SENIOR CONSTABLE UPSTON

- Of This is an electronic record of interview between Senior Constable David Upston of the New South Wales Water Police and Ken Batt at the Bureau of Meteorology on Friday, the 15th of October, 1999. The time by my watch is now 2.14pm. And also present, seated directly to my left, is Detective Senior Constable Gray from the Bega Detectives and also present is Pat Sullivan. Ken, for the purpose of the interview, could you please state your full name?
- A Kenneth Leslie Batt.
- Q2 And your date of birth?
- A 24th of August, 1954.
- Q3 And your address?
- A 27 George Street, Avalon.
- Q4 O.K. And your occupation?
- A Severe weather forecaster.
- Q5 O.K. Mr Sullivan, could you please state your full name?

MR SULLIVAN

Patrick Joseph Sullivan.

SENIOR CONSTABLE UPSTON

Q6 And your position here at the Bureau of Meteorology?
MR SULLIVAN

Regional Director, New South Wales.

SENIOR CONSTABLE UPSTON

Q7 O.K. Thanks very much. O.K. The time on my watch is now 2.14pm. And, Ken, prior to commencing the

interview, I explained to you that Detective Gray and myself are making inquiries into the 1998 Sydney to Hobart Yacht Race and we're here to talk to you today about your position and your involvement in the race as we understand that you gave a weather briefing on, on a day prior to the start of the Sydney to Hobart Yacht Race. Is that correct?

- A Yeah. I gave the pre-race briefing on behalf of the Bureau on the 24th - -
- Q8 O.K.
- A - of December, 1998.
- Q9 All right. What time was that?
- A By the time I would have got up to talk it would have been around 10.00 in the morning.
- Q10 All right. And that was at the C.Y.C, Cruising Yacht Club of Australia?
- A That was at the Cruising Yacht Club of Australia,
 Rushcutters Bay, yes.
- Q11 All right. O.K. Firstly, would you like to please state your experiences in, in weather briefing?
- As far as weather briefing's concerned I've been briefing, doing the pre-race briefing now on behalf of the Bureau for the Sydney-Hobart for the last 7 years and from time to time I've done the pre-race briefing for the Pittwater-Coffs Harbour Race on behalf of the Bureau. The Gosford-Lord Howe Island Race on a few occasions now. The Sydney-Mooloolaba, Sydney-Southport races off and on over the last 6 years.

Q12 O.K. And how long have you been employed by the Bureau of Meteorology?

A Coming up to 25 years.

Q13 And how did you gain your qualifications?

A Well, I - - -

Q14 Did you - - -

A - - I originally came into the Bureau as a meteorological observer having done my H.S.C. at that stage. I'd attended well, a year's university but wanted to get into the Bureau. I spent a year training in our training college in Melbourne and then was sent out into the field from there whereupon I worked in most states, two stints in Antarctica. Then eventually I came back and did our associate diploma in applied science which enabled me to be a forecaster as such. And after having done another course I was able to be classified as a forecaster and now I work in our severe weather section.

All right. And where, when you give your weather briefings prior to the race how do you obtain the information and the packages that you deliver to the participants in, in yacht races?

Well, what happens is that the information, because I'm acting on behalf of the Bureau, the information comes from the Bureau and that information is put together in a lot of cases as a series of overheads and I talk around those overheads. So overheads, what I talk about generally would be the weather that they could

experience at that time of the year, like, weather, typical weather problems up and down the racetrack before going into a, a weather outlook and there's always stress that it's an outlook because generally pre-race briefings are, are held 2 days, in some cases like, about 5 days before the race actually commences. So it's stressed to the people that attend, the skippers, navigators, that it's an outlook and it has to be updated

- When you put your package together do you consult other people here at the Weather Bureau and formulate what you want to deliver through various models?
- Yes, before I do anything I, I consult with our chief supervisor on duty who has the ultimate responsibility of setting, setting forecast policy for the state.
- Q17 And what were your thoughts on the, on the weather that may have been experienced through, through the models that you had received?
- A This is to do with the last Sydney to Hobart?
- Q18 Yes, the 1998 Sydney to Hobart Yacht Race?
- Well, essentially on the, I'd been tracking the weather for at least a few days before the briefing and, and being on shift as a severe weather forecaster, you know, you're sort of monitoring these things as well and in daily consultation with the chief supervisor. But on, on the morning of actually putting together the pre-race briefing it was still highly evident that the computer models were highly divergent, that means they

were all essentially in disagreement and there was a shift supervisor at the time that said, Well, the, the Australian global model, G.A.S.P. was, was the model or run with, it was picking, picking the situation as, as, as best as we thought at that time.

