That may well be the reason for it, I have not been party to setting up the Sydney Hobart so I'm not intimate with the reasons for it. I've no doubt that one of the reasons is for public interest.

Q. You then say in paragraph 18 my observation is that the Sydney to Hobart race upholds in some aspects - sorry, in some respects exceeds accepted international standards in a category 1 race, for example the provision of satcomsea for each yacht in the '99 Sydney to Hobart race is a world first for category 1 ocean races of its size. What is satcomsea?

A. Satcomsea is a satellite communications system sir which uses a text transmission method and we have had quite a lot of experience with it. It's extremely effective, doesn't suffer from the vagaries of HF radio or indeed any other terrestrial radio system and to my knowledge it's never - it had never before been used in a race of this size. When I say size in this context sir, I mean the number of boats involved. We have used standard sea on round the world races on at least two occasions and I'm aware of other organisers who've used it also but never with a fleet of the size of the Hobart.

Q. I take it what it is, is a tracking system, is it?

A. It in fact combines a tracking facility with a communications facility, Mr Hill. It's possible to use it only as a tracking facility. In that mode, it has a GPS chip embedded in the control unit which is on board the vessel and the GPS chip produces a continuously updated position, which can be accessed by external interrogation through the satellite system. That access may not be known to the people on the boat at all, it can operate in a quite self-contained way. But it has also the ability to be a communications channel by which it can communicate text, as I said, and this is usually worked through a laptop computer and perhaps a small printer. So in that way the vessel can actually use it to transmit and receive a text message.

Q. So that in effect race control centre could tell where each yacht was at any time?

A. With this system it could indeed sir, even if the text transmission facility was not operating. The location system could be operating on its own. 5

Q. That's not required under the rules, the AYF--

A. The international rules.

Q. The international--

A. Don't require it, sir. 10

Q. Don't require it.

A. May I make a comment about your use of the expression race control. This is an expression which is quite often used though I feel that it may not be properly descriptive particularly to people who are not familiar with sailing race operation. It may give perhaps a wrong impression. I would suggest that a better title would be race headquarters, because the word control could be taken to imply an ability to control, which in fact as I think you have seen Mr Hill and your Worship you have seen in all your inquiries is usually not the case in an operation like this. The boats are usually making their own decisions. So the word control may not be the best word in this circumstance. I say that as a matter of explanation. 15
20
25

Q. You say that it may be used by people who are unfamiliar with races?

A. People who aren't familiar may well take the word control to mean more than it in fact implies in this context. 30

Q. They're not my words.

A. Indeed not. 35

Q. It's called race control centre and you think that may well be a misnomer?

A. Indeed it is. I think it's perhaps a rather loosely colloquial title which is well understood by those involved but may be less well understood by those outside the sport. 40

WEBER: Could I just interrupt. I do it with some reluctance and with a genuine attempt to help. The large annexure to Mr Bush's implementation report in its attachment 14 has a description of satcomsea given by Telecom for yachtsmen, so it might be-- 45

HILL: We'll ask Mr Bush about that, he can explain that. 50

WEBER: I'm in your hands.

HILL: That would be ideal, so we know what's happening, it sounds good. 55

Q. Alright, so moving on from there, you say it's not a requirement but the CYC--

A. Not an international requirement sir.

Q. Okay but the CYCA has in fact made it a requirement.

A. So I understand sir.

Q. That's a first, alright. I'm going to move on to weather, which is at paragraph 19. You say the Royal Ocean Racing Club has never adopted the role of provider of weather information in respect to ocean racing. Can you explain why not? 5

A. Weather information in the areas in which we've run races sir which I must say include some races around the world has always been supplied by the regular weather services, of which there is a multitude. That's a pretty sweeping statement of course and I must say that in one of the round the world races there was some weather information supplied by - in the Whitbread race to some of the round the world races. This is really a pretty special case and the purpose for the provision of that weather information was not in any way because of a safety consideration but rather for a competitive consideration. Because one of the rules - one of the basic concepts of ocean racing is the self-contained unit of the yacht and it's a wish of the competition to test that unit without having outside help. Now, outside help, by this I mean help to win the race and plainly a sailing yacht is very closely linked to its power supply which is the weather, the wind. And the success of that yacht is linked to how well it can make use of the wind. So if a sailing yacht were permitted to access a professional weather forecasting service in order to receive what's called in commercial ships weather routing, then it could be at a considerable advantage compared with its fellow who was simply drawing in weather forecasts from wherever. And it was for that reason that the Whitbread race provided a particularly high quality weather service and I mention that only because as I say this is rather a sweeping statement. But the general operation of offshore racing is one in which certainly in the RORC's program is one in which the boats themselves have to obtain their own weather from the regular sources. 10 15 20 25 30 35

Q. I take it that there are plenty of sources around Europe? 40

A. That is correct.

Q. You've not only got the radios in Britain broadcasting but presumably you've also got European ones? 45

A. We have indeed sir and sometimes they produce slightly different forecasts.

Q. Is it because there is an abundance of sources to get the weather from, or simply to make the yachts self-reliant that the Royal Ocean Racing Club has never actually stepped in and furnished weather reports? 50

A. I think for both of those reasons, Mr Hill. The question of the provision of weather forecasts by the club has never to my knowledge been seriously raised but of course we have to remember that that's in the context of their always being plenty of weather forecasts already available. 55

CORONER: Q. How did it figure in the Fastnet inquiry?

A. Could you repeat that?

Q. The issue of weather, how did that figure in the Fastnet inquiry?

A. Well of course it was a critical feature sir in the Fastnet inquiry. The efficiency of the forecasting agencies was studied closely but the method of transmission of their forecasts was never brought into question in respect of the possibility of the club taking over the transmission of weather data to the fleet.

HILL: Q. I think in paragraph 20 you actually point out and you say notwithstanding the fact that our approach to the availability of weather forecasts to the fleet may seem casual by Sydney Hobart racing standards, in fact the situation is quite different. All yachts have a radio receiver on board with which they can pick up normal commercial radio broadcasts. The BBC regularly broadcasts the shipping weather forecast. In my experience, BBC weather forecasts are given a lot of respect by English and European ocean racers. Most of them listen to the BBC which in addition to shipping forecasts gives synoptic weather and coastal stations reports, as well as detailed forecasts for all maritime areas around western Europe. I think they actually break up the areas into quite relatively small patches?

A. That is correct Mr Hill.

CORONER: Quadrants.

HILL: Q. Is that right?

A. That is correct, your Worship.

Q. And then you point out that there are many weather stations around Europe and across the Atlantic than are available around Australia and it appears to me that the BBC weather forecasting service may therefore be more detailed than is available in Australia. So it may well be that the situation is that we don't have the facilities, therefore that was one of the reasons the weather was supplied here, is that your understanding?

A. That may well be the case sir. On the provision of weather, I'm looking around for a paper reference which I have here, but under the provisions of the Safety of Life at Sea Convention as you may well be aware, it is a responsibility of a contracting government to supply weather forecasts for mariners and I've no doubt that the Australian services do that within the convention. The convention is due for revision I think in July 2001, at which time a higher frequency of weather forecasts is going to be part of the obligation of contracting governments. So it may well be that the Bureau of Meteorology will according to that convention be looking at enhancing the regularity, the frequency with which weather broadcasts are made.

Q. The other thing I notice in paragraph 22 and I will come to that but first of all the races around Britain that are

conducted by your organisation and other organisations, I take it you get yachtsmen from all around the world?

A. We do, sir.

Q. Including some from Australia?

5

A. We have indeed had the pleasure of welcoming Australian yachtsmen on a number of occasions, Mr Hill.

Q. I take it in the Sydney to Hobart people from Britain actually come to the Sydney to Hobart?

10

A. They do indeed, sir.

Q. And other - from other parts of the world as well is your understanding?

A. They do indeed sir, it's a famous and well respected race.

15

Q. The reason I'm leading up to that is that the BBC still uses the Beaufort scale.

A. Yes it does.

20

Q. So do I take it then that yachtsmen would appear to understand, as far as you're concerned, the Beaufort scale?

A. I believe by and large they do sir.

25

Q. There's been evidence from people talking about force 10 and force 8 before this inquest but certainly as far as the BBC is concerned in Britain they're using the Beaufort scale and that's what these yachtsmen rely upon?

A. The BBC forecasts do use the Beaufort scale sir, yes.

30

Q. We've dealt with the weather as far as I want to. I'm going to go to paragraph 25, start and abandonment. This is starting the race and abandoning it. Paragraph 25 you say it has happened that at or just prior to the start of the Fastnet or other long ocean races in the United Kingdom we have been aware that severe weather is likely. In such circumstances the Royal Ocean Racing Club has broadcast the latest available weather over VHF radio and reminded skippers on very rare occasions in terms to the effect that the race is scheduled to start on time but skippers are reminded of their responsibilities. We pass on to you the latest severe weather forecast from the weather centre and accordingly skippers should take notice of weather conditions in making their decisions whether or not to start in the race. And then you say once a race is underway however we do not attempt to disseminate weather largely because of the excellence of the general weather broadcasting services. Then you say the BBC for example not only passes on severe weather warnings but will interrupt its regular programs to do so if the weather is particularly severe. What you seem to be saying there is where you have notice that there is going to be bad weather ahead, before they get there, before they even start the race, you point out there's bad weather ahead and you should really consider your options about taking your vessel into it?

35

40

45

50

55

Q. Then you say it's up to you. Is it a case that you have discharged what you consider your responsibilities by (a) pointing out that there is rough weather ahead and they should consider their position before deciding to go into it or not? Is that how you see that? You've then discharged your responsibility.

5

A. That is how the RORC sees it sir.

Q. And then it's left to the individual as being master of the vessel and the crew as it were, if they have that sort of vessel, to make that decision--

10

A. Absolutely sir.

Q. --having all the information?

A. Yes.

15

Q. If you had actually started the race, you say there that the BBC interrupts. If you don't have that facility, where the BBC does interrupt, or any other weather facility and you were the one that was supplying that information about the weather and you have it brought to your attention that there is a storm, do you consider that it would be - before the fleet actually gets into the area of the storm that it would be a responsible move, a prudent move to say hey, you've got severe weather ahead, you should consider your situation? Would you agree with that?

20

25

A. That sounds like a perfectly reasonable proposition sir.

Q. That is accepting that there is no outside source or anything like that?

30

A. Indeed.

Q. And you had taken that responsibility to supply the weather?

A. Indeed.

35

Q. You say in 26 because we do not have the system of scheduled radio communication, abandoning a race after it has started is a practical impossibility for us and that's simply because once they're across the line as it were there's no holding them and there's no calling them back, there's no facility for it?

40

A. Yes sir, that statement is correct but I don't think it's exclusive even if we thought we had the means of calling them back. Indeed on some of the round the world or transoceanic races, in theory one has often a highly reliable communications system but in practice to suddenly tell people when they're way offshore that the race is abandoned isn't really going to help very much in my opinion and indeed the opinion of the committee who has often considered this matter. The vessel is still very much under its own control and for an agency ashore to try to direct that vessel would I think be unwise and is indeed contrary to the practice - to seagoing practice both in sailing and in commercial ships.

45

50

55

Q. I understand that in the Fastnet, the 1979 Fastnet, some people rode out the storm, some people sailed before the

storm and various tactics were adopted?

A. That's correct sir.

Q. It appears after reading it that one can't really say which was the better tactic to adopt, it was simply a matter of luck? 5

A. That's correct sir. We have - I think in sailing we have done over the years as much as we possibly can to gather information about these kind of conditions but the fact is that they are still really quite rare and so the statistical quality of the information that we have is still not high. And so as you rightly say, conclusions about the best possible method are still rather open. 10

Q. At page 27, sorry paragraph 27 over the next page, you say that under our standing instructions if it was known for example a 65 knot front was going to hit the fleet, then we would make the starting signals. Do you mean we would not make the starting signals? 15

A. No, I don't mean that sir. 20

Q. What do you mean then?

A. I mean this was intended to be an example. The policy of the club which is stated in the annual program that I think is quoted in the paper but I can give you the reference, the policy of the club is to make starting signals except when the race committee at the start judges it patently unsafe to actually manoeuvre the yachts within the immediate vicinity of the starting line. But the conditions down the track and my paragraph 27 was meant to be an example, the conditions further away would not be a cause for not making starting signals. So unless it was physically impossible, for example committee boats couldn't hold station or if there were huge waves in the starting area which patently would cause yachts to collide with each other because they physically couldn't avoid each other manoeuvring, then that would be a cause for not going ahead with a start. But the conditions further down the track, albeit forecast conditions, would not be a reason for not making a start. 25 30 35 40

Q. You go on to say at the same time the committee would broadcast a warning to the fleet advising it of the forecast conditions and reminding the skippers in the fleet that if they felt the slightest doubt about their vessel's ability to handle the forecast conditions then they should make the appropriate decision. The ultimate decision however would be left up to the individual skippers. So do I take it you would say to them alright, we're going to start at 11 o'clock but you should know this, that down there is a storm of 65 knots, whatever it is, so bear that in mind and make the decision, we'll quite happily bring the flag down or fire the gun but you have to know about that? 45 50

A. That is correct sir.

Q. So you'd warn them? 55

A. Provided we knew about it then--

Q. Yes, provided you knew.

A. Then of course we would warn them sir.

Q. You then go on in paragraph 28 and you say I am aware from my own experience and knowledge that very many yachtsmen from all walks of life and from all corners of the globe have given a great deal of attention to the questions of whether or not an ocean race should be cancelled because of extreme weather conditions either threatened or actual. So this has been debated, it's not--

A. Thoroughly and continuously sir.

Q. It is my belief that this strong consensus world opinion is reflected clearly in fundamental rule 4, that is a boat is solely responsible for deciding whether or not to start or to continue racing. So there are other views, I take it? There are opposing views to that?

A. There indeed are sir but they are - they have always been outvoted in any conferences of which I'm aware and the regulations of the International Sailing Federation, I'm sorry there are so many jargon words and names coming in here but the ISAF or International Sailing Federation is a federation of some 130 countries whereas the Offshore Racing Council as I said is particularly offshore racing council countries of some 32-odd. So the ISAF which brings together sailors from all those countries has very carefully thought about this as indeed we all have and their decision is enshrined in fundamental rule 4 to which you referred.

CORONER: Q. I take your point and I acknowledge that it would be an extreme step for a yacht club here to take to implement a clause relating to ordering abandonment of the race but isn't our situation here somewhat different in that we have in the situation of extreme conditions in Bass Strait which is not an uncommon thing in January that's got to be looked at in the light of quite a large fleet, an extremely limited resource - rescue resources, an enormous expense of mounting rescues. Would that - could you see that that may be more so here than in the United Kingdom?

A. I think the scenario you've described is a very serious one sir and I don't underestimate it. I think however what we're talking about is whose responsibility should it be to make the decision. We all agree that a decision need - a proper, well informed decision must be made, there's no doubt about that. I think the issue really is deciding who should be making the decision. If we think about the case of a yacht going onto the high seas, whilst at the beginning of the voyage a land based agency may want to make a decision on its behalf, as soon as its 100 miles offshore and its radio is not working, it is absolutely on its own. There's nobody to say now put up your storm jib, now put up your storm trisail, now turn and go downwind. These are things which the skipper and the crew must decide for themselves. I think this is a most important principle and the one which the international sailing community has time and again returned to, albeit it's a difficult debate, I don't underestimate that.

HILL: Q. Can I suggest that it appears to be a solution between the right of the individual and the vessel and its crew to do as they see fit provided on the other side all the information has been supplied to them that can possibly be supplied, so that they can make an informed decision and after that, one can stand back and say I've done all I can possibly do, that final ultimate decision rests with them?

5

A. Mr Hill, I think your use of the expression informed decision is absolutely correct.

Q. In paragraph 28 at the bottom there, you also have a worry that if you set a limit, an upper limit of 60 knots, then designers will build vessels that will withstand perhaps 65 knots knowing that they don't have to build beyond that and that may well be a problem. I understand that Mr Van Kretchmar points out that in fact the America's Cup has come to that situation where they've built specific vessels because they don't start I think over a breeze of 25 knots. Is that one of the other problems that you--

10

A. That is absolutely the issue sir and whilst 60 knots perhaps is a rather high figure to make the example clear, if one considers it at a lower level and says alright, 45 knots, then I'm afraid there's no doubt that what would follow would indeed be that builders would take that as a licence to build their boats to withstand that particular wind speed and then the consequences of course are clear to imagine that one day one of those boats will be out at sea and the conditions will get worse than the set limit.

15

20

25

Q. I want to ask your opinion on this. If we have vessels that are racing and going into the sea, now obviously there will be more strain on such vessels than if they're simply running before the wind or avoiding the storm?

30

A. That may well be the case, though not necessarily.

35

Q. No, not necessarily, but if the contact is from the rescue authority is you've still got a race going on, vessels are still racing into that sea more strain, I haven't got the resources to go to any more vessels, what then? A difficult situation?

40

A. I don't understand quite the purpose of your question Mr Hill.

Q. The purpose of the question is this. It's come back to the race control centre via the rescue authorities, they say to them I haven't got any more available personnel or equipment to go to any more vessels.

45

A. Are you suggesting that in the face of extremely severe weather that racing craft would be inclined to take a more risky course because they knew that there was still apprised to be one than they would if they were cruising?

50

CORONER: Q. No. The very real problem here is that if you use the example of the 1998 Sydney Hobart race, from what we've learnt, our rescue resources were stretched to the absolute limit, the absolute limit. Now, that's - I think that's the basis--

55

HILL: Q. Yes, that's right, I mean that's what the--

CORONER: Q. --he's putting the question to you, you see, and that's why I raise the issue of perhaps alternatives in severe weather of warning the fleet perhaps if winds reach a finite level. Other ways to stop this - stop the fleet sailing on in circumstances where there is going to be calamity, rather than - I take your point about ordering abandonment of the race, that would be an absolutely extreme recommendation for this coroner to make, but I do need to look at this race in the context of our own resources for running the race beyond the CYCA.

A. Yes. But as I see it your Worship, if the fleet is out there already and the conditions suddenly change unexpectedly and become extremely dangerous, the boats will indeed as we heard from one of the witnesses yesterday the boats will effectively go into survival mode, they will concentrate all their resources on looking after themselves and their crew. In my personal experience, if that means turning round and sailing away from the destination of the race, that's most certainly what they would do. It's on record for example that in one of the famous races in the English channel one of the competitors, I think Adlard Coles(?) is one who did this, actually went and sought shelter and anchored in a bay by a headland for many hours and then when the weather abated came out and continued the race and won a prize. Similarly I think that in extremely severe conditions the boat and its crew would do everything it could to look after itself first, as I say again as we heard yesterday. So I'm not sure how a change to the method of operation could make any difference to the unfortunate situation to which your Worship referred.

HILL: Q. I'm going now to deal in page 10 with liferafts. You say there has been a growing need for an authoritative comprehensive standard for leisure liferafts for some years. You say whilst category 0 liferafts are considerably more sophisticated than the liferafts required for category 1, it is the position of the Offshore Racing Council that category 0 liferafts would be excessive in lesser categories. Why?

A. I don't know whether considerably more sophisticated is really the best way of describing that sir but as I think you know, the SOLAS Convention liferafts are liferafts which are designed and manufactured for use on commercial shipping and it's only within the last few years that we've introduced that as a requirement for category 0 races. Category 0 as I think may be explained hereto was particularly introduced for round the world races where the boats are doing thousands of miles through the Southern Ocean. The liferaft industry as I understand it, the best practitioners in the liferaft industry, use the essential SOLAS requirements in building leisure liferafts. I think not all of them do that. Those that do I think do so because it's patently less expensive for them to continue a production run in a particular manner, to result in different products rather than totally changing the production system. So already a number of the liferafts are

built to essentially similar standards in fact as those of SOLAS. In SOLAS the weight and packaging, I won't dwell really on the content of the packs because those can be quite easily changed, but in SOLAS the weight and packaging and indeed the storage circumstances are really different to those in leisure yachts. For example, if you're talking about a commercial ship, then the percentage of weight of a liferaft and its impact on the operation of that vessel is minuscule. If you're talking about a 32 foot yacht and you brought to it a large and heavy canister from a commercial ship, the percentage of weight compared with the weight of the boat would be so enormous as to possibly even comprise a safety hazard itself. And so the leisure raft industry responds - has responded to the need for lighter weight rafts by producing them. Lighter weight doesn't necessarily mean less strong, though I accept as in any manufacturing process if the process isn't well completed then the strength may not be satisfactory. The lighter weight raft and the lighter weight packaging is for the reasons I've explained more suitable for a leisure craft. The SOLAS raft includes a requirement for a drop test from some considerable height, I think it's 18 metres, and that sort of height as you will know from the studies you've made simply doesn't occur in sailing boats where the freeboard, the height of the deck above water, is only a matter of two or three feet. So having a raft overdesigned and overheavy is something that is inappropriate. The canisters which are habitually used to encapsulate a commercial ship's liferaft are I would suggest designed to withstand considerably heavy wear and tear. Men with boots on for example, working the deck. Which is fine in those circumstances but that sort of weight of canister is not really appropriate in a small yacht. So there are a number of reasons why the criteria for an effective liferaft in a yacht would be of a different and apparently lesser specification to those in a SOLAS raft.

Q. Isn't it a case that the rafts that are being produced at the moment simply do not stand up to the storms?

A. We certainly have seen some raft failures and that is a situation which--

Q. I'm going to show you a photograph of the 1979 Fastnet race and it's taken out of the book called Heavy Weather Sailing.

A. Yes.

Q. We'll put it up here.

CORONER: Unfortunately we can't do much about the lighting here. You can turn them off, it won't make much difference.

HILL: Q. This is the crew of a vessel, a yacht called Trophy, and you've undoubtedly seen this plenty of times?

A. Yeah.

Q. The floor of the raft has gone, the canopy has gone, they are clinging to the outside of the tube. Now this was basically the same as the Winston Churchill, one of their rafts, except this one actually seems to be mitred into a various shape, looks like an octagon but I'm not sure. Unfortunately with theirs it wasn't, it just became one long tube connected and went everywhere. That's 1979. Winston Churchill 1998, we're talking 20 years, nothing has happened.

A. Well sir, are you speaking from the knowledge of having discussed this with the manufacturers.

Q. No, they won't appear unfortunately.

A. It's my understanding sir that after the '79 Fastnet, when these problems were brought to light, that the liferaft manufacturers themselves did address them and we were assured certainly that they had been addressed by them.

CORONER: Q. Well it seems to be still a problem.

A. I note that sir, and we had in fact in the Offshore Racing Council, as I've said, noticed that there was still a need for a comprehensive standard. We did produce with the assistance of Mr Mooney, from whom you've heard, an outline standard because at that time there was nothing at all. But I would say that although our council comprises experienced yachtsmen, we are not liferaft manufacturers and - or engineers, and we have done the best we can to steer the industry towards establishing proper common standards or at least common standards that would try to prevent this kind of failure from occurring. And over the last two years including before the '98 Sydney Hobart I made an approach to the International Standards Organisation whom I knew to be working on this subject, to press them for progress. I did this again after the Sydney Hobart and indeed my own committee has established a group of people which is committed to studying the results of your inquiry sir, so that we could pursue the establishment of a new standard, if necessary in spite of the actions of the International Standards Organisation. One of the effects of that move, of which I informed the ISO, has been the publication in June this year of a new revised standard, draft standard by the International Standards Organisation. We however don't want to make another public statement on this until we have had the benefit of receiving the studies which your inquiry sir

has put into place.

HILL: Q. So the International Standards Organisation has issued in June this year a standard for liferafts?

A. That is correct, sir. I think the cover date is April but in fact it was circulated in June.

Q. It's a draft though is it?

A. As a draft international standard.

CORONER: Q. And what is it in practical terms? Is it something below a SOLAS standard but--

A. I would have to say that I'm not a sufficient expert in liferaft engineering to be able to give you that judgment at present, sir.

HILL: Q. Some of the problems from the Fastnet report that were seen, and I'm looking at page 29. It says "other adverse comments on the performance of rafts which related to protection from the sea and from cold which the rafts afforded," and some people have recommended blankets, and at point 3173 it says "trials carried out on foil space blankets some years ago indicated that they were likely to be of little use in liferafts." And this is the important part, "the blankets are extremely efficient in preventing loss of heat by radiation, but the major heat loss suffered by survivors in a liferaft is by conduction through the raft floor against which a foil blanket affords little protection." My understanding of the SOLAS liferaft is the fact that it has a double insulated floor to it and thus people are kept warm.

A. Indeed, sir.

Q. The point that I wish to make to you is this, that where you say at 44 of your statement "in my opinion the SOLAS liferaft which is the commercial shipping specification does not meet the needs of offshore racing boats." There is no difference between the needs of a yachtsman, a crew member of an oil tanker or a passenger on a liner when they're in the water. Their needs are the same.

A. Indeed sir Mr Hill, I agree with you.

Q. Aren't you really starting at the wrong end and saying we want something that fits our yachts rather than saying this is ideal for us if we have to go into the water. Let us design our yachts to what the international community has got together, looked at and said with this you will survive?

A. I don't think that's the case, sir. I've tried to explain the circumstances in which rafts are put on board, in which rafts are carried on yachts, and I think the - I think the whole context of the use of the raft needs to be taken into account. May I also draw your attention to the Offshore Racing Council special regulations booklet of which you may or may not have a copy, but on page 14 with regard to liferafts we do state, I quote, "insulated floor. The national authority or notice of race should specify" - and in race rules parlance should be an option, not a mandatory word - "should specify whether or not an insulated floor,

appendix A Kilo, is required (an insulated floor is mandatory in a SOLAS and is strongly recommended by the ORC in every raft." So I think you can see that we do - we do already recognise the value of the insulated floor, and if I continue as chairman in the - within the next period, which I anticipate I shall, I shall certainly do all I can to convince the committee that the insulated floor should be a mandatory part of the kit of the raft.

5

Q. But you simply see the SOLAS raft as being too bulky for the yacht and not the other way round, that it's the best preserver of life that we can come up with, as it were, if you have to go into the water? You see you're looking at it purely from the yacht point of view and the racing point of view rather than from the preservation of life.

10

A. I hope you're not suggesting that I'm not open minded, sir.

15

Q. No, not for one moment, but what I'm asking you to do is perhaps stand back and say well shouldn't we really be starting at the other end, that if a person has to get into the water, what is an international standard that obviously many countries have looked at and decided that this is the equipment that's best suited for you if you do happen to go into the water?

20

A. Yes sir. Well interestingly you've used the word international standard and that of course is another standard to which I've just referred, which seems to us may in fact be a more appropriate end result. But however, the situation is still not decided. Once the results of your inquiry are available to us, we are keen to pursue the subject with vigour to achieve as good an outcome as we can, and if this means changing the way we've looked at liferafts in the past and trading up to a large, a large and heavy device, then maybe that's what we have to do. I'm open minded to that extent.

25

30

35

Q. What is it precisely with the SOLAS raft that is, as you see it, the problem? Is it bulk and weight? Is that primarily the problem?

40

A. Basically that sir, although certainly expense. It's certainly more expensive but I don't believe that we should allow the expense to be a problem, and indeed it's often the case that lighter weight devices are more expensive than heavy ones.

45

Q. It's just that we've also seen a report from the Australian Maritime College where they had a SOLAS liferaft which I think was a few dollars actually cheaper than one of the less standard ones but it was I think about twice as heavy. That was a problem.

50

A. Yes, I think sir you would agree that there are circumstances in which equipment can be built to perform equally well but to a much lighter weight, albeit for a much higher cost, and I think what we must do, and I believe we're in agreement about this, is pursue the highest standard.

55

Q. Well moving on from there over to page 11, education. It's there dealing with the training of crews and you say midway through paragraph 45 "training and on page 16 we list topics in which we say that the skipper and at least 30 per cent of the crew must have had training." I take it it's the skipper and 30 per cent of the crew, not just 30 per cent of the crew including the skipper?

5

A. I'd have to read the wording.

Q. Well that's what I'm trying to find out, whether you're simply talking 30 per cent of the crew which includes the skipper--

10

A. The wording says 30 per cent including the skipper so--

Q. Well in this it says in which we say that the skipper and at least 30 per cent of the crew.

15

A. I apologise for the confusion.

Q. No, it's all right, I just want to know what you're saying.

20

A. Yes.

Q. Now 30 per cent training how? What sort of training?

A. Well the details of the training as you can see in section 6 are not given. We met in November and received the Cruising Yacht Club of Australia's I think excellent report on the Sydney Hobart race, and it became very clear to us that training should be part of the regulations. However, developing a proper training syllabus and schedule is a big and expert task, so for the immediate issue - this book was issued in January as you know, sir. For the immediate issue of this book we felt it would be valuable to at least set a marker into the international community by saying that we now - we from now will expect a minimum level of training. The details of the training will have to follow. But there are of course many training courses in maritime subjects available in different countries of the world which at the moment would be quite relevant to this list. I might add that we have said here that the ORC strongly recommends that all crew members do likewise, so I think you can see our ultimate aim is to improve the training level for everybody on board. But there's no point in making regulations which initially are so onerous that nobody can comply with them.

25

30

35

40

45

Q. I take it that you differentiate between training and what's been called experience, because we've had people who have been very experienced in Sydney to Hobart yacht races but never had been in a liferaft.

A. Yes, we do indeed differentiate there, sir.

50

Q. So there's quite a difference in your mind between training and simply experience?

A. There's a big difference in my mind, sir.

55

Q. You talk about safety checks at paragraph 48 and you talk about random safety checks and you regard those as quite good. Is that--

A. I regard - could you say it again please?

Q. Them as being quite good. That's a good technique?

A. Yes.

Q. I'll give you an instance. I was speaking with someone last night who was just back from the New York to Bermuda and they won, and as they crossed the line there was a safety boat alongside and they just came over and they asked for all these particular items to be produced.

A. Yes.

Q. Is that the sort of random testing that you regard?

A. It is indeed sir, just as in the civil community random testing is sometimes carried out to check on law enforcement.

Q. Rather than a check that might take place a few days before where the items can be removed and passed from vessel to vessel, which occasionally does appear to happen?

A. I think both kinds of checks have their value, sir.

Q. But a combination of both would probably be the best of both worlds, that is that they can be checked crossing the line?

A. Indeed, I think it would.

Q. Over at 49 you talk about a number of long and many short ocean races are conducted in the United States including the Bermuda race. Isn't the limit of positive stability for the Bermuda race 120 degrees?

A. I can't recall. I would have to - I would have to look that up, but perhaps you have a reference to that.

Q. That was one of the findings I think as well in the Fastnet inquiry, that the higher the limit of positive stability the less likely you were to be (a) knocked down, and (b) if you were knocked down you would recover a lot quicker. Is that the--

A. That's a correct general summary of the situation, sir.

Q. And that's why the stability ratings are as such, that is 110, 115, 120--

A. Yes, that's correct sir.

Q. Then we get on to the safety harnesses, the clips. We have what appears to have been the death of one person in this race because they couldn't get or undo the clip. What are your thoughts on this? Because we've a board with various devices. There would appear to have been in the Fastnet race similar deaths where people were underneath and could not get their safety harnesses unclipped. I think one survived though and he managed to get out. Is there any thought into this?

A. Yes, there's been a great deal of thought on the development of safety harness, sir. In the - at the time of the Fastnet it was common for safety harnesses to have the lifeline or tether fixed to the body part of the harness

with a permanent fixing, usually a splice, so that it was not physically possible to separate the line from the harness unless you literally cut it with a knife. And in the intervening period between then and now the regulations have been changed so that it's required now to have a clip on each end of the lifelines. Of course we take the point that the clip on the inner end, and effectively that means the clip on both ends because they could be moved around in practice, should be of a type which can be released easily under load. There are clips in existence which can release under load and they're used in other parts of the boat in fact. Whether they're absolutely in the best form for use on the harness is still a subject of study, because clearly what we don't want to do is to provide a man with a harness of which the chest clip is going to be accidentally released when he needs it most. There is a lot of this time I would say much more effective action in the International Standards Organisation. They have produced a new standard which is called 12401. It's only just published. But notwithstanding that, there is other research work in progress. As part of my work with the Volvo ocean race, I'm part of the Volvo ocean race safety committee, and Volvo being a company which is committed to safe practice in the automotive industry has a particular interest in helping to contribute towards safety in offshore racing now they're involved in this race. And one of the activities of the safety committee which has present in it a safety engineer from Gothenburg who's an expert in car crashes and seatbelt harnesses and so on, one of the studies is in fact the whole harness operation including the jackline, the jackstay, to which people clip on. We I think are aware of all the problems that had been raised, but if there were any more problems of which this inquiry is aware then we'll be only too pleased to take them up. And in particular the studies are concerned about the effect on a person who might go overboard at very high speed, of which these Volvo boats are capable, to be brought up all standing, so to speak. The shock load on the body and the ribcage is possibly catastrophic and so again, whilst we want to keep people from going overboard, we don't want to put them in a position in which they're going to actually be injured by their own safety device. So there are a number of issues here which I can assure you are receiving very close and expert attention.

Q. I notice that you have annexed the crisis management and this is the crisis management for the Fastnet race, is that correct?

A. Yes, that's correct.

Q. You go through that all the way to page 15, and I don't intend going through it bit by bit. It can be read there and it simply lays out things. What I did note upon reading it was that when you move down to Plymouth from where the--

A. Cowes.

Q. Yes Cowes, where the race is started, you are still in contact, you're still contactable?

A. Yes, that's correct.

Q. And in fact throughout this crisis management there is this - appears to be a policy of always there is someone to contact who can make a decision.

5

A. That is correct.

Q. And you go so far as to also name the particular people in all of the groups who may be required in a crisis management policy that they can ring. They can ring a particular person on a particular telephone number and it appears to be their professional number, their home number and their mobile number, so everything is listed. So that basically if a crisis arises and someone wants to contact the coastguard at a particular point, they can simply look in here and they know exactly who they must speak to and how they can contact them?

10

15

A. That's our aim, sir.

Q. One of the particular problems that appears to have come out of this is that when some of the group move down to Hobart they go by aeroplane and of course they're not contactable, and we will hear evidence about that. But as far as you're concerned when your group move around, and of course you don't have to move as far and I accept that, you're still contactable?

20

25

A. Yes we are, sir.

Q. You talk about the future in paragraph 64 and you point out that you are looking forward to obtaining the recommendations. Have you any particular submissions that you would want to put before the inquest on any particular topic, such as liferafts?

30

A. Well I have one or two observations, sir. They may not seem of huge significance but I hope they may be helpful. But you asked me particularly Mr Hill about liferafts and again I can assure you that the Offshore Racing Council views as they do the whole event of 1998 with the utmost gravity, and we will pursue the establishment of a good liferaft standard.

35

40

CORONER: Q. Do you believe that's the only method whereby - is to obtain an international standard? That's the only method whereby it will be effective in getting a decent liferaft standard?

45

A. I think it would be the best method sir, because the establishment of an international standard is clearly going to be something with which manufacturers can live.

Q. So who do you go to to seek that international standard?

50

A. Well the International Standards Organisation in Geneva.

Q. Is that under the auspices of the United Nations or--

A. I think it's an independent organisation, but it's becoming particularly important in the European community sir because of - the establishment of the community as a trading block, apart from its political implications, means that the European community is I am told an even more

55

powerful economic unit than is the United States, and therefore market regulations within the community are regulations to which manufacturers all over the world will pay close attention. If they wish to sell in Europe they must comply with European standards. European standards in their turn actually call up ISO, international standards, so I think it's very important that we do try to get the ISO standardisation body to speak our language so that finally the worldwide standards which effectively they control are ones with which we're happy.

5
10

HILL: Q. The other thing, the last topic I want to cover is this, that I note from the Fastnet inquiry that some people who had abandoned their yachts unfortunately drowned, whereas the next day in fact the yachts were recovered still floating.

15

A. Yes.

Q. So it would appear to be that the best haven undoubtedly is the yacht, certainly not the liferaft, the liferaft is the last resort. We have had someone who has put forward a proposition that in fact we should look at keeping the yacht afloat and air bags may be a way of doing that, and that came from Mr Brenac, and then that was asked about Mr Dovell. Do you know Andy Dovell, he's a--

20
25

A. I know him, sir.

Q. And he said that yes, that sort of thing could be done, it's quite feasible. Is that something that's been looked at at all?

30

A. Yes it is, sir. It's now some years since I saw a study done on the subject but it was done by one of our eminent naval architects, Rob Humphreys by name, who has designed the latest 72-foot steel round the world race boats, and his study showed that whilst it's certainly theoretically possible to retain a boat floating, albeit awash and flooded, there are various problems of which the greatest is probably that of what they call free surface effect. And that means, as I understand it, that within the hull of the boat when it's containing a lot of water, perhaps several tonnes, and the boat is moving, as the boat tilts to and fro in a seaway and perhaps more violently than that, the water is able to rush in an unrestrained manner from one end to the other, and in doing so these tonnes of water running free exert enormous pressure and are likely to smash everything in their path. So this free surface effect is - was seen by Rob Humphreys as a considerable disadvantage.

35
40
45

Q. Did he look at the concept of perhaps the air bags being baffles as you find in the tanks of larger vessels?

50

A. Being baffled, sir?

Q. Baffles, yes. In large tanks such as oil product tanks or indeed--

A. Yes. If I understand your proposition correctly Mr Hill, you may be talking about perhaps bulkheads, watertight effectively they'd have to be.

55

Q. Well not necessarily but inside the tank itself, that being the tank, to stop the water or the product, if it's a ballast tank, the water or product tank, from slipping to one side when you are rolling, there is a series of baffles inside and this stops the water.

5

A. I'm talking about sea water within the - within the cabin of the boat.

Q. I understand that and perhaps - did he look at the concept of building the air bags within that area so that they would perform as baffles and stop the rush of water? Was that concept looked at at all?

10

A. My understanding of what Mr Humphreys' research produced was that the forces involved would be so great that restraints of that kind would be easily swept away. With regard though to keeping the boat afloat, the concept of watertight bulkheads is I think a good one but it's not really relevant to relatively small boats of the size we have in--

15

CORONER: No, you're talking about 72-foot boats and that type of thing.

20

HILL: I've nothing further, Mr Coroner.

25

<WITNESS STOOD DOWN

SHORT ADJOURNMENT

<EDMUND ALLAN GREEN(11.55AM)

30

HILL: Q. Sorry Mr Green, I may have cut you off in what you were asking or what you were saying, there were matters that you wanted to bring before the inquest, concerns et cetera. Had you said all of them or were there--

35

A. I had - I had scarcely begun, sir.

Q. What other matters?

A. If I may I'd--

Q. Yes.

40

A. --like to mention one or two things. First of all the context of the regulations which apply to these races. I think it's important to remember that offshore racing is effectively a voluntary activity and those of us involved in regulating it are not doing so from a statutory point of view but we're doing so in a sporting framework, and in that framework we're always aware that an owner who's got a cruiser racer who might be considering racing with us has the option of saying well I don't like all these blooming regulations, it's going to cost me a fortune to fit out my boat with all this stuff so I'm just going to go sailing anyway, and we always have to bear that in mind. However keen we may be on introducing new and super rules for this, that and the other, we always have to bear in mind the practicalities. It would be quite a different proposition if we were a government department talking about regulating all sailing, but that's not the case. And I have a few

45

50

55

points Mr Hill, your Worship, not in any particular order if I may. The radio communications, which I must say over the years from Europe, from a European standpoint, we have admired the way that the Hobart organisation has always run its radio relay system, and until the advent of satellite communications what they have been doing with HF radio has been I think a remarkably efficient operation. However, nowadays satellite communications are overtaking the world so fast and so effectively. As you have seen, as we have seen, the coast radio station network in Europe is closed down. Even our long range station at Portishead which used to talk to the world, the ships in all the world, is actually shut which is an incredible change. And so I think we ought to recognise that HF radio is really now almost, if I can use the expression, with the dinosaurs and to try to spend a great deal of time and effort in enhancing its use may be misplaced effort and that attention should be instead put towards making better use of satellite communications, as indeed the Cruising Yacht Club has already done by using standard C. However, for watchkeeping for distress purposes, and we have discussed the possibilities of listening permanently to a frequency, an HF or MF frequency at sea for the purpose of trying to give assistance, I understand the importance of that and I think you sir, and your Worship, understand also that in the constraints - I haven't asked if either of you, your Worship or Mr Hill, have had experience of sailing offshore in a small boat, but if you haven't you can probably well imagine the clamour and noise and openness of the cabin in which the off watch people try to sleep. The noise is made by the sea and the waves and the actions on deck. So listening to a radio channel can be quite a challenge, and as with anything else continuous there will be a tendency for it to be habituated. So that in the event when it may suddenly be vital to hear a particular transmission, the habituation may be such that the transmission isn't noticed. What we did in the Fastnet race last year, despite the limitations of VHF, was to - and partly because the coast radio service is shut, but in any case in the spirit of self-sufficiency was to organise a roster amongst the boats in the fleet of duty watchkeeping on VHF, and in that we allocated each boat according to its speed, we allocated each boat a watchkeeping block so for - it might have been four hours in any 24, it might have been slightly less than that. I can't now remember the details, but the principle upon which we worked was that if we allocated particular boats a particular four hour watch-keeping block, the crew would be psychologically prepared to do that in order to be of help to their fellows, whereas a 24 hour watch would tend to suffer from the causes we've already discussed. And that may be a way of managing the monitoring of your MF HF radio, as long as you still use it in these waters.