- When the models are in disagreement like you, like you mentioned, what brings you to select a particular model that you feel might be, be familiar with the area that we're working with, with the coastal areas off New South Wales and down into Bass Strait and then on to Tasmania?
- Well, that, that selection isn't done by myself, that's, it's the job of the shift supervisor to, to select which model or, or models, either merge models or run with one, jump around between a few of them over the, over the 4 days or so. So it's the, it's the shift supervisor's job to do that.
- Q20 Well, from your experience were you happy with what the shift supervisor had, had issued you with?
- A Yes, at, at the time we, we, we both thought that G.A.S.P. was representing the situation.
- Q21 And G.A.S.P. is - -
- A G.A.S.P. sorry, is the Global Assimilation Prognosis model which is the, the Bureau of Meteorology's global model.
- Q22 O.K. And when you were giving your weather briefing at the C.Y.C. were there many questions asked by the, the sailors that were entering the race?

- A To my knowledge, none.
- O23 And how long did that briefing go for?
- A Normally I run for at least 30 minutes.
- Q24 Right. Now you, prior to commencing this interview you mentioned that you have a, a history of sailing as well. Is that correct?
- Yes. I'm actually a, well, I'm actually a third generation member of, of a prominent yachting family which has been based in Hobart now. Personally I've been sailing since I was born but didn't get into competitive sailing until I was around about 10 years of age and just gone up from there. I, I was out of racing for, for nearly 6 years before coming back into it in a big way after I was transferred here to Sydney where I've been sailing on a, well, one could say the grand prix level, for a few years I was sailing the grand prix level, you know, on the likes of Ragamuffin, Wild Oats, Yendys and others, Nicorette, Brindabella, boats such as, as those.
- So you've had a lot of contact with, with the yachting fraternity and the people that sail on a regular basis?

 Yes. I've had a two, two pronged, a two prong association with the yachting community, I've been hell bent on education now from the marine point of view for over 15 years and as well as an active yachtsman I like to put, try and put back into, into the sport what I've taken out of it. So at this stage I've done seven Sydney to Hobart Yacht Races, one Melbourne to Hobart

Yacht Race, about three Sydney-Mooloolaba's, three Sydney-Southport's, Sydney-Lord Howe Island Race and I've been involved with an America's Cup campaign. I've, I've sailed in Phuket in Thailand and numerous other offshore races and harbour racing around the Australian region.

- Q26 O.K. Well, at the weather briefing when, at the conclusion of the weather briefing and I asked you earlier was there any questions sought by the, by the participants, what was your feeling about that when no questions were asked of you?
- Oh, essentially it's, it's been that way now, I can only ever remember being asked probably two questions in the past over the last 6, 7 years that I've been presenting the weather briefing.
- Q27 So from that you would probably understand that they understood exactly what you were giving them?
- A Well, I, I've never, I've never been led to believe at the end of any weather briefing that people have misunderstood what I've said.
- Q28 Was there any conversation that, did you have with anybody after the briefing? Did they approach you and ask you for specific information?
- A Apart from the media, some yachtsmen came up to me essentially to congratulate me on my presentation and that's generally been the case in the past. Some of them have come up to obtain copies of my overheads, especially they've tried to, to get a copy of the sea

surface temperature analysis, which is sent to us by the C.S.I.R.O.

- Q29 Right. Prior to conducting your, your information given to the yachties, does, the C.Y.C. sought specific information from you, how they want the, the briefing issued?
- Yeah. The, the briefing's been set up over, as I said, a period of time now to a format that the Cruising Yacht Club have agreed, that they've been happy with, let's put it that way.
- Q30 Right. Can you run us just quickly through that format and how you, how you deliver it?
- Well, the format is, well, starts off with Α Yes. general information. So what I do is break up the, what we call the racetrack between Sydney to Hobart, The, the first segment is Sydney to into segments. Gabo Island. And then talk about weather problems that could come about and actually get into a little bit of weather strategy as well. And then I, the second segment is Gabo to Tasmania so it takes them across Bass Strait and again talk about weather problems that can, can come about in that area and talk about some weather strategies that, that I've found have worked for me in the past and, of course, in consultation with other yachting colleagues, you know, what's worked for them. The third segment is the east coast of Tasmania, which is generally a hard part of the race and again I talk about weather problems and strategies that people

could adopt, set up essentially on personal experience. And then the Storm Bay and I definitely say that Storm Bay can live up to, up to its name. And then I talk about the dreaded Derwent River, generally when I've been there personally it's been an area of very light winds, a real battle to get up. But I never, I never underestimate the, the, the weather, like, I'll talk about east coast lows, I'll refer them to articles that myself and a colleague, Bruce Buckley, have written for the Australian Sailing magazine, there's also the Offshore Yachting magazine, describing such things as east coast lows, cold fronts, how cold fronts can behave during the summer and also in the winter period. So after, and, and then the last part of the general information segment is a session on where they can obtain their weather and oceanographic information So I talk about magazine articles, books, from. I then go down the list from the Bureau's courses. stand at the C.Y.C. on Boxing Day and then a Comsat, Telstra Coastal Stations, the coastal and Coast Guard Stations up and down the coastline, the H.F. weather fax service operated by the Bureau, AM/FM radio. Eyeball mark 1 method, I, I stress that you've always got to keep your head, your eyes open 24 hours a day and, and actually log what you see from the point of view of, of the weather elements. I talk about logging cloud, wind, pressure, sea swell conditions, those sorts of things.

- Q31 That's from your experience. Do you know any, any of the yachts that or yachtsmen that enter the race actually did that?
- Yeah. I know that over time people have actually, they've actually spoken to me at courses and, and when I've been down at the various yacht clubs and you know, they've rung me from time to time at home, etc. And they've spoken to me about my strategies and generally my strategies sort of fit, fit their strategies and I've consulted with some of the best navigators that Australia has to offer and they confer with the strategies that, that I put forth.
- You mentioned earlier about the east coat lows that, that can develop off the coast. Did you stress at the briefing about the, the low that was developing off the north-western coast of Tasmania?
- A At, at that stage at the pre-race briefing the, the model that we elected to run with, G.A.S.P. and the others were, as I said, fairly divergent and to my knowledge none of the models that we use regularly were indicating a low developing. The only hint was the E.C.M.W.F. model that was wanting to have a low somewhere off the east coast and south-east Gabo. was south-east of Gabo Island was mentioned in our forecast policy statement issued at 3.45, I think, that, that morning. And that was based on the E.C. run the previous day and also the M.R.F. which is the medium range forecast model, it's one of the models out

of the U.S.A, it had been sort of indicating a low developing somewhere off the east coast, it being a history of what we call cyclogenesis or the birth of lows or lows that form, had formed in the Coral Sea, the southern Coral Sea and extended a trough of low pressure down off the east coast out in the central Tasman. So that morning there, there was a trough, there was an area of, of low pressure well to the east of New South Wales and I made mention of that and, and the E.C. model sort of showing some sort of hint of low pressure development south-east of Gabo. So I drew their attention to that and told them to keep an eye on it.

- Q33 And was there any questions that came out of that?

 A No.
- So from what you're saying is that they really weren't terribly concerned that there, about this east coast low that develops and possibly of the one that was developing off, off the coast?
- Well, I can't really comment on, on what they were thinking but I suppose if you're not getting any questions back - -
- Q35 Yeah.
- A --- one can assume that they're, they're fairly happy with what they're hearing and, and yachties being yachties, will go about it in their own way to sort of deal with those sorts of things.

Q36 As a yachtsman yourself and, and also a forecaster, what would be your opinion of keeping a lookout for these, these east coast lows that develop around this, this time? Would you have concern for them?

Oh, always, it, it, it's something that, that you hope never happens at sea but, but of course they do and it's, it's, it's vigilant monitoring of the weather elements which, which will help you there, you know, to, to, to some extent. But actually getting a position and the severity is very, very difficult.

In fact it has been the case that in recent years that there has been a, on two occasions recently that these east coast lows have developed and, and caused a fair bit of havoc over the races I think in '93 and again in '95 I think. Is that correct?

No, '93 I was actually on a, that particular year and that was essentially what I'd call a, a pseudo east coast low. There's some, looking back on the situation there were a number of low pressure centres, there's a parent low, let's put it this way, a cold front moved through Tasmania so south-east Australia and actually waved, what we call waved and the front developed a bow, a low pressure system developed and then in the re-analysis of that situation there were at least another two centres that could be located back into Bass Strait. The, the east coast low from definition, it depends on how, the rate of change of pressure and I'm not too sure of that figure at the moment. But

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it's essentially classified as a pseudo east coast low and the big difference between the '93 event and the '98 race was that the low in '93 actually moved south with the fleet. I'm not saying that the '98 race or the '93 race was worse but - - -

Q38 Mmm.

- - - from the, from, from the observations and Α feedback from, from the yachties up east they're on a par with one another, having first hand experience of the '93 race. We, we in our educational program stress to, to the yachting fraternity that these things, these things can form and form very quickly and go into roughly the three types and how they form. But it's a matter of keeping an eye, eye on everything that's available to you and especially forecasts that are issued by the Bureau and the warnings and for those boats that are lucky enough to have a high frequency weather fax they can receive weather charts, whether they be surface analyses or surface prognostic charts. O.K. So the best of your knowledge you believe that Q39 the package you, you delivered on the, on the pre-race briefing on the weather was to the best available information to you?