Q. If I could just stop you there, because what I - I can understand the watchkeeping system in that sense, but how then if someone gives a distress call over that, and I presume that's what you're talking about?

A. Yes.

Q. How do I, if I'm on the vessel here, the distress is from say Mr Weber there and I want to ask Mr Colefax to go to his aid, how can I do that because Colefax won't be on the air. Did you resolve that problem?

A. No. You would only be able to - obviously you would only be able to contact directly the boats that were then watchkeeping.

5

CORONER: Q. I see, you have a block of boats watchkeeping at a given time?

A. Yes. But of those, some would have long range communications and indeed if you continue in the Hobart race to have everybody on satcom sea one would assume that a distress call would either have been made by the distressed vessel using satcomsea, so it would be known to the shore authorities, or if the satcomsea was out of order and all they were using was a hand held VHF, sorry, I was talking about watchkeeping on HF, but if you did a watchkeeping series also on VHF, then one of the recipient vessels may have access to a longer range communications ability with which he could relay the mayday.

HILL: Q. Have you resolved any system by where what you call race headquarters can contact the whole of your fleet? Is there any method that you've--

A. In Fastnet race we have as I have explained no such ability and that's well understood by the participants and everyone. If we're talking about a fleet which is equipped with standard sea, then matters change radically. Race headquarters or indeed the Canberra search and rescue headquarters would have the ability to broadcast to the whole fleet. And although standard sea is a text forwarding system, it's not a direct link, I would urge consideration of standard sea not to suffer from that method, because in practice the messages are forwarded extremely quickly, so it's to all intents and purposes it is instantaneous, it usually comes through within a minute or two.

Q. The next point you had?

A. The dependence upon the radio relay vessel seems to me sir, my personal opinion seems to me by now rather outmoded. I think the demands on the radio relay vessel and the expectations of it probably are almost always likely to exceed its ability to fulfil those demands, which seems to me unfair on the radio relay vessel operators. Indeed, it's always better to know the truth about a situation rather than to assume hopefully that there are abilities present which really are not. I say this because patently manning a radio relay vessel is itself quite a bit task. Even if the radio relay vessel were to have a duplicate set of equipment, we're still talking about HF and the vagaries of HF, MF and HF are well known and it's not the 100 per cent communication system which is offered by satcoms. I personally would question whether the radio relay vessel should be - if it continues to be used, I would question whether it should continue to have the key role which it does at present.

Q. Accepting that there would be the reporting skeds that we've talked about and we do away with the radio relay vessel, how then would then communicate with what is called the race control centre?

A. I'm sorry, which skeds are you now talking about?

Q. I'm talking about the reporting skeds that they have in the race.

A. As at present?

Q. Yes, as at present.

A. On HF?

Q. Yes. How would they communicate if we do away with the radio relay vessel?

A. If you're using the standard sea equipment Mr Hill you are already getting extremely high quality position information and indeed virtually on request.

Q. So they wouldn't have to actually--

A. They would not.

Q. They wouldn't have to report in, you could simply look where they were and you would know that?

A. You could indeed, from your laptop computer you could call up the positions of the whole fleet and receive it within a few minutes.

CORONER: Q. And they could use the communications part of satcomsea to notify race headquarters of any problems?

A. They could your Worship. In fact of course the advent of the satellite system means that race headquarters itself would be the natural place at which the positions of the fleet would be initially received, so that the radio relay vessel would no longer be the centre.

Q. So you're really - looking at it globally, you're suggesting that the CYCA looks at doing away with skeds completely, insists on a satcomsea facility on all boats, all contestants, eliminating the need for a relay vessel at all?

A. I would suggest that the Cruising Yacht Club should indeed look at that sir.

CORONER: Okay, I think I understand that.

HILL: Q. How would you speak with the fleet, just using the text system, would you?

A. Do you mean how would you send information to the fleet or how would you talk orally?

Q. Both.

A. As we discussed, satcomsea is a text, has a text transmission facility in it, so therefore you Mr Hill if you had the necessary codes and so on could type a message on your laptop keyboard, send it to an appropriate address through your modem on the telephone and that message could appear on the satcomsea sets on every boat in the Hobart fleet within a few minutes. That would be read either on a screen or through a printer. A message waiting light would appear on the unit.

Q. What about if we wanted to speak to them orally?

A. If you wanted to speak to them orally, there would have to be a different channel used. Probably the easiest way of doing that would be to send an individual message to the

boat with whom you wished to speak saying switch on your HF radio and call such and such a station.

Q. So you would still see them as having their radios not only for the purpose you've just stated but also for the mayday situations, is that how you see that? 5

A. I think having the radios is a help but should no longer be regarded as the principal method for handling everything, because of course the maydays as we've also mentioned is really yet another facility on satcomsea and by operating the two buttons simultaneously according to the instructions which are very simple the mayday message is transmitted immediately to the local search and rescue headquarters. 10
So there's no longer the onerous task of having to receive it, get the position right and transmit it from A to B to C, it goes direct. Now that's from satcomsea. The other way of transmitting the distress situation is through the dedicated emergency beacon, this is the 406, so-called 406 megahertz beacon, which upon switching on or they're mostly activated if they're thrown into the water, that also transmits a GPS position directly which is received - when I say directly, it's received usually within about an hour at the local search and rescue headquarters. There is another type of beacon called a type E, E for echo, which is provided by the international maritime organisation, Inmarsat, and that uses the maritime communications satellites which are a different constellation to those used on the 406 EIPRB. The type E is claimed by Inmarsat to be able to deliver a distress message to the local rescue centre within five minutes and usually two. So I would recommend that the type E, which is more expensive than the 406, but that type E should be accepted by the Cruising Yacht Club as an alternative, because it is in fact I think a better alternative to the 406. But the 406 itself is extremely good, it's coded with the yacht's identity, the boat's identity and everything is done automatically including the position transmission. So we now - we're really moving into a different era your Worship, we now have all these satellite based assets which the Cruising Yacht Club seems to me to be moving quite rightly towards. 20
25
30
35
40

Q. What about the training though of the crew on this? This is always the difficulty with a new system like that. How - I mean supposing the person that is trained to use this system and understands it and can actually get a picture on one of these things, he's seasick or indeed fallen off, what about the ones who aren't trained? What do you propose about that? 45

A. Yes, well I think it's an absolutely relevant question, Mr Hill. The various aspects of the application of these systems include distress calls and communications. The operation of the distress beacons or the distress facility on standard sea is ultra simple. I mean they are about as simple to understand as the - I'm looking around for a fire extinguisher but can't see one, but they-- 50
55

CORONER: They're out here, I've got one.

HILL: They were all loaned to the yachts.

A. We're all non-smokers. But they're simple, as you would expect on a fire extinguisher in a public place. And operating the standard sea distress is an extremely simple business which an untrained person looking at the front of the unit would be likely to be able to understand very quickly. However, having said that, in the training courses which we are now supporting, it would obviously make sense that these procedures should be gone through in training. 5 10

HILL: Q. So if in the notice of race it referred to the satcomsea, do you think that it would also be advisable to say and to ensure that 30 per cent of the crew to use a hypothetical figure knew how to use this? 15

A. I think that would be useful, Mr Hill, though if we take the communications facility, that indeed requires a bit more training than quickly reading the instructions on the front of the unit. That certainly would need some training, although increasingly these days people are familiar with the operation of laptop electronics and the operation of the text sending is very similar to e-mail. 20

Q. Do you think that perhaps when we get new equipment, for instance I take it 10 years ago we didn't have a satcomsea? 25

A. That's right, it's been within the last 10 years.

Q. And bearing in mind that we can talk about today the need of training, do you think perhaps an overall catch-all clause that you might have in it that wherever there is new sophisticated equipment brought onto a yacht that you have a percentage of the crew who must know how to work whatever-- 30

A. I think that would be a very good principle, Mr Hill.

Q. Sorry, was there anything-- 35

A. Yes, thank you. In the weather forecasting and here perhaps I'm moving into the area that properly belongs to the Bureau of Meteorology--

Q. You've created a disturbance. We thought they weren't alive. 40

CORONER: Picked up their pens and written.

A. Perhaps the Bureau of Meteorology and indeed I guess on return to the UK I should make this proposal through the proper channels to our own weather forecasting people, perhaps it would make sense for the weather officers to consider including a maximum possible wind speed in their forecast rather than - I mean we're all now familiar with the business of the averaging which is normal meteorological practice and of course it's well understood by meteorologists but I think to be honest, not only may yachtsmen in this part of the world failed to appreciate the significance of the occasional spike, if you like, within the average but I suspect that some UK yachtsmen and European yachtsmen may also be in that position. It may well be that the reason for a maritime forecast talking in 45 50 55

terms of average is because by and large they have been put together for big ship use and sailing boat use is an extremely small percentage of the general customer proportion. But to a big ship a wind which is varying between 30 and 40 knots is probably all the ship master needs to know. To a sailing boat with a large area of sail up on his mast, in the usage of the sail plan you have the scale of wind strengths which a particular display of sails is suitable for, but if suddenly you get a gust of twice the wind speed, it doesn't so easily go unnoticed as it would on a big ship, it actually hits the rig pretty hard. So even a short gust of a minute or a few minutes which might be insignificant to a ship is of course significant to a small boat and maybe the yachting authorities and the met office might consider whether the peak speeds should be mentioned as well. That obviously goes with - goes also for wave height forecasts. In the Royal Ocean Racing Club literature which our annual program and I think you may have a copy of the statement we actually set out a paragraph which begins ocean racing can be dangerous and then goes on to explain in a fairly short way why this is so, going to sea can be dangerous. We try to make sure that all the participants in our races have been made aware that that is the case and we try to make sure that the skippers of the boats who sign that they want to enter a race understand that and that they have explained that to their crew. Of course, yachting has - yachting conjures up so many different pictures in different people's minds that it might be possible for a newcomer joining a boat late and not being very well versed in things to think that going on a sailing yacht means a rather pleasant ride around Sydney Harbour. But I think it is important that the realities are explained. I don't wish to over-emphasise this Mr Hill but I think that it's reasonable and proper that the notice of risk should be made clear. Just as in fact it should be in mountaineering or any other sports in which there is inevitably inherent danger.

Q. Where did you say that's contained?

A. That's contained in the Royal Ocean Racing Club annual program, a copy of which I can let you have. I don't know sir how much the Cruising Yacht Club has recently made use of a website, I expect they do have a website for displaying race information but certainly we found with Fastnet information display that a well organised website with a potentially very large capacity is an invaluable tool for transmitting information, making the information available to the public. In 1979 one of the biggest problems ashore was that all the telephone lines into the city of Plymouth were saturated, because of the international nature of the race, which is not dissimilar to the profile of the Sydney Hobart. There were calls being made from everywhere including Australia aimed at getting to race headquarters. Race headquarters had all the lines which the local post office could supply us with but nonetheless compared with if we talk about 50 or 60 lines which is the order of number we had available, compare that with hundreds of calls, then you can see it doesn't match. One of the recommendations that

we worked on in the years after the Fastnet was so-called teletext systems which as you may recall I expect they existed in Australia too, where you could get text information which was effectively ridden on the back of the television signal and by which therefore we could have, and we had this set up with the authorities, we could have displayed a list on the television service of all the boats that were safe, with a message that would have said if the yacht in which you're interested is on this list, please don't call.

5
10

CORONER: Q. Yes but now with an internet website it's much simpler?

A. Absolutely sir. So if this is not already in place and it may well be, I would strongly recommend that that facility be investigated with the emphasis on its ability to handle a very large capacity, because I do know and I expect you do sir that sometimes websites with big ambitions are put on public service only to be overwhelmed.

15
20

HILL: Q. I suppose you could also, if you had within the system, I notice that there were many telephone calls coming through. If you had a recording system on there that listed the yachts that were safe and if such - that's on the telephone itself, then they could hang up?

25

A. I think the logistics of doing that would probably not be very effective with respect to Mr Hill, I think that being able to get the data from a website would be much faster. I think--

30

Q. I'm just thinking of the people that may not have a computer.

A. Yes, indeed.

Q. Or if they have one, they have no idea how to use it.

35

A. Yes. I imagine however that if the situation was really serious that somebody who was not computer literate would fairly soon track down somebody who was.

CORONER: Q. Yes. Is there anything else?

40

A. Personal location of a man overboard. There is already a system which is in fact compulsory under the Offshore Racing Council regulations for category 0 by which a small unit about the size of a packet of cigarettes, working on 121.5 megahertz, can be carried by the person and if they fell overboard, they could be located by a device on board the boat. By the reference in the ORC special regulations I would hope that those involved in categories other than category 0 would be aware of these devices. I am not suggesting that they should be compulsory in this race but I do believe that it would be useful to draw the attention of yachtsmen to their existence. They did in fact save certainly one life in one of the Whitbread races when in the Southern Ocean people were washed overboard. Two people were actually recovered, thanks to the location system. Sadly one later didn't survive but the other who was in a very bad way did survive. I think anything we - I now speak to include yourselves and the yachting authorities should do

45
50
55

all we can to encourage the electronics industry to look at a personal device which will make use of the GPS positioning which is now, thanks to President Clinton, so accurate that it really effectively does away with the need for taking bearings. And I would hope that every encouragement can be given to the industry to try to develop a device of that kind. In the management plan of the Cruising Yacht Club I notice the expression PRO, principal race officer but it then explains that this is the title of the person who is in charge of the start. I would suggest with respect to the yacht club that probably again as with the race control appellation that it might be better not to use that expression for a person who is effectively a starting officer. I think to a third party coming into the affair, as might be yourself Mr Hill, you might quite reasonably be misled by the expression and expect the principal race officer to be in fact somebody having an interest in the whole operation, which is not the case here. Another point I have sir which I must apologise to the Cruising Yacht Club for not discussing and I hope they'll forgive me for raising it in this way. In the crisis plan, the - I'm looking to see if I can see the commodore. I can. In the crisis plan, the commodore of the yacht club is named as the person who should take over the crisis operation. I would suggest that that may not be appropriate. It may be appropriate but it may not and I would suggest that the person who is to take over that task should be somebody who may well be the commodore but should be somebody who is well trained and well versed in the task which he is about to - or he may be called upon to take. He should for example be thoroughly familiar with the operations of the search and rescue coordination centre at Canberra and so on and so forth. On a detail point and I apologise your Worship for jumping between points of different significance here--

Q. That doesn't matter.

A. Thank you but on a detail point and I have discussed this with Peter Bush, the author of the report which again I say I thought was excellent, it's comprehensive and very quickly delivered, he recommends watertight stowage for harness and Mr Bush knows that I don't agree with that particular recommendation. In my view, watertight stowage implies therefore being airtight and an airtight stowage for anything that's damp and dirty, even though it may have ostensibly been washed in fresh water, difficult at sea, watertight and airtight stowage could breed mould and suchlike deterioration. I would be much happier that the stowage for harness should be in an airy albeit sheltered place but it should have free air. I think Mr Bush and I have discussed that. In the special regulations book sir we have together with the requirement for lifejackets and harnesses we have appended a number of recommendations, including for example on the lifejacket the use of what is called a splash guard. If I may explain to the Court your Worship, the splash guard is a simple device. It's effectively similar to a plastic pram hood. The reason for its efficacy is that when a survivor is suspended in a lifejacket, he's going to lie with his face more or less to

the wind, he lies with the top of his body downwind. That means that breaking waves will roll over him. That means that he can actually drown whilst being supported in his proper lifejacket which is doing a good job of supporting him and yet ironically it could actually help him to drown. 5
 The splash guard which we recommend and in these regulations I would suggest that it might be useful to consider making them mandatory, it's not a very expensive extra. The splash guard as I say is rather like a pram hood only on a smaller scale, it comes over the head, it has a clear plastic front 10
 to it through which the survivor can see what's going on, it has a number of air holes in it obviously but the main thing is that when the water rolls up over the face, it doesn't get into the mouth and nose. I think that's a very effective device and I would suggest that the Cruising Yacht Club might consider making those recommendations in this 15
 book mandatory.

HILL: Q. When you say in this book, you're again--
 A. I'm again referring to the Offshore Racing Council's special regulations and if you don't have a copy I'll be pleased to supply one. In my experience, the most effective method of providing lifejacket harness, lifejacket and harness, is a combination garment. This isn't required in our regulations but if we're talking about best practice 20
 then I would suggest that this is best practice. I believe in Australia for quite some time, though perhaps not now, to comply with local statutory regulations it's been necessary to use permanent buoyancy lifejackets. A permanent buoyancy jacket of course working around in a small boat is nothing 25
 but a hindrance and understandably people would be reluctant to wear them. The type to which I refer now is perhaps best described as a shawl. It's a roll that goes around the neck and it's fixed with the - to the harness so it's an integral unit, so you've actually got both things on together. The 30
 rolled up inflatable part isn't obtrusive, it's perfectly possible to learn how to get around with it on and I would strongly recommend that that is the best combination of lifejacket and harness which should - the use of which should be encouraged. Again, referring to special 35
 regulations, in the harness although we've now got quite a good international standard and I explained how we're trying to improve that, the use of retaining or restraining straps around the thighs or under the crotch is still only a recommended extra. In the RORC we require that as a 40
 mandatory part. The reason for that is that as a result of quite a number of tests and various experiences, not least of which has happened in this '98 race, there have been cases in which survivors have actually been pulled out of 45
 their safety equipment and it's most undesirable that a survivor with a harness and lifejacket could be putting his arms above his head and holding a rescue rope only to find that the equipment is being drawn off over his head. This is I regret an absolute possibility which has been proven on 50
 a number of occasions. The use of the crotch strap is generally regarded as a nuisance but however it is a lifesaver and I would strongly recommend that the club 55
 should consider making the provision of those mandatory.

They are used by - they are increasingly used by a number of other authorities, including for example the German Navy, the Dutch Lifeboat Institution and many others. With liferafts sir and again I invite your attention to the Offshore Racing Council's special regulations, in appendix A which contains the provisional standard, we have identified what we originally introduced some years ago and have slowly enhanced what we call a grab bag. The idea of that is to encourage people to have a - typically it's a sailing bag, a soft cloth sailing bag, clearly marked and put in a position where everybody knows that it's there and knows what its contents are but the contents are items which, if you were to abandon ship, you would want to take with you. So it cuts down on the rushing around and trying to find the right things at short notice. Included in that now we have actually recommended dry survival suits. We haven't said how many and the Cruising Yacht Club may want to consider whether it should require one for every person. In category 0 races we do require the boat to carry one for every person. We require amongst other things that a 406 EIPRB be actually in the bag. We require also--

Q. Can I just stop you there.

A. Yes, of course.

Q. When you say a 406 EIPRB in the bag, is that in addition to?

A. No it's not.

Q. Or is that - that is the EIPRB of the vessel?

A. It is sir. Yes, again I refer to what I said earlier about not wanting to make the regulations too onerous, otherwise people simply go and say well I'm going to sail to Lord Howe Island anyway even if I haven't got a liferaft or all this stuff.

Q. They'll organise their own races.

A. Indeed they would and could as the first Hobart was I believe originally intended to be a cruise and it turned out to be a friendly race and from there, yes. So amongst the other things is a waterproof hand held GPS. They're now quite cheap units and the ability of survivors in a liferaft to talk on the waterproof VHF, hand held VHF which are also now commonly available, the ability for survivors in a liferaft to be able to tell their potential rescuers with great precision their location is an enormous asset in saving time in actually locating them.