A The, the package presented was based on the best available information that we've had - - -

Q40 O.K.

A -- in, into this office.

- Q41 Ken, did you travel to Hobart after the commencement of the race?
- A No.
- Q42 O.K. Was there any contact, did you make any contact with race organisers during the race?
- What I have to stress here is that I, I present the Α pre-race briefing on behalf of the Bureau and generally I've been lucky in that it's fallen on a day shift. But being on a, being on a shift roster now in the severe weather section it was, it just so happened that I had an office day shift on that day but things can be shuffled around so that I could get down to it. But on the Boxing Day I was on my day off and, and volunteered to go down there with two other colleagues to present the updated information. So I want to stress is that I'm not part of the, the routine public marine weather forecasting. The severe weather section is, is, you know, we're monitoring thunder storms and the far weather but, if need be, colleagues do ask me my opinion of, in certain situations, you know, they'll just grab my opinion. So, no, I didn't, I didn't have any, any consultation apart from on the Boxing Day after coming back from the Cruising Yacht Club with my two colleagues when things were evolving. we or I didn't personally, but suggested that AMSA and of course the C.Y.C. were contacted and the Eden Coast Patrol, amongst others, were rung. And I didn't physically do that.

- Q43 Are you saying that you suggested that these people, these other groups should be contacted as a result of the ensuing storm?
- A Well, well, as part of our check list that we sort of do these things, yes.
- Q44 And do you know if that was done?
- A Yes.
- 045 O.K. And how was that done?
- A It was done by phone.
- Q46 And who, who, who made those contacts, do you know?
- Well, Peter Dundar was the shift supervisor at the time and Brett Gage, who was also off duty but volunteered to go down to the Cruising Yacht Club on, on the Boxing Day. We were both, we were both there sort of assisting.
- Q47 So at any time during the 28th was any contact made with the C.Y.C.A. in regards to the, the severity or the, the approaching storm?
- I know at the time that I was in the office that, that every move was made to do that. Yeah. As I said, it wasn't, wasn't up to me to do that.
- Q48 So even between the, the 26th to the 28th was there any contact between the Bureau of Meteorology and the C.Y.C?
- Oh, yes. Each, each day there, there was an update, well, on, leading up to the 26th, including the 26th, there were outlooks issued and on the 26th there were the special race, that's when the special race forecast

commenced and these were issued three times a day from memory, the special race forecasts, twice, twice a day, Pat? I can't, twice a day, sorry.

As a result of those, that information going from the Bureau of Meteorology to the C.Y.C. were you aware of any contact made from the C.Y.C, the Cruising Yacht Club of Australia, back to the Bureau of Meteorology seeking advice?

A No, as I said, I can't comment on that, I wasn't, no, I wasn't around that.

Q50 Have you heard of any contact made - - -

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050 - - - between any of your colleagues?

A My colleagues have mentioned that there was some contact, but as, as I said I'm not sure.

Q51 And that is, that contact was made in reverse from the C.Y.C. back to the Bureau?

Well, the Bureau, it, the, the Bureau and at least on one occasion did talk to the Cruising Yacht Club apart from the Boxing Day, but I don't know who, who initiated that call. As I said, I wasn't, I wasn't here in the office around that time.

Q52 O.K.

A See, the, the warnings are issued, the forecasts are issued, yeah.

Q53 Can you recall of any conversations between Peter Bush from the C.Y.C.A. back to the Bureau of Meteorology seeking advice or any information?

A Again, I can't, I can't answer that. When I've, when I was in the office over that period I, I can't recall any, any phone conversation - - -

Q54 O.K.

A -- between Peter and the office, but I'm not saying it didn't happen, you know, I just don't know.

O55 That's fine.

A Mmm.

Q56 In your opinion, do you feel if the race had been postponed a further 24 hours that things would have been different?

Well, well, in hindsight the way the weather panned out it would have been, 24 hours would have seen the fleet take off and the, sort of getting towards the tail end of the worst of, of the, of the winds, oceanographic conditions. But again I, you know, I can't comment on that, I'm not, I'm not a race organiser so - - -

Q57 But in your opinion if, if you feel like looking at the way the fleet progressed down the, down the, track - - -

A Mmm.