Q. Did you then say a hand held VHF radio?

A. I did sir.

Q. Are you talking about one in the grab bag?

A. I am sir.

Q. Is that the one that they talk about to be carried aboard the vessel?

A. Yes.

Q. Are you suggesting it be kept in the grab bag?

A. Yes.

Q. We're not talking about two?

A. When not otherwise in use, in my view it would be a wise stowage location for it. 5

Q. We've also seen what appears to be an aerial, a spare aerial for these, that can be fitted to the hand held one which will give you additional range. What are your thoughts on carrying such a spare aerial that you can hold in your hand? 10

A. I think a spare aerial for a hand held VHF if something I would have some doubt about its value. 15

Q. It would also fit the main VHF.

A. Yes. I think sir - our regulations do require that the principal communication system does have a spare aerial that does not depend upon the mast. However, it may be said that in this race the HF set is the principal communication system and so that having a spare HF aerial would answer that regulation, which indeed it would. However, I think that if you've got a VHF, 25 watt, installed VHF on the boat which typically and hopefully would have a masthead aerial, then it would make a lot of sense to me that a portable emergency aerial for the VHF should be on board. 20 25

Q. And if necessary you can have an adaptor that will fit the hand held one?

A. You could indeed sir. As a personal view I would prefer that the integrity of the waterproof hand held should be-- 30

Q. Maintained.

A. --left intact. Thank you for listening to me sir and your Worship on those points that I've raised. I will of course be only too pleased to assist your Worship in any way with the further process of your inquiry. I would like to say from the point of view of the Offshore Racing Council who are well aware of my visit here and indeed support it, as does the Royal Ocean Racing Club, that both of those bodies considerably appreciates the work which you sir and this body of people is carrying out. We understand that you're determined to seek out appropriate lessons and we appreciate that very much. I'd like to quickly say that we also appreciate very much, albeit that we're far away, the efforts of the rescue services here which have clearly been superlative. I would also like to express on behalf of those organisations our sympathy to the relatives of those who were lost. 35 40 45

CORONER: Thank you very much, Mr Green. Mr Hill, that ORC special regulations that Mr Green's been referring to, do we have a copy? 50

HILL: We've got that, in fact Mr Mooney gave us a copy of that some weeks ago as soon as he got it. 55

CORONER: Can we tender that?

HILL: Yes, we can have it tendered.

EXHIBIT #54 OFFSHORE RACING COUNCIL SPECIAL REGULATIONS
TENDERED, ADMITTED WITHOUT OBJECTION

HILL: If it could be photocopied because we've got it under
the folder called recommendations. 5

CORONER: Yes, okay, we'll get that photocopied.
Mr Stanley? 10

STANLEY: Q. Mr Green, I want to ask you some questions
generally relating to the issue of the weather. In your
statement you said that the Royal Ocean Racing Club has
almost never had any formal weather briefings before the
start of the Fastnet race, or any other ocean race. The use
of the word almost provokes the question, apart from the
Whitbread race that you mentioned, is there any other time
when to your knowledge the club has had a formal briefing,
or even any, an informal briefing so far as weather is
concerned before the start of an ocean race? 15 20

A. Yes Mr Stanley, the reason I used that expression was
because in fact there have been some briefings, though not I
think in the sense which you might think. The briefings to
which I refer have been typically given for Admiral's Cup
teams and indeed the Royal Ocean Racing Club amongst its
many activities is also the responsible authority for the
British Admiral's Cup team. The British Admiral's Cup team
has organised its own weather briefings. Inevitably those
briefings were for competitive purposes and not for safety
purposes. That's the kind of other briefing to which I
refer. 25 30

Q. Are those briefings given by the club, or are they
obtained individually by various competitors? 35

A. No, a team briefing would be commissioned by the team
manager, although as the event organiser I would make it my
business not to have anything to do with the team management
section. I've simply alluded to it because to be absolutely
comprehensive in my description, I didn't want to pretend
that there were never any briefings but the briefings were
in fact for competitive reasons. 40

Q. You at no time give weather briefings or weather
forecasts once the race has commenced to the competitors, is
that correct? 45

A. That's correct. I think to the best of my recollection
there might have been the odd exception to that Mr Stanley
in particular races but by and large that's our principle. 50

Q. Do you in fact have the capacity to do that, if you
wished? 50

A. The capacity to which? To brief beforehand or--

Q. No, during the race. If for example a storm warning was
issued and it came to the knowledge of you as the race
director, would you have the capacity, if you wanted to and
if it was determined it was appropriate to do so, to then 55

communicate that to all the yachts in the race?

A. Usually no sir but occasionally if we're talking about a fleet with a standard sea satellite equipment, one or two particular round Britain races where we've had only ten competitors, they've all had standard sea, then we could have done.

5

Q. But certainly not in a race with the number of competitors that would be in the Sydney to Hobart race?

A. No, and not for example in the Fastnet.

10

Q. Is the reason that you do not provide either a pre race briefing to all the competitors or a briefing as to the weather during the race, is that because as you mentioned earlier it may be seen as assisting competitors in an unfair way?

15

A. No Mr Stanley, it's because the need has never manifested itself in view of the comprehensive weather services already available.

20

Q. It's one thing of course for comprehensive weather services to be available, the second thing is for them to be not only obtained but understood. That's so, isn't it?

A. Indeed it is.

25

Q. It would seem from what you've said that your racing club operates on the basis that a lot more reliance - the emphasis is placed upon self-reliance for the individual contestant rather than them being in a sense spoonfed, would that be fair?

30

A. That is so, Mr Stanley and that is indeed the ethos in which all offshore racing is conducted around the world.

Q. Is it fair to say that this is to your knowledge the only situation, that is the Sydney to Hobart one and the way that it's operated in Australia, is the only one where this assistance is provided to competitors both before and during a race?

35

A. I can't claim such intimacy with the details of all the other offshore races in the world to be sure of an answer to that but I believe it would be the exception rather than the rule.

40

Q. That being so, so far as your system is concerned, as you've said it does require that the individual racing in these races such as the Fastnet do have a good appreciation of weather forecasts and what they mean?

45

A. Yes indeed it would.

Q. Does your club for a race such as the Fastnet have any requirements for entry that are relevant to the issue of weather, knowledge of weather forecasting?

50

A. No sir, we have no requirement for a qualification which refers to knowledge of weather forecasts. What we do have is an experience qualification and we discussed earlier the difference of course between training and qualification. We require the skipper and at least half the crew to have done - it depends on the year, but at least two or two and a half

55

offshore races which would amount to 400, 450 miles of racing. And during that - within that experience, that experience is unlikely to be the first ever season that a Fastnet entry would have undertaken. During the general preparation for the race, I believe that it's reasonable for us to assume and it's never been shown otherwise, that the understanding of the weather forecasting is well integrated with it. 5

Q. First that there would be a clear knowledge of how to obtain the weather forecast? 10

A. Yes.

Q. And then having obtained it, to understand the implications of what has been forecast? 15

A. Yes, Mr Stanley.

Q. In particular, I imagine you would assume that all the competitors in for example a Fastnet race would know the significance of a storm warning? 20

A. I believe they would.

Q. And they would know that it was more serious than a gale warning?

A. I believe they would, Mr Stanley. 25

Q. And that they would know that it was the most - if they were racing in such a race, they would know that it was the most serious warning that could be given by the weather forecasting body? 30

A. I believe they'd know that, Mr Stanley.

Q. You'd be very surprised wouldn't you Mr Green to know that a number of contestants in this Sydney to Hobart race, contestants who expressed great - having had a great deal of experience racing, that they believed a gale warning was more serious than a storm warning? 35

A. I am surprised to hear that.

Q. It'd amaze you, wouldn't it? 40

A. I've said I'm surprised.

Q. I want to take you further. It's almost unbelievable, isn't it, that someone who professes to having had a great deal of experience-- 45

A. Mr Stanley, I'm very surprised.

CORONER: Leave it at that, Mr Stanley. He's English.

STANLEY: Q. If they are speaking the truth, the people that expressed that view, give that evidence, it would indicate that a great deal more training is required before one could say that person is fit to be in charge of a boat, either a skipper or navigator, in a Sydney to Hobart race? 50

A. It may indicate that Mr Stanley, I don't know what it may say of their skills in other respects but I agree with you that their lack of knowledge of meteorological usage is surprisingly inadequate. 55

- Q. Mr Green, in your racing experience, a storm warning is a relatively rare event, isn't it?
A. It is, Mr Stanley.
- Q. In fact, I could say very rare? 5
A. Yes, I think we could say very rare compared with the miles sailed in offshore racing these - such weather conditions are very rare.
- Q. Let's just look at the Fastnet, you've been intimately involved with that race for the last 30-odd years have you not? 10
A. That's correct sir.
- Q. How many times has a storm warning ever been forecast during the running of a Fastnet? 15
A. To the best of my recollection, only the 1979 race.
- Q. How long was that forecast, that storm warning forecast before the storm in fact occurred? 20
A. I would have to look again at the report to remind myself of the exact timing but it was - you may know this better than I do, it was comparatively short, I think it may have been within the order of about 12 hours.
- Q. It certainly wasn't anything like 20 hours was it? 25
A. No it wasn't.
- Q. At the time it was issued, it was then for the individual boats in the fleet to find out? 30
A. Yes it was.
- Q. That was a force 10 storm, was it not?
A. Yes it was.
- Q. Under the Beaufort scale. 35
A. At least that.
- Q. It met the proper description of a storm warning, for a storm warning and under the Beaufort scale that would mean-- 40
A. Forty seven to 55 knots.
- Q. Forty eight to 55 knots.
A. A translation difficulty.
- Q. It would mean in terms of sea heights up to 40 feet? 45
A. I agree with that, Mr Stanley.
- Q. Perhaps I'm taking you away from metres but you're probably more used to using the feet?
A. I have to admit that's correct. 50
- Q. Mr Green, are you in fact familiar with the availability of forecasts to the fleet in the Sydney to Hobart race in 1998?
A. No I'm not, I wouldn't like to use the word familiar. I have seen the reports and I have seen somewhat briefly - looked at somewhat briefly the schedule of forecasts 55

available from Australian stations but I can't say I'm familiar with it.

Q. The evidence discloses that in fact from the time the storm warning was first issued at 2.14pm within the next 14 or 15 minutes it went to no less than 65 organisations or sources from which it could be then relayed or utilised by the recipient. Were you aware of that?

5

A. No sir.

10

Q. Those sources included the marine radio stations both in Sydney and Melbourne and the Penta Comstat, it included the volunteer coastal patrols right down the relevant section of the New South Wales coast, it included the volunteer coast guard again covering the relevant parts of the New South Wales coast. It also went to the land radio stations, including of course the ABC in Sydney and those stations that were relevant down the New South Wales coast. It went to television stations and it went to emergency authorities including the police in Sydney, the water police at various relevant places down the coast, the state emergency services, the Maritime Services Board operations, the Search and Rescue Emergency Services Board and so on. Were you aware that the forecast was sent to all those bodies?

15

20

A. No I wasn't Mr Stanley though it perhaps was documented in some of the papers I received but I haven't got--

25

Q. I'm not being critical of you for not knowing, I'm just concerned. It might be thought from your paper or your statement that you were somewhat critical of the lack of availability of weather forecasting in Australia.

30

A. I had been led to believe that it was less comprehensively available, by which I mean the radio broadcasts were less comprehensive in Australia than in Europe but I may be wrong. You sir will be obviously better informed on that than I am. The other remark I made about the Australian forecasting service was about detail and that was intended to refer to my presumption of the relative sparsity of surface meteorological reports from if you like upwind, whereas in Europe we have of course virtually - the weather normally comes from the United States across the Atlantic and there's quite a comparatively good series of observations available to the European forecasters which it seemed to me that with weather coming in from the ocean wastes you may not have such a detailed set of reporting.

35

40

45

Q. You used the word may. Is the situation this that you know what the Australian Meteorological Bureau does receive or you don't?

A. If I knew exactly sir I would have said this was a fact.

50

Q. Have you made any inquiries of the Bureau of Meteorology in Australia to ascertain what they do obtain?

A. No I haven't, so if I'm guilty of mis-assuming something, I apologise.

55

Q. Have you made any inquiry of the meteorological office in the UK as to this question, to enable you to effectively

make a comparison?

A. No I haven't sir.

Q. Are you aware that on Saturday 26 December there was a schedule, sorry, I withdraw that, there were broadcast on a number of radio stations throughout that day the weather forecasting including particularly a storm warning that was issued just after 2 o'clock? Are you aware that that was done? 5

A. No I wasn't sir. 10

Q. You've not seen the details?

A. No.

Q. In fact, the chronology of broadcasts indicates - and I'm just going from 2 o'clock on, between 2 o'clock and the time at which the sked was issued to the fleet, the storm warning was in fact broadcast over the radio, various radio stations, relevant stations, on no less than 16 occasions, you were not aware of that? 15 20

A. No I wasn't Mr Stanley but I don't think I suggested in my statement that I believed there was any inadequacy as between the Bureau of Meteorology and the dissemination of this forecast, was I? Did you believe that was the case? 25

Q. I'm concerned that that's not--

A. That that impression is not--

Q. --concluded from what you said.

A. --created. I understand that. 30

Q. Are you familiar with what in fact was provided to the competitors in the Sydney to Hobart race, this race, relating to weather and where they could obtain details of weather in the briefing that they received before the race? 35

A. I can't quote it, I certainly have seen the documentation.

Q. You've seen it, have you?

A. Yes. 40

Q. You're aware are you not that Mr Batt in the pre-race briefing emphasised the importance to the competitors of making contact, keeping contact, with the various sources of weather forecasting during the course of the race? Is that so? 45

A. That was in the - I guess that was in the report that I've read from the Cruising Yacht Club.

Q. And that he told the competitors who attended at that pre-race briefing precisely where the weather information was, how it was available to them and indeed that they were provided with on that occasion an article that had been published or was published in the Offshore yachting magazine which was in fact the official program for the Sydney to Hobart race. Have you seen that? 50 55

A. I'm sure I've seen it though again I can't now quote it.

Q. I only have one copy of it that's legible, it's a photocopy, but the article - in the Offshore yachting magazine is entitled Finding That Weather Information, a Guide to Weather Prediction at Sea with a Hobart Race Bias and it's in the December 1998 edition. It indicates that these are the sources of weather and oceanographic information provided. It sets out a comprehensive list of the sources of weather information for use before, during and after the race. Thereafter it sets out all the radio stations, all the ways in which the details of the race can be obtained by competitors at any time they wish, whether by fax if they have the facility, by telephone to the Weather Bureau, a recorded message number, or by listening to the coastal radio and all the times of those calls are set out with the numbers they can call and so on. Were you aware that that had all been provided to the competitors? 5 10 15

A. Not in the detail to which you now refer, Mr Stanley, which causes me to be slightly puzzled as to the importance of the - the importance attached to transmitting weather forecasts through the radio relay vessel if there is a relatively comprehensive service already available from land based stations to which you refer there. 20

Q. It may be convenient over the luncheon adjournment if I simply showed you the document that I've referred you to and perhaps some others that are relevant to the availability of the weather services-- 25

CORONER: Mr Stanley, we've got to get Mr Bush on today and finished. This witness I think is going back to the United Kingdom very soon. We're running out of time. Do I need to hear this? 30

STANLEY: We are concerned lest there be any conclusion drawn that the-- 35

CORONER: He's made a passing reference to the weather in his report and I don't see it in any way as being critical, just different. 40

STANLEY: Aside from this, if we put this issue aside, there are at least two other matters that I do desire to take the witness to. 45

CORONER: What about you? 45

COLEFAX: I have no questions, your Worship.

CORONER: Do you have some?

WEBER: No more than five minutes, your Worship. 50

CORONER: Okay. Let's put those questions, Mr Stanley.

STANLEY: Q. Just dealing with the suggestion that you had Mr Green that the bureau should consider forecasting a maximum wind speed and a maximum wave height, are you suggesting that that should be done in the bureau's standard 55

forecast that it issues generally, or in a special race forecast such as has been issued over the past for this particular race?

A. I think it would be relevant to a forecast which the bureau knows would be of interest to a large group of sailing vessels.

5

Q. You see, there are two types of forecasts we've been talking about in this case. There's the standard warning that's put out by the bureau for the coastal waters and then for high seas and that forecast is given under guidelines set out by the World Meteorological Organisation under the auspices of the United Nations.

10

A. Yes.

15

Q. There are specific guidelines that have been set out, were you aware of that?

A. I was in general terms Mr Stanley and I'm not suggesting that what the bureau has done is inadequate and I'm not suggesting that what the bureau has done is outside the proper international guidelines. What I was suggesting was that it might be useful for yachting authorities and the meteorological authorities to discuss together whether it might not be useful to consider putting in maximum strengths in some forecasts.

20

25

Q. But these would be forecasts that you say should be directed to the race - people concerned with the race?

A. Not necessarily, Mr Stanley. If during the period of a race given good communications between the weather organisation and the organising clubs, then it seems to me that it might be perfectly possible for the regular shipping forecasts to be slightly altered to include this extra information. I mean it may be - you may find on discussion that it's really for all sorts of reasons I'm not aware of, that it really would put a big burden on the service and not be a practicality. It was simply a suggestion of mine that might be worth discussing.

30

35

Q. Can I suggest this to you. It's a suggestion made effectively as a layperson without having discussed the matter either with the meteorological office or the Bureau of Meteorology in Australia?

40

A. The suggestion comes from me, it depends how you regard myself, Mr Stanley. I'm an experienced racing sailor which is perhaps slightly different from the man in the street and I have had the privilege of working with weather services over quite a number of years.

45

Q. The purpose of providing this information would be so that the yachtsmen would know that the wind may be more than - the wind they might encounter would be more than the winds that have been forecast because those are only average winds, is that so?

50

A. Yes, that is so.

55

Q. If the yachtsmen in fact knew that winds could be as much as 20 knots higher than the forecast wind, then the

need for specifying an actual maximum would not be there, would it?

A. That is correct Mr Stanley. The reason I make the suggestion - made the suggestion I did was in the interests of simplicity. Whereas as I said a professional meteorologist and indeed an amateur user of weather information should know these things, I don't deny that for a moment, what I'm suggesting is that it might be worth considering going for a much - going for a plainer and simpler approach whereby the peaks, instead of being if you like coded within the expression storm or gale, were actually explicit. It would take perhaps a few more words in the forecast but it would be explicit and I feel that for sailing users, not all of whom are racing and not all of whom perhaps have had the sort of training that they should have, would be able to understand better because it would be plain language.

5

10

15

Q. Are you suggesting this should be only when there's a race on or at all times?

20

A. My original idea was that it should be looked at in the context of the race, it may well be that it has a wider context.

Q. Are you aware that in the same journal, Offshore, again being the official program for the Sydney to Hobart race, there was in the 1997 edition again an article in relation to the weather by Mr Ken Batt, in which it was specifically set out that stronger winds can be 20 knots or more higher in speed than the average wind speed and this is with particular reference to the Hobart race?

25

30

A. Yes, I am aware of that sir and indeed in an article which I wrote myself in the RORC journal Seahorse, which goes to 10,000 people I made that very same point. However, I still felt - I still feel that it's something that might be worth discussing between the yachting authorities and the meteorological authorities.

35

Q. And similarly are you aware that in the same article Mr Batt refers to the fact that sea waves can be at least twice as high as the average height stipulated in the forecast?

40

A. Yes, I am aware of that.

Q. And you'd expect any sailor to know that, wouldn't you? Any experienced sailor?

45

A. One would hope that that was the case.

Q. And any experienced sailor would know that gusts occur that are significantly higher than the average wind forecast?

50

A. One would hope that was the case too. May I say Mr Stanley that in talking to the - I'm sorry. May I say that in talking to the UK weather forecasting services and asking for forecasts from them for yachting use, it's been in my experience not uncommon for them to give a range of wind and peak winds. I simply think that it's perhaps simpler for everyday people, if I can call yachtsmen that,

55

to understand when that is pointed out to them. I don't disagree for a moment that an experienced, a properly trained yachtsman, should know these things but I do also suggest that there are other people out there who may not. A simple clear statement would be better understood than one in which the peak wind speed is implicit and not explicit. 5

Q. I want to take you just to one other matter. Do you know Mr Liciardopoulos(?)?

A. I know him well enough to say his name. 10

Q. Do you know that he was the skipper of the yacht Aera that sailed in the Sydney to Hobart race?

A. I do sir. 15

Q. He's a very experienced sailor?

A. He is indeed.

Q. His navigator was Mr Hugh Agnew, you know him also?

A. I do sir. 20

Q. Again an extremely experienced navigator?

A. He is indeed sir.

Q. One who sailed in the '79 Fastnet. Would you regard their opinion as to the extent of weather briefing received in a particular race and the availability of weather forecasts as opinions that would carry some weight? 25

A. I do believe that to be the case sir and I think I know the opinion to which you refer, because I debriefed them after their arrival in the UK. 30

Q. They'd already been debriefed in Australia by Weather Bureau people hadn't they?

A. Of course. 35

Q. And he indicated that it's the first time that's ever happened to him, isn't that so?

A. The first time? 40

Q. He'd ever been debriefed by a weather forecasting service in the aftermath of a yacht race?

A. I don't recall him saying that in London but I don't dispute it sir. 45

Q. I'd ask you just to look at this letter please. You'll see there that the author indicates so far as the pre-race briefing was concerned he found it interesting and informative, he also took advantage of the polfax service and the internet website and he collected the Weather Bureau package on the morning of the race. He also spoke to the meteorologists who were there and he found that they were happy to answer all his questions and he concluded that the quality of the material exceeded that which he's received in the past from commercial forecasters and he names them and far exceeded the quality of that normally provided by race organisers. You I take it would not be in a position to dispute that? 50 55

A. I wouldn't wish to dispute it sir, I think it's a true statement.

Q. And then he indicates that after the start of the race he heard from a large number of regular - heard a large number of regular storm warnings from the coastal stations on VHF and SSB, so that they had the opportunity to take a decision to retire long before the bad weather hit and long before they left the shelter of the east coast of Australia and that throughout the race they had received weather faxes which were clear and informative. It would seem if that's the case that the yacht Aera was well served by the forecasting services? 5 10

A. I'm very glad that Mr Liciardopoulos wrote to you in those terms sir, I think as you say he is an extremely reliable well informed yachtsman. 15

STANLEY: I tender that letter if your Worship pleases. I suspect it may be in the brief but I'm not certain. 20

CORONER: Don't think so.

EXHIBIT #55 FACSIMILE TO BUREAU OF METEOROLOGY DATED 31/01/99 TENDERED, ADMITTED WITHOUT OBJECTION 25

WEBER: Q. Before I touch briefly on some of the matters that were brought to your attention this morning Mr Green, can I just raise one other matter that has been aired before his Worship in evidence. What's your view about the utility of identifying markings on the decks of sailing yachts for the purposes of assisting in search and rescue operations? 30

A. We recommend in the Offshore Racing Council literature that a portable sail number should be lashed across the deck in conditions in which aerial identification may be needed. 35

Q. You were asked some questions about the size of your staff at the Royal Ocean Racing Club and I think you indicated that you had a team of approximately seven, is that right?

A. Yes, seven paid staff. 40

Q. And how many races all up per annum did you and your seven staff administer in a given year?

A. Some 20 or so. 45

Q. You were asked some questions about the route of the Fastnet race, do you recall that?

A. By Mr Hill do you mean?

Q. Yes, that's right. 50

A. Yes, I recall that.

Q. I think you described the English - agreed with the proposition that the English Channel was a relatively protected stretch of water? 55

A. I used the expression relatively with some caution and I think I went over that a couple of times. Of course the English Channel is perfectly capable of being an horrendous

place, as indeed are even closer waters than the English Channel but in a broad comparison I think the waters off Australia we're talking about as being oceanic and the waters in the English Channel as being relatively closed.

5

Q. I wanted to ask you about how you'd describe the waters of the South Irish Sea where the Fastnet race also ventures?

A. The Southern Irish Sea I would describe as not dissimilar to the Channel, relatively closed, they're not - within the Southern Irish Sea is not what I would describe as an oceanic area.

10

Q. You were asked some questions about paragraph 25 of your statement which dealt with the situation where you from time to time issue a warning to skippers before the race commences, do you recall that?

15

A. Yes I do.

Q. That was a warning which you indicated that you would give where the club is aware that severe weather is likely, is that right?

20

A. Yes.

Q. Now obviously the concept of severe is a relative one, you agree with that?

25

A. Yes.

Q. If in a hypothetical situation the weather which - weather forecast with which the club was familiar indicated that the weather to which the fleet would be exposed was more or less typical of the weather that fleets in such races are usually exposed to, would you issue such a warning?

30

A. No sir.

35

Q. It was put to you in the context of abandonment by my learned friend Mr Hill that it was a question of the right of the individual to do what they saw fit provided that they were provided with the relevant information, do you recall that?

40

A. I do sir.

Q. Do you see it as the right of the individual skipper or his obligation?

A. Could you explain that please?

45

Q. Do you see it in terms of the right of the individual skipper to do what he sees fit is an appropriate way to describe it, or is it the obligation of the skipper to do what he sees fit?

50

A. Yes, I think it's an interesting combination of both sir. A skipper plainly has an obligation to conduct his vessel safely.

Q. I think that in answer to the question you said that the crucial aspect of what Mr Hill was putting to you was that the decision be based on informed information, do you recall that?

55

A. I do recall that.

Q. On whose shoulders do you say the responsibility lies for making sure that the information is informed?

A. Again primarily the skipper sir but I believe in ordinary - not being a lawyer I don't know how to put this but I think the ordinary obligations of one person to another would mean that if I was aware of impending danger to yourself which I knew you didn't know about, I would feel I had an obligation to tell you.

5

10

HILL: Q. The seven paid staff that you have, does that remain so or does that become more staff since then?

A. Seven paid staff, sir?

Q. Yeah, you said full time--

A. Seven paid administrative staff, that's about the same. 5

Q. And I take it--

A. It is enhanced with volunteers as I explained. 10

Q. I take it what you were saying to my learned friend Mr Stanley was that it doesn't hurt to give people as much information as you possibly can?

A. Well I don't know that I quite meant that, sir. 15

Q. What did you mean?

A. We'd be into information overload perhaps if that were the case.

Q. But nothing wrong with telling them the maximum gusts of wind that they might likely get? 20

A. Indeed so, yes.

HILL: I've nothing further. 25

CORONER: Thank you very much Mr Green for your patience and thanks for assisting me with the inquest and I appreciate your evidence, I'll give it every consideration.

WITNESS: Thank you for the opportunity your Worship, and I shall be very pleased to assist further if I can. 30

<WITNESS RETIRED

LUNCHEON ADJOURNMENT 35

<PETER HALLAM BUSH(2.03PM)
SWORN AND EXAMINED

HILL: Q. Sir, would you give the Court your full name please? 40

A. My full name is Peter Hallam Bush.

Q. And your address? Professional would be fine.

A. 67 Holt Avenue, Mosman, New South Wales. 45

Q. And your occupation?

A. I'm a business strategy consultant.

Q. You or under your guidance the race review of the 1998 Sydney to Hobart yacht race review was compiled, is that correct? 50

A. That's correct.

Q. I'm not going to deal with that at this stage. There are one or two items that I will direct your attention to, and then my learned friend Mr Weber will be taking you through that as to the recommendations and what have been 55

put in and why you recommended them. You're happy with that procedure?

A. Most certainly.

Q. I want to concentrate if I can on your statements, one or two things that I want cleared up. You heard in evidence or you possibly heard that Mr Carter said he complained about the tape facilities?

A. He complained about the?

Q. The tape facility aboard the Young Endeavour. He said he complained to you about it. Do you recall anything about that?

A. I'm afraid I don't recall that at all.

Q. If he had complained and wanted a new or a tape facility so that he could tape it, what would have occurred?

A. I assume you mean following the 1998 Hobart race--

Q. No, prior to that he says.

A. Prior to that?

Q. Mm.

A. Had I been aware of it we certainly would have been in a position to provide a tape facility for the radio relay vessel.

Q. So if he did ask you to do that is something that's simply fallen through the cracks as it were?

A. I don't recall him asking that question.

Q. At page 19 of the race review you say that - and it's down the last paragraph on there, Royal Volunteer Coastal Patrol et cetera, and you say there, it's the second sentence, "however poor administrative records for 1998 prevent an accurate assessment of precisely which stations received this information." Poor administrative records where?

A. In the CYC in context to particularly which of these coastguard and volunteer coastal groups actually got that particular fax.

Q. And I take it that's in the sailing office is it?

A. That's correct.

Q. When you say poor administrative records, are we talking about no administrative records or someone hadn't done - filled out the sheets properly? What was the situation, do you recall?

A. In respect to this particular fax?

Q. Yes, only in respect to this.

A. In respect to this particular fax I could find no covering memo that gave you any guidance as to whom this particular fax had been sent.

Q. This I take it was compiled, that is the race review, was compiled on the information that you could gather in the

time frame in which it was put together and published?

A. That's correct, myself and others.

Q. There may - since that time I take it other things have come to light that you simply didn't know about and therefore wouldn't have been able to put into here?

5

A. That's certainly possible.

Q. I'm going to go to your second statement, the one that's dated 15 July 2000, and you there at page 1 you say that you're a licensed radio operator and an AYF safety officer.

10

A. That's correct.

Q. First of all, when did you get your licence for the radio operation?

15

A. I can't be precise but it was some time in the late 1970s.

Q. And how often would you use the radio?

A. I've been actively sailing for all that period, so in virtually every long ocean race probably 20, 30 times a year at least, and on each of those events several times a day during the event.

20

Q. So can I suggest to you this, that in your case, because you use it so often, there's no requirement really for a refresher course because you're in constant use of the thing. Is that how you would see that?

25

A. Perhaps that's a fair assumption.

30

Q. Whereas I note that Mr Collinson, he was critical of some licences because the situation is you can get one, not use it for many many years, not use a radio, and yet you're still classed as being able to do that. Do you see that as a problem?

35

A. Only under circumstances where radio licensing rules may change, in the same way that for example road rules might change and we don't get the rest of them.

Q. Would you see anything fundamentally wrong with the recommendation that there be a re-test or something every five years or something like that? Would that be a good thing, a bad thing or what?

40

A. Any mechanism to keep you abreast of best practice would certainly be a good idea.

45

Q. The AYF inshore certificate, what is that?

A. The AYF inshore certificate is part and parcel of the AYF's accreditation programme on your way to becoming a yacht master. At one point in time I determined that I would get that qualification and began that process, and that was the first I guess step in that process which I later didn't pursue because of time.

50

Q. And once you get that certificate do you have to have refresher courses on that or is that--

55

A. No, you do not.

Q. In paragraph 4 you point out you were a member of the sailing committee from July 1995 to June 1997, and July 1998 to June 1999. But as far as the sailing committee was concerned, during the Sydney to Hobart race of 1998 you weren't a member of that committee? 5

A. In 1998, yes, in fact I was.

Q. During the race period?

A. I was a member of the sailing committee. 10

Q. The sailing committee?

A. Yes, I was.

Q. I notice at the end of your statement at paragraph 49 that what you say in that last sentence, "however the ultimate responsibility moves up the CYC, a management hierarchy via the sailing committee and general matter ultimately rests with the CYCA board." Is that how you see the whole of the structure, that ultimately the buck stops at the top as it were? 15 20

A. My corporate practice or my corporate experience would suggest that that is a fair and reasonable way for the practice at the CYC, or indeed any club or business to operate, yes. 25

Q. It's quite clear, and I'm dealing only with the Business Post Naiad, somehow the certificate got through and therefore there was something wrong with the system. I've only asked questions so far of Ms Holt and it appears so far that there's not a strict regime, or there wasn't one at that stage. Is that how you saw that, because you refer to it as-- 30

A. In my investigations specifically into processes within the sailing office and certainly referred to in the report, we make it quite clear that there were no formal processes or protocols and that things had been done very much by I guess following procedure, informal procedures that had been done previously. I could find no specific qualification, no specific details of any given person that should be doing any particular job. 35 40

Q. Has anything been done to remedy that?

A. Certainly in terms of the way the sailing office now works, there is a series of job descriptions, there is now a plan for - a formal plan for the running of the Sydney Hobart yacht race which did not exist. It sets out the procedures and protocols from - you know, effectively from January through to January for that event and clearly prescribes roles and responsibilities. 45 50

Q. So in other words, people now know what they've got to do, when they've got to do it?

A. I believe that's the case.

CORONER: Q. Was that implemented last year? 55

A. Yes it was, your Worship.

Q. How did it go?

A. I believe it worked much more effectively and it also included an audit process where a member of the board's audit and planning committee actually went to the sailing office I believe several times during the lead up to the event and audited at some discomfort, I might suggest, to the sailing office staff that they were up to speed with everything they should be doing. 5

HILL: Q. So I take it then that not only do they have procedures but there's someone that oversights those procedures as well? 10

A. I think there's a much stronger set of balance and checks as well as the procedures in their own right.

Q. I'm going to take you to paragraph 7 which is over on page 2 of your statement. Sorry, if you want some water please-- 15

A. I've just got some, thank you very much, Mr Hill.

Q. I'll read out the whole paragraph. "In the weeks leading up to the 1998 Sydney to Hobart yacht race, the board requested that I be the CYCA media spokesperson for the Sydney to Hobart yacht race as Hugo Van Kretschmar, the then Commodore, was sailing in the race. As such I was to host the VIP boat for the start of the race and go to the CYCA to listen to each of the skeds from 27 December 1998 onwards and at the conclusion of each sked be available to give a press conference if necessary." I take it what it was was so that you would listen to it and then you would tell the press where the vessels were, who was doing what, et cetera? 20
25
30

A. Precisely.

Q. And that was only from 27 December?

A. That's correct. 35

Q. The actual--

A. Sorry, in fact that was from the 26th, from the start at 1 o'clock I would be available if necessary. 40

Q. But not listening to the skeds?

A. No, sorry, not listening to the skeds.

Q. You certainly would have been available and I imagine as the person to give the press conferences you would be tied up with the press, they would be hounding you as it were? 45

A. As required, yes.

Q. Perhaps if you can give us a breakdown of what you did on race day to the best of your knowledge as you can recall it? 50

A. On the race day I joined the club probably at about 8, 8.30 in the morning. I was to host a cocktail party of club VIPs, invitees going out on a start boat, and I met with them as much as the ex-Commodore, the immediate past Commodore as anything else. I went out on that boat for the day and for the start, returned to the club after the event probably at around 2.30 to 3 o'clock, wasn't paying 55

particularly attention to the time, and had one or two drinks in the afternoon and left the club.

Q. And I think you say in paragraph 9 you then went home?

A. I then went home, that's correct.

5

Q. Just so that I understand it, did you see at any stage a weather forecast about - on that day?

A. I did not, no.

10

Q. Were you told anything about a storm warning or anything like that?

A. No, I was not.

Q. When was the first time that you were informed of that?

A. The first time I became aware of the storm warning was when I went into the club at about 02:30 on the 27th to listen to the radio sked and that was the first time I was aware that a storm warning had been issued.

15

20

Q. What did you think when you had got that storm - when you saw that?

A. The storm warning at that stage was still I believe suggesting winds of 50 or 55 knots, and my immediate reaction was one that this weather is fairly consistent with my expectations. I had been personally as a long term competitor watching the forecasts. My own expectation was that a system called an east coast low was going to develop, this was in the days preceding the Hobart race, and in fact I had commented to several people that I thought it would be a particularly tough Sydney Hobart race because of the weather that was going to develop. Hearing that such winds and such a forecast was in place was completely consistent with the expectations that I had developed based on my own experience.

25

30

35

Q. And that was the 45 to 55 was it or--

A. Well certainly when I heard winds of 45 to 55 knots I was not overly surprised.

40

Q. Did you know about this concept of adding 40 per cent?

A. The first time I became aware of the concept of adding 40 per cent was when I met with some representatives of the Bureau of Meteorology and they presented their preliminary report or extracts from it with me. I believe it was in late January, perhaps early February, they came to the Cruising Yacht Club in - assisting us in compiling the report, and during that process they made me aware of both those protocols in relation to both wind and waves.

45

50

Q. Was it a case that you thought the forecast between 45 and 55 meant that the winds would be between 45 and 55 and that was it?

A. My experience at sea is that a forecast certainly has a range. I've been in forecasts where the wind has not reached what the bureau has predicted and I've been in winds where they have certainly been stronger than have been predicted. My experience would suggest to me that in a

55

forecast of say 40 to - say 40 to 50 knots I would see winds in the mid to high 30s and I would also see some winds in the 50 to 60 range in gusts.

Q. So that's what you expected from them?

5

A. Certainly.

Q. If you had known at that stage that in fact you would have winds much stronger than 55, that is you could add 40 per cent to the 55, would that have caused you concern?

10

A. I'd have had a quite different perspective on the event.

Q. So you listened to the 3 o'clock sked, you expected the winds as you've described them. I'll deal at 12, paragraph 12, the 14:00 sked. You heard the Doctel Rager report. Did you hear that before?

15

A. Yes I did, I recall that being at around about midday.

Q. 50 to 60 knots with gusts of 70 knots. Did that cause you concern?

20

A. It did to some extent. In fact I had previously owned that boat so I knew that boat particularly well. I also had some knowledge of the crew on that boat. I think sailors, like fishermen, at the end of races have some tendencies to exaggerate wind as fishermen do to exaggerate the size of the fish. The crew on Doctel Rager were not one of the very experienced crews in the race, and my expectation was that they were certainly receiving strong gusts but may have been exaggerating a little. My expectation was also that they were reporting apparent wind speeds, not true wind speeds, and an apparent wind speed on a boat is one where the speed of the boat is added to the wind speed, so that my expectation when they reported 70 they may have been getting closer to below 60 knots of wind speed. And I also believed and my experience is that in the early part of fronts as they come through, there tend to be several stronger than expected gusts until the front sort of settles down as it comes through.

25

30

35

Q. Mr Honeysett was down in the Royal Yacht Club of Tasmania and he says - have you seen his statement?

40

A. No, I have not.

Q. Well what he says is that he was on duty setting up the listening station. I understand it's in a separate room from the race control centre.

45

A. That's correct.

Q. And he says that he got a facsimile at about 6 o'clock in the morning, he got a facsimile at about six in the morning and what it did is it showed that at Wilsons Promontory they had wind of 71 knots. That's at six in the morning. He says he then put that into the race control centre where it was supposed to, the faxes, and he recalls telling Sam Hughes about that. If you had been part of the race control centre down in Tasmania and you had been notified say when you first got that at about 10 o'clock that they had winds of 71 knots at Wilsons Promontory, would

50

55

that have had any influence on you?

A. I don't think I quite - influence in terms of?

Q. Well what would you have done about that, if anything?

A. Well my role was to talk to the media.

5

Q. No, no, I'm asking you--

CORONER: It's hypothetical.

10

HILL: Q. --if you were part of the race control what do they call them, management group is it--

A. That's correct.

Q. --that goes down there, race management team. If you had that brought to your attention--

15

A. I'm sorry, yes.

Q. I'm not suggesting you did. I'm asking you what you would have done had you been in that position and you'd seen that.

20

A. I think perhaps at the next available sked we would have appraised the fleet of those winds.

Q. So it's something that you would have told the fleet?

25

A. I believe it would have been.

Q. If you could tell them immediately, would you tell them immediately of that?

A. If there was a capacity to do that, I think so, yes.

30

Q. What I'm trying to work out is whether there is a need to have access to them, that is to the fleet, at all times, and obviously if you've got 71 knots at Wilsons Promontory and you think that they should be informed, if there was a mechanism.

35

A. I think having a mechanism to communicate to the fleet full time is certainly an asset, although - yes, it's certainly an asset.

40

CORONER: Q. You heard the evidence of the last witness. Have you any comment about the satcom system and its ability apparently to communicate with the fleet?

A. We - your Worship, we installed satcomseas, the CYC installed satcomseas for the last race. Those satcomseas were able to give you continuous position reporting, and in fact that was available on the Internet for anybody to access and you could see the fleet at any given time. Via the printers the fleet received nav area weather forecasts and Sydney Hobart race specific forecasts, and we would have had the capacity had there been a requirement to send a specific message to the fleet or any individual boat, so that capacity existed during 1999.

45

50

Q. So it is a real asset isn't it?

55

A. It certainly is, yes.

HILL: Q. So that's one of the things that you, if you had

been in a position of part of the race management team, you would have got that information to the fleet?

A. I think that would have been valuable information for the fleet to have.

Q. We have been told that the wind speeds at Wilsons Promontory are to be read down because it has a certain height. Is that how you understand that?

A. I became aware of that at that same Weather Bureau briefing that I mentioned to you.

Q. Well had you known it was supposed to be read down and then we have Doctel Ranger, or Rager rather, at I think 12.30 saying that they're getting--

A. Around about that time.

Q. --60, 70, it would appear that what we have is the wind building. Would you accept that?

A. Yes, I would accept that in hindsight. In isolation at that stage it was an isolated report from a given boat and not necessarily absolutely reliable.

Q. Well it wasn't actually isolated because they were all talking about severe weather. There were a group of vessels that all came in at--

A. I'm sorry, but at the time I had - the only one that I had heard at that time prior to the 14:00 sked was Doctel Rager.

Q. I'm not saying or suggesting for one moment that you should have done anything, but I'm asking - what I'm asking is that someone who is close to it, part of the race management team who's supposed to keep an eye on that. If you look at what's happening is the wind appears to be building over a period of time till we get to Doctel Rager, and there are quite a few vessels that actually come in and verify that, they say we've got severe weather according to the relay text that we've got and their logs. If something was to be done, whatever it may be, would you agree that between 12.30 and 1.30 appears to be the appropriate time to do something?

A. In my view nothing actually could have been until the 14:00 sked, when there was an opportunity to speak globally to the fleet.

Q. If there had have been an opportunity to speak with them other than just on the sked, does it appear to be 12.30 to 1.30 that--

A. No, in fact Mr Hill I would suggest it would have been substantially earlier. At that time and as the fleet got into difficulty it was well down the coast, and a yacht is only moving at five or six knots. The average boat, when they took a decision to retire some time later, was about 60 to 65 nautical miles from Eden and took an average of 15 hours to get back to Eden. So to preclude that fleet entering that storm, that extra couple of hours would in my view not have been sufficient to take the bulk of the fleet out of the path of the storm.

Q. What time do you suggest then, if a warning was going to be issued such as telling them to take shelter or bringing to their attention, what time in your opinion would you suggest?

A. If you just give me a moment, I'm just trying to sort of calculate the speed the boats were doing. 5

Q. Certainly. I can actually show you the charts where they were.

A. No, that's quite all right, I'm quite familiar as to where they were on the charts and the approximate time. I mean I think the time of warning, given that the bulk of the fleet that experienced the worst of the weather were in the 40 foot range, it would have been - needed to have been something like six to eight hours earlier perhaps to give them the opportunity to make that determination. 10 15

Q. Six to eight hours earlier than what?

CORONER: The sked. 20

A. Than the sked at 14:00.

HILL: Q. So six in the morning or the 03:00 sked?

A. Possibly the 03:00 sked if people were aware of the severity of the weather that they were facing. 25

Q. What time was it, do you recall, that Mr Thompson left for Hobart? Are you aware of that?

A. I'm sorry, I'm not aware of that time. 30

Q. I think you say in paragraph 10 at 03:00 Mark Robinson, Peter Campbell and Lisa Smith also listened to the 03:00 sked. Are you aware if Mr Thompson was there?

A. No, these were to the best of my recollection. 35

Q. Would it be correct to say that you weren't really looking at it and listening to the sked other than for your purposes and that was to relay it to the press?

A. That was very much my focus, yes. 40

Q. I think you say in paragraph 10 "I was not alarmed by the weather forecast. It was consistent with my expectations." See at about halfway through?

A. That's correct, yes. 45

Q. "I also recall that approximately six yachts advised during the sked that they were retiring. I was not concerned by the number of retirements. Retirements would be expected given the strong northeasterly and westerly wind the fleet experienced during the first leg of the race." I take it the strain on the sails and things like that were causing damage and they were out?

A. Also in hard running conditions with spinnakers set, boats tend to have some exciting times, shall we say, and break equipment so it's not unusual in those circumstances to rip spinnakers or break spinnaker poles or booms and even sometimes rudders, and in fact they were the sorts of 50 55

reasons given for retirements by those yachts.

Q. At paragraph 11 you say "after the 03:00 sked I was interviewed on radio by a couple of stations, and after those interviews I decided to stay at the CYCa and to continue to monitor channel 4483 as I thought it was likely there would be more retirements because of the hard running northerly winds and oncoming change. In those circumstances it would make a lot of sense just to stay in the CYCA." So you were planning really to see what was coming out regards retirements and you'd be having press conferences about that? 5 10

A. Yeah. Also I might add there that at this stage the kind of conditions that were prevailing meant that the race record was under threat at this early stage, and that's always a focus of the press and that's something that they would have wanted to talk about, so part of the reason for - it was also really by this stage quite late after the 03:00 sked so it made a lot of sense just to stay when the press would start to ask questions for sort of the 7am news. 15 20

Q. So you were, as you've said, well focused on this aspect?

A. Absolutely. 25

Q. You say that "in the period leading up to the 14:00 sked I recall further yachts advised that they were retiring and Doctel Rager reported it was experiencing winds of 50 to 60 knots with gusts of 70 knots plus." 30

A. Correct. 35

Q. That was your first inkling that things were building at that stage?

A. The weather was developing, as I said earlier, consistently with my expectations based on my own experience. The breeze - I was expecting a southerly front or a southwesterly front to cross the fleet. I was expecting that to be in the 35 to 45 knot range and what I was hearing was consistent with that. I was surprised that Doctel would report winds of 70, but as I explained earlier I was somewhat sceptical that that report would have been absolutely accurate. 40

Q. What did you understand by the storm warning, the words storm warning?

A. I fully understood what a storm warning entailed. 45

Q. Meaning what?

A. That it was the most severe warning that would be issued. 50

Q. That's fine. It's like saying the headmaster's going to give you the maximum punishment, whatever that is, but what does it actually mean to you? I know it's the highest warning, you knew it was the highest warning, but what did it actually mean? 55

A. Well my expectations were that there would be big seas, that they would probably be in the 20, possibly even 30 foot

range, and I also expected that there would be strong winds. At that stage I was still of the view that they would be in the range suggested by the Weather Bureau, which I think at this stage that storm warning was saying maximum was 50 knots I think at that stage and that there would be gusts probably into the early to mid-60s with a forecast like that.

5

Q. Can I suggest this to you - and you have been sailing for how long?

A. Since I was 10.

10

Q. The words storm warning. Although you knew that to be the maximum, what you really took notice of in that weather forecast was (a) the size of the seas, and (b) the strength of the winds?

15

A. I took most note of the strength of the winds.

Q. So that if someone had have told you that you were going to get gusts up to 76, 80, that would have registered far better?

20

A. It would have registered very powerfully Mr Hill, yes.

Q. What I'm trying to find out is, is there a need really not just to give a name storm warning to something but to actually tell people this is what you are going to get?

25

A. I believe that absolutely.

Q. Because if that had happened, the whole of your morning may well have changed from your point of view wouldn't it?

30

A. I think my perspective on the peril that the fleet ultimately sailed into would have changed considerably. I might also add that from a purely pragmatic standpoint, from a layman's standpoint and, you know, a category 1 race fleet goes out to sea in relatively well-prepared and relatively safe boats compared with a lot of recreational boating people who rely on the same forecasts, I think the word storm warning is a poor description of that weather structure in as much as we have thunderstorms or there's a wind storm and these things are used in everyday language as something that we don't think too much about.

35

40

Q. Mr Allen, you heard his evidence?

A. Yes.

Q. What he was suggesting is that perhaps if you said what the gusts were likely to be, the highest peaks, that would not just help people who are in a race but convey to everyone that's out there what's likely to occur.

45

A. Yes, and in fact I would go further than Mr Green did in as much as--

50

Q. Sorry, Mr Green.

A. Sorry, in as much as after races we deliver boats back to their home ports and rely on the various weather forecasts available. There are many people cruising up and down the New South Wales and Australian coasts for that matter in various boats, relying on weather forecasts where

55

they may not be particularly conversant with the weather. So I think all weather forecasts that are for marine consumption, it would be extremely helpful for them to have maximum gusts included.

Q. You then go on in paragraph 12 and you say that "I was not alarmed by the weather reported by Doctel Rager as I thought it was likely the front had hit, and my experience during the first few hours of a front it is common to experience very strong gusts."

A. Correct.

Q. So really that was what, in keeping with what you--
A. Certainly in keeping of my experience, particularly going to Hobart and particularly when the southwesterlies come through, the very early part of - normally you get hit pretty hard.

Q. You say then during the 14:00 sked I recall that the Sword of Orion advised it was experiencing westerly winds of 50 to 65 knots with gusts up to 80 knots. Did that cause you concern?

A. The expression of 80 knots certainly got my attention and more so because on this boat I knew there were a number of very experienced crew and that if they were reporting that level of winds, the reports from Rager for me were now much more - much more relevant and believable.

Q. You say there "during the 14:00 sked, at approximately 15:00 hours I received a telephone call from Greg Halls. To the best of my recollection we had a conversation to the following effect. He said Bushie, I've been following the sked on my HF. There's going to be a lot of retirements, do you want me to go to Eden, and I said I don't know, I don't have any authority. Let's just wait and see what happens, we'll talk later."

A. Correct.

Q. Who had authority? Authority for what?

A. To authorise Greg to go to Eden.

Q. Who had that?

A. The race management team. I mean I was there to--

Q. Thompson, Mr Thompson?

A. Mr Thompson or any one of the other team in Hobart presumably had authority to do that.

Q. Were you in contact with them at all?

A. I was from time to time, yes.

Q. Did you speak with any of them down there in the morning?

A. I don't recall speaking to them specifically in the morning, no.

Q. He then said he'd be on standby--

A. Correct.

Q. --so you could phone back. Did you get authority?

A. I spoke to Phil Thompson and said that Mr Halls had suggested that he would go to Eden, and we agreed that that would be a good idea and that we'd be able to cover his costs, and I called Greg back I think some - quite some time later about 7, 7.30 I think, maybe 8 o'clock.

5

Q. I think that then you started getting volunteers in?

A. Yes, we had quite a number of people that - many of whom normally race in the Hobart had been around the club, staying on their boats, planning to go away. We were starting as a result of the 14:00 sked and media from that to have quite a number of enquiries starting to come into the club and the switch were unable to cope with the number of phone calls, and I prevailed upon a number of members and staff at the club to assist us in responding to phone calls. At this stage those phone calls were really from three sources, they were the press and given that was - I was designated to do that I focused on trying to respond to the press, or to the media I should say, and then the other calls were coming either from relatives of people on crews or friends of people, the crews on boats.

10

15

20

Q. The race management team seems to leave early in the morning of the 27th is it to go down to Hobart?

A. I believe that's the case, yes. I think some perhaps even go on the afternoon of the 26th. I think they move iterately.

25

Q. There seems to be in the statements I've read some sort of gap where Mr Thompson's in the air, he's uncontactable I take it. I'm just wondering whether this is a good thing because you've got no one there to give you the yes as far as Bush is concerned at 14:00. You've got to phone someone in Tasmania, is that correct?

30

35

A. That's correct, yes.

Q. It just seems a position that up in Sydney, certainly at that time, there's no one in actual charge in regards the race management team.

40

A. I mean the race management team were in Hobart and were contactable. I picked up a phone at a later time, called Mr Thompson and he agreed that it would be a good idea if Mr Halls went to Eden.

Q. Is that still the system now?

45

A. I believe in terms of the way the race management team moved to Hobart, yes, it is.

Q. So there will be a time when the race management is moving down there where some of them will be uncontactable because they'll be in the air?

50

A. Well certainly where individuals would be uncontactable, yes.

Q. But there should, as far as you're concerned, be someone on the ground who can make a decision either in Sydney or in Hobart?

55

A. Correct.

Q. Is that how you would see it?

A. Absolutely.

Q. And someone who would know what they're supposed to do?

A. Absolutely.

Q. Of course, you did say at one stage in your race review that Mr Sommers didn't seem to know what his responsibilities were, and as I understand it, clearing this up later both in his statement and your statement, he didn't know what to do in a crisis. Is that--

A. That's absolutely correct, yes.

Q. So in other words, because there was no plan, things just stopped in a lot of ways. Is that how you saw it?

A. I wouldn't necessarily say things stopped, in fact I think in many cases quite the converse was true. We had a number of volunteers like myself, like Mr Halls, who were able to take on additional duties. I mean in the case of - in my case I took on additional duties and mustered help and support from a number of club members who were experienced Hobart sailors who had an acute understanding of the sorts of things that were happening on the course. Mr Halls had been a previous race director and a veteran of I think 14 or 15 Hobarts, so he again was well qualified to understand what was going on and stepped into the breach to assist.

Q. Is there now a crisis management plan?

A. There certainly is, yes, and a dedicated - contrary to what Mr Green said today there is a dedicated crisis manager appointed who is suitably qualified.

Q. And who is that, what position?

A. That's the - for the Gold Coast race which is being run in two days time it's a past Commodore who's gone and done a course on crisis management.

Q. And is it just one individual who is it, or is there someone actually appointed for each race?

A. There is somebody appointed for each race on their availability, they in turn appoint a team and that's well documented there. They appointed a - in the case of the 1999 race, there was a team appointed, a second crisis management team appointed that went to Eden of four people and a third - and that was a mobile team that had the capability to establish itself anywhere, so if it needed to be in the northeast corner of Tasmania, they would have gone to the northeast corner of Tasmania for that period. And a third team established and operational in Hobart which included the Hobart police. That document is in evidence.

Q. So that is now resolved?

A. Yes.

Q. There's as you've said no shortage of volunteers and then your statement goes on to then set out what you did and how you called in people and there's nothing really I want to bring out in that, that's history. But what does trouble the inquest is this, that it's quite clear from the evidence of - they're not here today, of Mr Gage and Mr Batt, they did try to contact the centre, that is the CYCA, once they got that storm warning. That appears to be quite clear. The phone records show that. The fax is there. There is even a phone call made back to - from the CYCA to the Weather Bureau at about 4 o'clock and that remains unexplained. Setting that to one side in the sense of who's doing what and what's not coming out, that obviously is a problem. Has that problem been rectified?

A. I believe it has in that the race team are on the water starting the event and come off till - soon in the afternoon at say 2 or 3 o'clock and I believe someone is in the sailing office during that time.

Q. Right, so there's someone that's actually staffed in the sailing office and do they know their job?

A. I believe so.

Q. I mean it's not someone sort of plucked from the bar and sat, answer the phone, or anything like that, it's someone that actually knows what they're doing?

A. I believe so, yes.

Q. So that particular thing can't occur again, hopefully?

A. One would assume not, no.

Q. Hopefully, anyway. Alright. So that - and I think on anyone's terms that was a very vital time when the Weather Bureau wanted to explain what a storm warning meant. Have you any idea what went wrong there?

A. I have no idea, no. My understanding is that the fax was sent to the media centre fax rather than to the sailing office fax number and if that's the case then I don't understand why that would have been done but that's my only knowledge as far as that fax is concerned and whatever else may have gone wrong I'm unsighted.

Q. Campbell clearly had it, because it appears in his press release for 6 o'clock that night so he's got it somehow one presumes but no-one else appears to have - no idea who it might have been that rang the Weather Bureau?

A. No idea whatsoever.

5

Q. As you've said, your race review report was compiled, recommendations made on the evidence and the information that you'd gathered at that stage?

A. The review committee had gathered, yes.

10

Q. One point on that that I want to clarify. Some recommendations are mandatory and some are recommended. Why? What is the difference?

A. The basis for that was that where some were recommended, for example personal EIPRBs were recommended rather than made mandatory, some personal EIPRBs are not currently licensed in this country and secondly from a technological standpoint my understanding is that AMSA can only monitor 10 121 EIPRBs at any given time. To mandate a piece of equipment that was neither legal nor able to be used by the satellite system would have been an erroneous thing to do, however the committee regarded personal EIPRBs as a praiseworthy thing to use. So we tried to temper our views on these things. There were others. For example, I heard Captain George talk about the benefit of drogues and sea anchors. One of the voluminous submissions that came from the various sources to the committee were on the use of those devices. We chose not to make them mandatory because there has been quite an amount of evidence to demonstrate that a number of makeshift items work very efficiently and effectively and I think we cite in the report Business Post Naiad deployed their primary anchor and warp in such a manner over the bow, it kept the bow of the boat into the seas and in discussions with the crew they believe very strongly that it was a very, very effective mechanism and worked as efficiently and effectively as a drogue would have done. So our view was that there were things available on yachts. I think there were aerial photographs of one of the yachts from where there were people being recovered that had deployed a spinnaker in the water in the same method that equally worked during the discussions with them very, very effectively. So we tried to take I guess a pragmatic view if there were alternatives that worked efficiently and effectively, it was not necessary to make those mandatory.

15

20

25

30

35

40

45

Q. You'd recommend it but you're not going to say you must have it?

A. Yes. And certainly that's consistent with the kind of documentation that Mr Green submitted this morning with the AYF blue book that makes some things mandatory and recommends some things for different categories of races. So in a sense it was also consistent with the protocols that exist within the sport.

50

Q. So basically you are willing to compromise on some things because there were substitutes aboard the vessel but other things you weren't willing to compromise on?

55

A. There were other things that we just felt were obligatory to do, they just had to be done.

Q. The last point I want, that spare antenna for the VHF, that got left off. The reason that that is of some concern is that the Sword of Orion had a spare VHF antenna, that's what they were putting up and it seemed that when you take into account channel 16 and the aircraft it seemed a fairly useful item but it went off. Why was that?

5

A. Are you talking about a spare antenna for a regular VHF aerial or--

10

Q. Yes.

A. --for the hand held?

15

CORONER: Q. No, regular.

HILL: Q. The regular one, all Collinson was saying about the hand held one was that you can get an adaptor and you can connect that bigger aerial on. Primarily it's for the main VHF but you could connect it if you wanted to, to the smaller hand held one. Why was that left off? What's the rationale behind that?

20

A. I don't think frankly we left that off deliberately. Many yachts have VHF aeriels fitted to the stern of the yachts, they're a whip aerial not a mast aerial. It is my understanding and I'm not certain of this, it is my understanding that emergency aeriels for both HF and VHF are currently part of the requirements, despite the fact that it was not mandatory as part of the report.

25

30

Q. But it is a requirement?

A. Frankly I believe it was something that was overlooked in the report.

35

Q. That's fine, I mean that's - what we're trying to find out is whether in fact there is a real reason why they should be different and if it's--

A. If I may answer the question another way Mr Hill, I would wholeheartedly support and I also believe the safety committee would wholeheartedly support a spare VHF antenna for yachts where the VHF antenna was mounted on the mast.

40

SANTAMARIA: Q. Mr Bush, you didn't sail in the '98 race?

A. No I did not.

45

Q. But you did sail in the '84 and '93 races?

A. Most certainly.

Q. Which are generally regarded as two of the toughest races in the history of the Sydney to Hobart?

50

A. Yes sir.

Q. Could you tell us about the general conditions at sea in the 1984 race as you recall them?

55

A. 1984 were winds generally in the 40 to 45 knot range. We were in a situation where we had those winds over a very strong east Australian current and that created a

particularly savage sea where the waves were not especially large but - perhaps in some terms not especially large but certainly, you know, 15, perhaps the occasional 20 foot wave but they had no backs in them, very, very steep. The boat would come to the top of those waves and literally launch off the top and boats would literally fall several metres and crash, very noisy, very, very uncomfortable.

5

Q. Forty to 45 metres (as said) with gusts to?

A. I don't recall frankly, I was navigator that particular year on a 37 foot boat. I actually don't recall seeing many waves - many wind gusts much above the mid to high 40s as I recall, yes.

10

Q. There was no storm warning issued for that race?

A. No there was not.

15

Q. Nor indeed for the '93 race?

A. No there was not.

20

Q. And to your knowledge so far as your involvement in the Sydney to Hobart races go and you've got a most extensive involvement, there had never before been a storm warning issued prior to the '98 race?

A. To the best of my knowledge definitely not.

25

Q. In fact, in the 1984 Sydney to Hobart race, you forced upon the owners of that boat in which you were sailing a decision made by you that you would retire from the race?

A. That's correct.

30

Q. That was because the sea conditions were such that you felt that your own life and those on board were at risk?

A. That's not precisely correct. We had broken five strands of a 19 strand cap shroud wire, we had another individual in a bunk who was catatonically seasick and we had a third crew person who had separated their shoulder. The owners were intent on continuing. I felt in the conditions and our situation it was imprudent to do so.

35

Q. Yes indeed and all of the matters you have described resulted from the conditions of the sea which you encountered during the 1984 race?

A. Absolutely.

40

Q. It got to a point during that race where in fact you told the owners that you refused to continue navigating unless the decision was made to pull out of the race?

A. Correct.

45

Q. The record of interview which you gave to Detective Senior Constable Grey was in terms that because of the decision which you forced upon them, and that's what you say, forced upon them, they didn't speak to you for a couple of years?

A. Correct.

50

55

Q. What was the situation on board--

A. I might add they speak to me now.

Q. I'm sure they do. What was the situation on board when you communicated your insistence that because of what was happening and the injuries which had been sustained and the condition of the boat--

5

A. I was most concerned that the mast was going to fall out of the boat, that was my biggest concern.

Q. Sure, alright. What was the captain's attitude on that - at that moment when you communicated your insistence?

10

A. They made the decision to return to Eden.

Q. They had a different view though at the time?

A. Certainly. I mean they were prepared and would have preferred to continue racing.

15

Q. If it had been the case that the captain had said to you, I'm saying this with respect, look, Mr Bush, you keep navigating, I'm the captain, the rules of racing say it's my boat, I want to continue, what would you have done in that circumstance?

20

A. That circumstance didn't eventuate.

Q. What would you have done in the circumstance?

25

A. I would have insisted - I would have insisted that we return to shore.

Q. There's a problem isn't there with the way the rule may translate into actual practice where there's a division of opinion on board a vessel as to whether a vessel should retire from a race, go into survival mode, or keep racing, there's a potential problem isn't there?

30

A. It's not usual on racing yachts, in fact I would suggest to you that it's absolutely common practice that a group are involved more often than not in a decision. There's a consultation between the navigator, the skipper, a couple of the other more experienced people on board who discuss the weather, the tactics, their position and more often than not a decision to retire which in a yacht race is a very grave one and it's a grave one in those conditions, because often the decision to retire puts a boat in as much peril as you are already in, if not more and so those decisions are not easy ones to make.

40

Q. No and there will be different views on a boat, in fact I think there's evidence in this inquest of different views being expressed on a particular boat?

45

A. Certainly.

Q. If in fact it's the captain's call and the captain decides to continue, go back to your situation in '84, you would have known that to continue in the race would not only have imperilled the safety of those on board but potentially also those who may have to rescue crewmen from the sea?

50

A. My focus at that time was I was convinced that we would lose the mast out of the boat and my primary responsibility at that stage was to get the boat to shore prior to that

55

happening.

Q. In your record of interview which I've referred to, you talk about the cynicism of sailors towards weather forecasts, do you remember that section?

A. I certainly do, yes.

5

Q. When you were making that comment, I take it that you were describing sailors generally and not particular people that you might have had in mind at the time?

A. Just sailors generally, yes.

10

Q. Would you accept that there may be circumstances in a yacht race where the decision to continue racing or not should be withdrawn from the captain and crew of a yacht?

A. From my personal experience I would regret that decision being made. It is my view and my unequivocal view that only the skipper and the crew are in a position to determine the condition of their boat, the condition of their equipment, the condition of the seas and are the only ones able to make that decision.

15

20

Q. You were asked some questions by Mr Hill about your responses to the observations from Doctel Ranger on the 27th and you at that stage knew that there were - one vessel was experiencing winds of 50 to 60 knots with gusts of 70 knots plus and you were asked some questions about communications between the race management and the crews. What would you have told the crews at that stage if you had the opportunity so far as continuing in the race with those observations?

25

A. Sorry, if I'd had a role in race management?

30

Q. Yes. I ask that because of the experience which you have, which is set out in your statement, which I take it everyone knows about, as far as the administration of yacht races.

35

A. I would have appraised the crews of those wind strengths.

Q. And no more?

A. And no more.

40

Q. Seventy knots plus didn't alarm you?

A. Not any more than it fitted in broad terms with the expectations that I had.

45

Q. The fact that observations are consistent with your expectations is something you've said I think two or three times and you say it in your statement. Is the fact that--

A. If I could answer that another way. I would have continued racing I believe if I would have heard the same information. If I'd have been out there.

50

Q. So where do we draw the line? You said to his Worship that if you were told 76 to 80 knots that would have registered very powerfully upon you but 70 knots plus doesn't?

55

A. I said 80 knots registered very powerfully.

Q. It gets to 80 knots does it and that's when the bell rings?

A. I think you're being pedantic sir in suggesting that between one wind strength and another, what I was suggesting was that the sound 80 knots as opposed to 75 or 70, 80 actually got my attention.

5

Q. I didn't mean to be pedantic but I want to suggest to you that the mere fact of a storm warning, given your experience of the '84 and '93 races, must have told you that these yachts were in for the most severe weather?

10

A. Certainly I expected them to be in severe weather, yes.

Q. Just turn to the events of this race. You were at Ken Batt's briefing on Christmas Eve?

15

A. Yes I was.

Q. On Christmas Eve and Christmas Day what you did was to obtain the latest weather maps by polfax?

A. I did.

20

Q. You formed the view after obtaining those weather maps but before Boxing Day that this race had the potential to be one of the toughest races on record?

A. Correct.

25

Q. This was I think you explained because of the presence of an east coast low, you agree?

A. That's correct.

30

Q. Did you think at that point, that is prior to Boxing Day, that the conditions of the race would be comparable to the '84 and '93 races?

A. I thought it would be very much like the '93 race rather than the '84, '84 had this particularly strong current, '93 had slightly stronger winds and slightly bigger seas, but I thought not dissimilar to '93 most definitely.

35

Q. Did you share your views with anyone about the potentially adverse sea conditions which you anticipated, anyone at the yacht club I should say or in race management prior to Boxing Day?

40

A. Prior to Boxing Day I shared it with my father, my brother-in-law who was in fact racing in the event and at the function that I hosted prior to going out onto the - with the people on - taking them on the start boat, I said to them that I felt that it would be one of the toughest races on record, the way the weather pattern was building.

45

Q. Do you accept the fact that as at Christmas Day the only warnings issued by the bureau for coastal waters was the strong wind warning?

50

A. I believe so, yes.

Q. You've examined these facts as part of the review which you carried out?

55

A. Yes I did, yes.

- Q. We'll go to Boxing Day. You told his Worship you got to the club at about 8.30. What did you do when you arrived at the yacht club?
- A. I don't particularly recall, I probably had a chat with a few people, I wandered out on the dock and wished a number of competitors well. I don't recall anything else specifically. 5
- Q. You had your feelings or anticipation about the severity of the weather conditions. Did that motivate you to go and speak to the bureau personnel who were at the weather stand that morning? 10
- A. I don't believe I did.
- Q. Did you talk to Dr Badham? 15
- A. I don't believe I did, no.
- Q. You didn't visit the weather stand? 20
- A. I don't believe I did, no.
- Q. Did you discuss the forecast with any other members of the yacht club in a control sense at this stage? 20
- A. No.
- Q. I think you said that you had a very 1984 feeling about the race by this stage? 25
- A. Yes.
- Q. Did you see Mr Campbell during the morning of the race, on Boxing Day? 30
- A. Other than to say hullo and happy Christmas, no.
- Q. How did you work together with Mr Campbell, given that you had a media function yourself? 35
- A. My role was to be spokesperson, Peter's role was very much to write press releases, disseminate information and do those sorts of things and--
- Q. Was it his task to assemble the information about the weather and then he would package it for you to present it to the media? 40
- A. Certainly Peter and I had no arrangement as far as weather was concerned.
- Q. Of the two of you, given that the media would be wanting to talk to you about weather no doubt, which of the two of you would go about assembling information about weather? 45
- A. I never formally assembled anything about weather other than to make some notes in a book that I took with me and relied entirely on my own recognisances for any briefings that I gave the press. 50
- Q. Did Mr Campbell tell you during the morning of Boxing Day that he had spoken to Mr Batt at about 8.30 in the morning? 55
- A. Not that I'm aware of, no.
- Q. Prior to the start of the race, were you aware that

Mr Campbell had prepared a press release for issue at about 10am?

A. Not that I'm aware, no.

Q. Have you read that press release at any time since the race? Do you know the one I'm talking about? 5

A. No, I don't know the one you're referring to.

Q. I'll just read you a paragraph of what Mr Campbell wrote, Mr Bush. He says the Bureau of Meteorology issued a forecast a gale warning just four hours before the 115 boat fleet was due to set sail at 1pm on the 630 nautical mile race to Tasmania. The gale force south to southwesterly winds kicking up rough seas are expected to continue through to Monday evening, giving the fleet a severe battering as they battle headwinds and heavy seas down the New South Wales coast and across Bass Strait. He then quotes Mr Batt. You are certainly free to have a look at that if you feel more comfortable. Did you have any discussion with anyone within the yacht club about the issue of the gale warning? 10 15 20

A. No, I don't recall having any such discussion with anybody.

Q. Do you recall the issue of a gale warning?

A. I'm aware there was a gale warning, yes. 25

Q. When did you - did you become aware of a gale warning on the morning of Boxing Day--

A. I think - I'm almost certain that I became aware of the gale warning from the polfax that I'd got at home prior to leaving. 30

Q. And again that was something that was consistent with your expectations?

A. Absolutely consistent. 35

Q. The upgrade of a strong wind warning to a gale warning wasn't a particularly significant event so far as competitors in the race so far as you were concerned?

A. No it wasn't. 40

Q. You hosted a cocktail function on the morning at the club of VIPs and others. Were there any other members of the race management group, for want of a better term, at that cocktail party? 45

A. No, the race management team at that stage were to the best of my knowledge already on the water getting the various things, the course laid, buoys, markers down and all those other things, all the administrative things that go on to start the race. 50

Q. Did you see Mr Thompson about the yacht club that morning?

A. Most certainly, yes. 55

Q. Did you have any discussions with him about the weather?

A. Not specifically, no.

Q. When you say not specifically, did you have any?

A. I would have chatted to Phil, talked to him about Christmas, other things.

Q. Did he know about the gale warning?

A. You'd have to ask him.

5

Q. No, no, did you--

A. I'm not aware that Mr Thompson knew about the gale warning.

10

Q. You spoke before in your evidence about telling some others in the club, I assume it was at the function, it may have been elsewhere, about this being potentially the toughest race on record. I'm referring to your record of interview, question 86, page 21, you say from my point of view first of all I'll go on record as saying that as a veteran Hobart racer and someone that's done a lot of ocean racing and has had the responsibility of navigating in probably at least eight Hobarts, my expectation and in fact I said to a group of people upstairs in the club prior to the race, that my view on the way the weather pattern was building was that it had the potential to be the toughest race on record and I said probably even tougher than the toughest race that I'd done and I'd done both '93 and '84 of those too. '84 for me was much tougher and there was a formation that year of what was called an east coast low and my prediction was that an east coast low would form. What I wanted to ask you Mr Bush was that did you express that view to any other members of the board of the club, the race committee, the sailing committee or anyone else?

15

20

25

30

A. Of those groups you mentioned, none at all. Just to that group in the cocktail party.

Q. If that was the opinion which you had formed, that it was potentially to be the toughest race relative to '84 and '93, why didn't you go and raise your expectations with people who were in control of the race?

35

A. My expectation would be that those that were in control of the race already had that information and I was certainly aware that they would because they were liaising with the Weather Bureau.

40

Q. But your someone who's obviously highly respected within the club, you've sailed very many Sydney to Hobarts and you're a distinguished sailor. Surely your opinion, putting all modesty aside, your opinion would carry great weight within the club?

45

A. It may but I had - look, I had no role to play in that event other than to be a media spokesperson, that was my role there.

50

Q. Did you have any concern at that point for the safety of friends and relatives on board the various yachts?

A. Absolutely not.

55

Q. Absolutely not?

A. Absolutely not.

Q. Absolutely none?

A. Absolutely none.

Q. You went out onto the VIP starting boat at about 11.30 and came back at 3 o'clock. This starting boat, what sort of boat are we talking about? 5

A. It's a very large catamaran.

Q. Ocean going?

A. It's limited to the harbour by its specification but it's, you know, a pleasure craft, takes 300 people. 10

Q. But presumably equipped with all necessary facilities for accessing weather forecasts?

A. I presume so. 15

Q. It would go without saying, wouldn't it?

A. I presume so, yes.

Q. When you got onto the starting boat, who else was with you? Who were the other people from the yacht club? 20

A. From the yacht club I think there were some other directors.

Q. Which ones? 25

A. I believe the treasurer, Allan Green, was there and frankly I don't recall what others but certainly some life members and mainly club sponsors.

Q. Was there no discussion about the anticipated weather forecast at this stage? 30

A. No.

Q. You see, when the rest of us have nothing to say, we talk about the weather. Knowing what you did about the weather, surely the weather was at the forefront of the conversation? 35

A. No, it wasn't. I mean what you're misunderstanding is that the weather so far as I was concerned was quite consistent with my expectations. 40

Q. Yes but your expectations would be the roughest race possibly ever, isn't that something that you'd think you might just mention in passing if not be a substantial subject of a conversation? 45

A. If you understood the situation, we're on a pleasure craft with VIPs, watching the start of an event in sunshine where people are talking about boats that are passing around outside them and so forth.

Q. But Mr Bush I must put this to you as a matter of fairness. May I suggest that it is incredible that aboard the VIP boat at the start of the Sydney to Hobart yacht race there was no apparent discussion between you and others about the likely weather conditions which would be encountered during this race? 50 55

A. Sorry, I wasn't saying we didn't have discussions about the weather, I'm saying it wasn't a primary focus.

Q. I see, I'm sorry, that was my fault.

A. I'm sorry. We were on this boat for, you know, three or four hours and we didn't spend three or four hours with respect discussing the weather.

Q. Of course you wouldn't but what was said about the weather?

A. I don't recall, probably things like I'd already said to this group of people previous that it was going to be a tough race and there were going to be strong winds. I mean we've already agreed that that's what I'd said to this group was - did we continue that discussion with those people or did I continue those discussions individually with those people on the boat, I frankly can't remember. I possibly did.

Q. Didn't the captain of the vessel tell you that the storm warning had been broadcast?

A. No he didn't.

Q. And no-one else mentioned the storm warning?

A. No.

Q. You accept that it was issued about 2 o'clock that day?

A. I accept that it was, yes. I was not aware of the storm warning until I came into the yacht club for the 0300 sked.

Q. You conducted the CYCA review. Having conducted the review, do you accept that if attempts had been made within the yacht club to access weather information, whether at the club or on a boat, after 2.30 or so you would have heard that a storm warning had been issued?

A. Every possibility, yes.

Q. After you got off the boat, came back to the CYC at 3pm, what did you?

A. Had a few drinks, talked to various friends around the club and went home.

Q. Did you see Mr Campbell?

A. I don't recall seeing Mr Campbell, no.

Q. Wouldn't you have had to have spoken to Mr Campbell for the purpose of the media business that you had to perform?

A. As I said to you before, I relied exclusively on my own recognisances to gather that information.

Q. But if someone from the media asked you a question about the weather, the last information which you would have been able to give them was pretty antique by that stage wasn't it?

A. It was my expectation that I wouldn't be speaking to the media again till after the 3am sked.

Q. That may be the case, but if someone from the media had asked you about the weather, the latest information you would have given them would have been what, Christmas Day or Boxing Day?

A. Early Boxing Day morning.

Q. The gale warning?

A. Correct.

Q. Did you see any press release prepared by Mr Campbell prior to your leaving the yacht club that day?

A. No, I did not.

Q. What time did you leave the yacht club, Mr Bush?

A. I have suggested somewhere between 3.30 and 4.30.

Q. Did you leave that early for a particular reason? Did you have to prepare yourself to go elsewhere?

A. I had a family at home that I hadn't seen a lot and was trying to get home because it was Christmas.

Q. When you went home did you not turn on the news driving home, television, anything like that?

A. No, I did not.

Q. Was there anyone at the club to your knowledge who was keeping an ear out for developments in the weather pattern?

A. No, I'm not aware that there was.

Q. Do you think that there ought to have been?

A. Yes. I think I've already suggested to Mr Hill that that should have been the case.

Q. Was there someone who was planned to be listening to the weather but who failed to listen to the weather?

A. I don't know if there was anybody on the race management team who was specifically designated to do that.

- Q. Having conducted the review, is it your belief that no one who counted within the yacht club was even aware of the existence of the storm warning until the following day - I withdraw that - until the 8pm sked.
- A. When you say the following day - when you say-- 5
- Q. Till the 8pm sked, until the 8pm sked.
- A. Till the 8pm sked?
- Q. Yeah.
- A. I think that's probably correct, yes. 10
- Q. You don't mention the 8pm sked in your witness statement. I take it that you didn't hear it?
- A. I didn't go to the 8pm sked. 15
- Q. Others within the yacht club did hear the 8pm sked as you'd be aware, having conducted the review. Did no one contact you after the 8pm sked?
- A. No, they did not. 20
- Q. Mr Hill asked you about a telephone call that's logged on the telephone records exhibited to Mr Thompson's statement which shows there was a phone call at about 4.06pm from the sailing office to the Weather Bureau. It went for about three minutes. Do you know anything about that?
- A. No, I don't. 25
- Q. Would you be interested to find out about that?
- A. Yes. 30
- Q. Pretty important isn't it in the context of this inquiry?
- A. Possibly. Not knowing the context of the phone call. 35
- Q. Look, I may have misled you, I may have misled you. Is the telephone number 9731 the general office of the yacht club?
- A. Nine - yes, that's correct. 40
- Q. Having corrected the wrong phone number, I take it that your evidence is the same, you know nothing about that call?
- A. No. 45
- Q. Have you made any enquiries in the last couple of days about who it may have been that made that call?
- A. No, I have not. 50
- Q. Does that not interest you at all?
- A. No. At this point no. 55
- Q. Would you have any idea of why someone from the yacht club would be ringing the bureau at 4.06 or so in the afternoon?
- A. To discuss the weather. 55
- Q. In response to a fax perhaps?
- A. Perhaps.

Q. You said before in your evidence, and I take it this is a result of the inquiry which you conducted, that there was only one fax sent from the bureau to the CYC in connection with the storm warning. Is that your evidence?

A. I'm sorry, can you tell me where this comes from? 5

Q. I'll rephrase that. Did you say before that the only attempt by the bureau to fax the storm warning to the yacht club was a fax to the media centre?

A. I believe that to be true, yes. 10

Q. You've made no enquiry about the receipt of faxes or telephone calls?

A. No, I have not. 15

Q. Have the yacht club solicitors given you a schedule to look at which details all of the faxes and telephone calls?

A. No, they have not. 20

Q. Well I'll put it to you anyway that there was a fax sent at 14:49 to 9363 9745 of the update of the storm warning, which I think is the sailing office of the yacht club?

A. I'm not sure of that, but it may be. 25

Q. Mr Bush, the storm warning was issued and you were asked about storm warnings in general by my learned friend Mr Hill, and you told him that a storm warning is the most extreme warning that can be issued?

A. Correct. 30

Q. And you knew that by early Sunday the 27th?

A. At about 3am. 35

Q. You've heard the evidence about storm warnings from Captain George. I think you talked about his evidence about the drogues?

A. I heard part of Captain George's-- 40

Q. You didn't hear his evidence about storm warnings?

A. I don't believe I did, no, I'm sorry. 45

Q. Did you hear the evidence of I think Lieutenant Galletly?

A. No, I didn't. 50

Q. Well I want to just read you a short passage from what Mr Galletly says about the topic of winds because you were asked some detailed questions about winds by Mr Hill. 55

Mr Hill, this is transcript 6 on 21 July, Mr Hill asked Mr Galletly, he's a Lieutenant Commander, he said "when they forecast 45 to 55 knots, what's your understanding of that? Is there going to be high winds above the 55 knots or what? Answer, of course there are. Question, I'm sorry? Of 55

course there are Mr Hill because it doesn't stop at 55 knots necessarily. It's like trying to predict the stock market I suppose, it goes up and down, so anyone that would take it to the letter of the law that it will not make 55 and a half knots or 60 knots or 70 knots, you're kidding yourself

because what you get out there at sea is what you get. It's real life, it's real ocean, it's only a guide." Would you agree with that?

A. I think in my testimony to Mr Hill earlier I did agree to that.

5

Q. Would you agree with what I just read out to you from what Mr Galletly said to the Coroner?

A. Yes, I would.

10

Q. Have you read the evidence obtained by the detective senior constables from the fishermen at Eden who performed rescues?

A. No, I have not.

Q. Does the name Mr Lachlan Marshall mean anything to you?

A. No, nothing at all.

15

Q. They had something to say about storm warnings, but you haven't read that?

A. No, I haven't.

20

Q. You said before in your evidence that at the 3am sked you were still of the view - this is my note - maximum 50 knots at that stage, that was what was in the forecast--

A. I think that's what was in the forecast I believe, yes.

25

Q. And from that you expected gusts early to mid-60s?

A. Correct.

Q. Seventy?

A. Possibly occasions.

30

Q. Seventy knots weren't a matter of concern?

A. The odd gust, no.

35

Q. So that when before in answer to Mr Hill you said that if you'd got a different forecast it would have made a different impression on you, a forecast of 70 knots made no impression on you?

A. A forecast of 50 knots, which is what I had, is substantially different to a forecast of 70 knots that you're suggesting. I didn't have a forecast of 70 knots, I had a forecast of 50 knots.

40

Q. But you've said to me before, you've said to Mr Hill early to mid-60s and you've just admitted a possibility of 70.

A. Expecting gusts, occasional gusts, not winds consistently, which is precisely what happened at that speed.

45

Q. So a forecast of 45, 55 knots gusting to 70 knots in express terms would not cause you any alarm?

A. In express terms?

50

Q. Yeah, a forecast which says, adopting the suggestion made to you by counsel assisting, that we include the gusts

55

in forecasts. So we've got 45, 55 average winds gusting to 70 knots. You get that, that forecast is given, but you would say on your evidence that is not a matter of concern? Is that right?

A. If the gusts were periodic, right, it would not be for a matter of major concern, no. If they were forecasting winds of 70 knots it would have been a matter for concern, yes. The forecast that I had to deal with said 50 knots.

Q. But you knew it would gust up to 65 and possibly 70?

A. It could possibly gust.

Q. And that didn't concern you?

A. Not overly, no.

SANTAMARIA: I think they're the only matters, your Worship. Thank you, Mr Bush.

WEBER: Your Worship, could I just enquire what your Worship is proposing with this witness? As a result of a conversation I had with Mr Hill at lunchtime, he's requested that I take Mr Bush through.

CORONER: I thought you'd like to, I thought you'd like to. It's a chance, I saw it as a chance for you to explain, have the witness explain to me and the public just what the club has done but it's a matter for you.

WEBER: I'm grateful for it, I'm just raising the--

CORONER: I only say at this stage I note the report of Mr Bush. I note a lot of things have been changed, a lot of implementation, and we hope to look beyond that.

WEBER: Your Worship, I only raise it in terms of timing. It's highly unlikely that I can take Mr Bush through the implementation stage and the other areas I have to take him to in 25 minutes, and I'm enquiring of your Worship with respect as to whether your Worship wishes me to start this task now or whether your Worship prefer that Mr Bush stand over to a convenient date where it could be done in one fell swoop.

CORONER: That doesn't even have to be done. We have the report and we can work out what has been implemented, partially implemented or what's mandatory and what's discretionary. We can work it out. It would have been nice to have it on the record, but Mr Bush as I understand is leaving the country for a while.

WEBER: There was a time when he had to leave the country, but I'm not sure that's the case.

CORONER: Not had to leave the country, I mean one would hope he's not going to Brazil.

WEBER: There was a time when there was a meeting I think in Auckland.

WITNESS: I have a commitment for a board meeting on Tuesday.

WEBER: In Auckland?

WITNESS: It's been moved to Sydney. 5

WEBER: That's what I mean. I'm only raising a question of timing logistically. I'm wondering whether your Worship might not prefer to hear that style of evidence in one continuous stream. 10

CORONER: It's probably a good idea, but Mr Santamaria busted a valve to get finished in the time he did and he may have a few more questions if we're going to go back. I don't know. 15

SANTAMARIA: It's always dangerous to ask about--

CORONER: I'm not going to do that, Mr Santamaria. I hope you have no more. I think you've covered it very well. 20

SANTAMARIA: In fairness to Mr Bush, I've got no more questions.

CORONER: How long do you think you'll take. 25

WEBER: I'd say all up an hour.

CORONER: Why don't we get started. Are you ready to go? 30

WEBER: Yes, I'm ready to go.

Q. Mr Bush, do you have your report with you?

A. I do, yes. 35

Q. Could you go to that please and relevantly to page 151. That's where--

A. I have that page, yes.

Q. That's where your recommendations commence? 40

A. Correct.

Q. And 151 is effectively the preamble to your recommendations?

A. That's correct. 45

Q. While we're at the preliminary stage could I ask you this. When did you actually commence work on the report?

A. We started about mid-early January. 50

Q. It was complete some time in May?

A. Yeah, about mid-May.

Q. Just dealing with you, how many people did you have assisting you? 55

A. We had a full time secretary available to the committee of the club employed, and I had seven other committee

members apart from myself and they co-opted two or three other people to assist them in subcommittees.

Q. Just dealing with you personally at the moment. In the period mid-January to May when you brought the report down, did you work part time or full time on it? 5

A. I worked full time on this for the club.

Q. Were you remunerated for your work?

A. No, I did this pro bono for the club. 10

Q. Mr Hill's asked you some questions about why some matters were recommended as compulsory and others were recommended as mere recommendations. Is there anything more you want to say about that dichotomy or do you think that you've told his Worship all that you need? 15

A. I think perhaps I've covered that effectively.

Q. In your statement - I want you to keep your report available to you at page 151. In your statement you deal with implementation at paragraph 43. 20

A. Yes.

Q. And you deal with it through the vehicle, if I can use that expression, of an exhibit which is PHB1. 25

A. That's correct.

Q. Do you have PHB1 with you?

A. I do, yes. 30

Q. I think it's probably convenient for you in answering the question I'm going to ask you if you keep open your report at its recommendations stage.

A. Mm hmm. 35

Q. Go to page 152 where the first of the substantive recommendations commence.

A. Correct.

Q. And that deals with weather does it not? 40

A. That's correct.

Q. If we go to PHB1, and there are two preliminary pages, but the page that's marked in the bottom right hand corner is the first substantive page concerning implementation. Is that correct? 45

A. That's correct.

Q. With weather you indicate that all of the compulsory recommendations have been augmented except one, that correct? 50

A. That's correct, yes.

Q. And the one that's not implemented is the recommendation for the club to develop a weather strategy which includes working with its nominated race forecaster to develop forecasting assets in the eastern Bass Strait including accessing information from Bass Strait oil rigs. 55

A. That's correct, yes.

Q. You indicate in your exhibit that you've had some - the bureau has suggested, made suggestions which has negated that as a proposal and there is improved forecasting model for the area. Could you elaborate upon that? 5

A. My understanding that the Weather Bureau communicated through our sailing office, that they have apparently a new improved model, forecasting model that specifically works efficiently in that area and would supplement other forecasting models that they had and would by and large preclude the need for putting assets in those areas. 10

Q. And on the basis of that information you decided that it was unnecessary to cause to be implemented the fourth bullet point compulsory recommendation on page 152? 15

A. I don't think that you want to assume if I may that because we say things have not been implemented that we don't necessarily still believe they're a good idea, but from my personal standpoint if that system in fact provides that benefit then yes, one could assume that those assets would not be needed. 20

Q. And of course you're reliant on the expertise of the Weather Bureau in telling you that the new models do the job, if I can put it that way? 25

A. Absolutely.

Q. Then you indicate that you've worked with or the club's worked with the bureau to develop a comprehensive programme to educate competitors including the CYC's safety seminar programme? 30

A. That's correct.

Q. And you refer there to attachment C which is a letter which deals with the provision of services of the meteorological kind to the club? 35

A. That's correct, yes.

Q. The weather forecasts were increased to four times daily? 40

A. That's correct.

Q. There was a representative from the bureau with the race management team for the entire event? 45

A. They were with - yes, I believe Mr Ken Batt was with the race management team for the entire race.

Q. Another important recommendation is it true to say is a change in the culture of yachts reporting in about weather? Is that fair to say? 50

A. Yeah. I mean historically yachts have preciously regarded local weather information, local to their position, as being competitive, and one of these requirements from the review committee was that in winds in excess of 40 knots we would have yachts report that those conditions in fact were prevailing in their area, and this was implemented and in fact was done during the course of the '99 Hobart race by a 55

number of yachts, particularly in the latter part of the event.

Q. I'm sorry, particularly in the latter part of the event?

A. The latter part of the 1999 event, the tailenders of the fleet, the last 20, 30 boats, encountered very strong winds at the bottom end of Bass Strait and off the Tasmanian coast.

5

Q. Was there a perception before this recommendation was brought in, a perception at least to your understanding, that perhaps to be reporting in the weather that the yachts were experiencing may well have been contrary to the rules of racing?

10

A. It was in fact contrary to the rules of racing.

15

Q. Depending on the severity of the winds though?

A. Depending on the severity, yes.

Q. So you've cut through all of that and--

20

A. I mean it's a fundamental change I think to the culture of yacht racing, yes.

Q. Has the club gone to a four sked arrangement for 1999?

A. They've run four skeds a day, yes.

25

Q. You indicate that there was some perception from the smaller boats that four times a day is too much?

A. Yes, this was something additional, there were the two ordinary skeds and then the two additional safety skeds. The club determined or the race committee determined that it would be pertinent to upgrade those to full position reporting skeds in the event that weather deteriorated and when the weather did deteriorate for the back markers in the fleet, those two weather skeds which were weather only skeds were upgraded to position reporting skeds.

30

35

Q. So when you say that the smaller boats reported that the four skeds was onerous, what in fact you're indicating was that it was the tailenders who experienced the worst of the weather and it was only them that were subjected to--

40

A. Yes and it was onerous because each sked takes a considerable amount of time, perhaps up to 60 minutes, it disrupts the yachts' routine to have to have somebody doing skeds. The smaller yachts at the tailend had smaller crews and so someone had to be awake and available to do those skeds and sitting at a chart table in a small yacht in rough conditions is a decidedly uncomfortable thing to do. And it also meant that there was I guess more activity on the yacht when you're trying to rest and preserve your crew, which is all part and parcel of the crew being in good condition and able to react to difficult situations.

45

50

Q. Notwithstanding the perception of some of the crews on the smaller yachts that four skeds a day is onerous, is there any suggestion that if the weather gets difficult again that the four skeds will not be brought into--

55

A. Hopefully not the four skeds would be invoked again if

required.

Q. Regardless of--

A. Regardless.

Q. --any perception of onerousness, if that's a word. Alright then. You mentioned barometers. These aren't compulsory as I take it as part of a yacht's equipment?

A. No, there's not. One member of our committee at the time, Mr Roger Hickman, who is a master mariner, very well qualified, was very sceptical at how beneficial a barometer was as a scientific instrument on a small yacht, reported that setting the barometer at the outset was technically difficult and that its reliability could well be suspect. Therefore - we had however had reports I think from two yachts from the 1998 fleet that said they'd found the barometer beneficial and were recommending it to people if they also felt that it would be but there's a suggestion that it may be unreliable as a good reporting source.

Q. So your current view is that the evidence about the utility of barometers isn't hard enough to justify--

A. Is not hard enough to justify, yes.

Q. To justify them being a compulsory item?

A. Correct, yes.

Q. You indicate that in addition to the weather related measures that were recommended by your committee, some additional measures have been brought in to play, is that right?

A. Yes, certainly the additional skeds and an additional weather briefing or the weather briefing was changed, the weather briefing that was traditionally done for the Sydney Hobart race skippers and crews was done on Christmas Eve, a couple of days away from the event, and that briefing was done and will be done in future on Boxing Day at 8am prior to the race starting, so it's as recent a weather forecast as can be got to the fleet.

Q. Because I take it that much later than that on Boxing Day you start to interfere with the last minute preparations?

A. Yes, most boats start to leave the dock sort of by 11 o'clock and it's - you know, I guess for people that are preparing their boats it's a task that they have to set aside time for, to make an hour or so to do the weather forecast.

Q. Is there anything else that you wish his Worship to know about the regime of implementation of weather related recommendations?

A. I think your Worship if I may, the inclusion of a representative from the Weather Bureau proved to be I believe a serious success and one that I think both the Weather Bureau and the club are committed to as working closer together and proved to provide, you know, I think the kind of insights that I've been challenged on here today.

CORONER: Q. And so have a lot of other witnesses who have done a lot of sailing.

A. Yes, in terms of providing good pragmatic understanding to yachtspersons out there sailing.

WEBER: Q. Before I move to the next species of recommendations, namely gate and equipment checks, can I just ask you a more general question about your report. Did you intend your report to be a once-off problem fixed type document or--

A. Absolutely not. I mean the club felt - and this was a most onerous and important task to do, to one, while things were fresh in people's minds to gather that information and to get I guess a strong understanding of problems and where there were significant problems get them fixed prior to the next event, so we moved as quickly as we could. What we have here in this report is as comprehensively as our resources at our disposal to get a report together that would achieve that and that it was always our expectation that this would in fact be a living document that would be open to continuous improvement, to new inputs. We were aware that the inquest would be coming and that the wider resources of this inquest your Worship would certainly provide us with other experts, more expertise and other inputs that would continue to be able to be adopted by not only the club but by other ocean racing bodies.

Q. Can I then take you to page 153 in your report which are the recommendations concerning gate and equipment checks. You indicate that all of those compulsory recommendations were implemented.

A. That's correct.

Q. You say that they were regarded by the competitors as serious and onerous obligations. Can you elaborate on what you intend to convey by that?

A. It was a very onerous obligation for a particular reason, that those that I think compete in the Sydney Hobart race take it as a very serious event and to get only one third of the way down the course and have to withdraw because you were not able to demonstrate that a piece of your equipment was working, was hardly a desirable outcome. I mean people spend many, many months preparing for this event and all the reports that I had were that they put in special efforts to make sure that those various bits of equipment and others were all well serviced and the yacht was in a heightened sense of capability to be able to continue across Bass Strait.

Q. Just so that your evidence is explicable to those who don't have the report in front of them, the recommendation which you're describing as serious and onerous is an obligation on the skippers to declare to the race committee at Green Cape, that's just prior to entering Bass Strait--

A. Just prior to entering Bass Strait, that's correct.

Q. --that their HF radio is working, correct?

A. Correct.

Q. That their liferafts are on board?

A. Correct.

Q. The yacht and the crew are in a satisfactory condition?

A. Correct.

5

Q. And their engine and their batteries are operational?

A. That's correct.

Q. Failure to do so will result in disqualification?

A. That's correct.

10

Q. How many yachts in 1999 had to retire as a consequence of being unable--

A. I don't believe any did.

15

Q. But all yachts reported in accordance--

A. All yachts reported in, yes.

CORONER: Q. Are there any plans to audit that after the race?

20

A. They were not audited your Worship after this race but certainly--

Q. No, I was just thinking about the concept though.

25

A. Certainly the concept of auditing is one that would be praiseworthy, yes.

WEBER: Q. On an allied topic, you heard Mr Green this morning talk about certain ocean races, I think he gave an American example, the Bermuda race, where there's random checks on the water of finishes to ensure compliance with in this respect safety matters. Are you of the view that that's an advisable safeguard?

30

A. In 1999 the CYC advised competitors that the club would up until I think 1 January have the option to conduct spot safety checks in Hobart. I'm unsighted as to whether or not any were actually conducted.

35

Q. But the warning was there?

40

A. Most certainly.

Q. Could you go then to page 154 of your report, which deals with the topic of eligibility. Your first compulsory recommendation was that the fleet conform with IMS stability recommendations for cat 1 races of 115 degrees.

45

A. That's correct.

Q. That's a reference to the limit of positive stability is it not?

50

A. That's correct, yes.

Q. That was carried into effect?

A. In fact, the sailing committee have made it more onerous for classes other than IMS that any competitor now for the Sydney Hobart yacht race has to have an IMS certificate with a limit of positive stability or stability index of 115 degrees, so that will be the only measure which is regarded

55

as robust enough so the sailing committee went in excess of the recommendation of the Hobart review committee.

CORONER: Q. And in keeping with that, they've done away with the grandfathering altogether?

5

A. Completely.

WEBER: Q. So does that mean that regardless of the class in which a yacht wishes to sail, it has to comply with category 2 - category 1 stability?

10

A. The yacht must be IMS measured as the only technically sound means of determining its stability.

Q. Was the deletion of grandfathering and the across the board application of 115 degrees LPS a move which was met with hostility in some parts of the sailing community?

15

A. I don't know whether it was met with hostility or not, I can't answer to that. It had the potential, because there was certainly a number of boats that would have been discriminated against based on previous Hobart races and their stability at that time.

20

Q. And certain yachts who had a history of successfully getting to Hobart would have found they couldn't go?

A. They would have found they couldn't go, or wouldn't be able to go without making modifications, correct.

25

Q. There's also a proposal - the recommendation that HS and PHS yachts must demonstrate compliance with stability by a series of means. That I think you indicated was actually implemented to a higher degree--

30

A. They've been overridden and you have to have an IMS certificate as being the only scientifically reliable way of determining - accurately determining stability.

35

Q. The other eligibility compulsory recommendation was that the owner or his or her representative of CHS and PHS yachts must sign a declaration to the effect that no changes have been made which will affect the stability. Has that become otiose in view of the--

40

A. No, that is still part and parcel of entering the race, to confirm that nothing has been done to change the boat.

CORONER: Q. To change the IMS rating?

A. To change the rating, under IMS rules, someone racing under IMS rules has to conform to the IMS rules. Someone who's lodged a certificate to say that my boat meets the stability is not constrained by the IMS rules so you need that declaration quite separately.

45

WEBER: Q. It brings a reporting requirement on non-IMS--

50

A. Correct.

Q. --of non-IMS vessels to that to which the true IMS class are subjected?

A. That's correct.

55

Q. The next recommendation area is concerning crew

experience and your compulsory recommendation there that the number of "experienced" crew should be increased to 50 per cent of the total. What do you mean by experienced in the context of your recommendation?

A. There is a definition in the AYF blue book and forgive me, I can't quote it precisely, but it determined how much ocean racing experience a crewperson should have and that's a direct reference to that in RRS(?) AYF addendum A.

5

Q. So you took the AYF blue book benchmark for--

A. Correct.

10

Q. --experience and you required that that benchmark be met by half the crew?

A. That's correct.

15

Q. Has that been carried into effect?

A. Most certainly, yes.

Q. There's benefits is there not for still making available places on crews for relatively inexperienced--

20

CORONER: I accept that.

A. Yes, absolutely.

25

CORONER: Got to learn.

WEBER: Yes, your Worship.

Q. The next recommendation was that a mechanism be developed to ensure that the integrity of crew experience is maintained with crew changes. What problem were you seeking to address there?

30

A. In the course of investigations it was clear when in 1998 you submitted a crew form to have your eligibility passed on the basis of crew experience we detected the same crewperson on several boats. That's not unusual, a skipper asks somebody to do a race with them early in the piece and the fellow may have committed or the skipper's assumed that he may have committed to those boats and that was actually open to abuse potentially and that loophole has been closed by some administrative processes that have been put in place.

40

CORONER: Q. You'd be really checking your crews now?

45

A. It's checking, very much so.

Q. Prior to the start?

A. Very much so. So there are a series of checks and balances that have been put in place in relation to all crew work.

50

WEBER: Q. The recommendation for the crew composition to be reviewed by a subcommittee of the sailing committee, has that been carried in effect?

55

A. That's been done and signed off I believe by two or three people.

Q. And notwithstanding the desirability of people being able to have their first start in such a race, you've put an age limit of 18 years?

A. That's correct. That's been one of the most unpopular decisions we made.

5

Q. One of the most unpopular?

A. Most unpopular.

Q. But there's no proposal to step back from--

A. My view is the club is steadfastly standing behind that.

10

<WITNESS STOOD DOWN

CORONER: I think it is important that this does require some explanation, it seems to me. We're looking on the one hand at just the recommendations of Mr Bush's committee and to varying degrees they've been implemented. Some have been fully implemented, some of the recommendations are otiose now, they're irrelevant. A good example is the IMS thing. So I think it's fairly clear that we've got to get this evidence in, in some way and it will take a little while. We just have to do that, it's very important. I hope there's no perception that I think the work this witness has done is irrelevant, it's been very important and I said to him right at the start we'd look very critically at his report and see what we've made of it and that's what we've done.

15

20

25

ADJOURNED TO THIS COURT TO FRIDAY 28 JULY 2000

30

oOo

35

CERTIFICATION OF TRANSCRIPT

I, We the undersigned being (a) Sound Reporter(s) do hereby certify that the within transcript is a correct transcript of the depositions sound recorded at the New South Wales Coroner's Court in the matter of in the matter of

INQUEST INTO THE DEATHS OF JAMES MICHAEL LAWLER: MICHAEL BANNISTER: BRUCE RAYMOND GUY: PHILLIP RAYMOND CHARLES SKEGGS: JOHN WILLIAM DEAN AND GLYN RODERICK CHARLES

on 27 July 2000

Dated at GOODSELL BUILDING
this day of 2000

NAME	PAGES	SIGNATURE
------	-------	-----------

RMB

1- 21, 33- 55
71- 82
91- 97

RMB

ACS

22- 32, 56- 70
83- 90

ACS