Q57 -- if it would have been postponed another 24 hours the, it would appear to you that the storm may have abated and --

Well, I suppose my personal opinion is, is well, you know, the way it panned out, yes, but then, you know, a yacht race is a yacht race and, and crews are taught prudent seamanship so you know, this is me personally

speaking, your yachts exercise, the skippers exercise prudent seamanship so the decisions are made on board the boat, you know, they can elect to wait. Like, even if, even if the race had started 24 hours later, without the benefit of hindsight, conditions could have been just as bad somewhere down the track so it's a purely academic exercise.

- Q58 All right. Well, from that do you feel from your experiences that there could have been sufficient information from the 26th to the approaching storm that the race could have been postponed - -
- Q59 Well - -
- Q59 --- prior to the majority of the fleet hitting the cell?
- A Well, let's put it this way. On the 26th, roughly 4 hours before the race commenced, the gale warning had been issued and was current for the, at the time that the race started. Now a gale warning or gale force winds anywhere and I suppose especially in eastern Bass Strait is nothing to be sneezed at. But again, any, any yachting persons that are worth their salt they, they know how to handle those conditions.
- Q60 With your experience though, then you've got gale warnings and then storm warnings - -
- A Mmm.
- Q60 - when was the first storm warning issued?
- A Well, the first storm warning was issued roughly an hour after the race had, race had commenced because it

was around about 1.00pm that we received into the office here the latest high resolution computer modelling run that was suggesting storm force winds and in consultation with our Victorian colleagues and, especially our Victorian colleagues because they're responsible for eastern Bass Strait, yeah, a storm warning was issued.

- Q61 When that information was passed on to the C.Y.C. officials was there, was there any conversation or correspondence apart from that entered into about concern about the ensuing storm?
- A Again, again not to my knowledge.
- Q62 Yeah. O.K. Have you read Roger Baddams' report on the storm?
- A I've looked through it, I've looked through it, yes.
- Q63 And what are your, what are your personal opinions on that?
- A Well, I can't really comment because it's Roger's personal opinions on, you know, on what happens.
- Q64 O.K. Again I just, what, what, with, after the fleet had left and you had the information on the, on the approaching storm and the, and the gale, what, what were your personal feelings on that, that, did you feel that something could go wrong or did you feel that basically what you said a minute ago, that once they leave they're, they're on their own? What, what are your thoughts?

Well, my thoughts on, I suppose once, once we looked at the high resolution computer modelling output, my thoughts were that, yeah, Bass Strait would not be a comfortable, a comfortable area from a boating point of view in roughly 24 hours time or 18 to 20 hours time. So personally I, I felt for the boats because, as I said, in 1993 I was in a, a similar situation and I know how I felt personally - - -

Q65 Mmm.

A - - - during the height of that event.

Do you feel that you may have had some sort of moral obligation to, to contact the C.Y.C.A. and, and the race officials in regards to the, the low depression forming?

As I said earlier, the, the Bureau is engaged by the Cruising Yacht Club and it's the shift supervisor that sets the policy and any discussion's between essentially the shift supervisor and the C.Y.C.A.

067 Stuart?

DETECTIVE SENIOR CONSTABLE GRAY

Q68 Yeah, just a couple of questions. In relation to the phone calls that were made to the C.Y.C.A. was that on the day of the 26th?

A Yes.

O69 And was that after the warnings had been issued?

A Yeah, as soon as, as soon as the storm warning, as soon as the button had been pushed, yes.

Q70 O.K. Now was that part of a check list?

- A Yes.
- Q71 O.K. So it's protocol for you to contact the C.Y.C.A. if a, a storm warning is issued?
- A Well, let's put it this way, we, we thought it was prudent to do that.
- Q72 O.K. And are you aware of who made that phone call?
- A It would have been Brett Gage, yes.
- Q73 O.K. Now was there a fax forwarded to the C.Y.C.A. after that phone call, do you know, or before the phone call?
- Well, essentially we push the button and we assume that these faxes are sent because the lines are tested before - - -
- 074 Right.
- A --- before the race commences and, and any warning or forecast as issued by the office would, would go to the relevant authorities, whether they be the C.Y.C, the Young Endeavour.
- Now when you say that it goes to the C.Y.C.A. who would it be normally directed to at the C.Y.C.A. do you think?
- A Well, again I'm not sure.
- Q76 O.K.
- A They do supply us with a fax number.
- Q77 Right.
- A Both for the club and the Young Endeavour have a separate fax number which is sent via the satellite, satellite communications.

Q78 O.K. The same fax would have gone to the Young Endeavour?

A I assume so.

Q79 You assume?

A Yes.

Q80 Was there a phone call made to the Young Endeavour, are you aware?

A I don't, not to my knowledge, no.

Q81 O.K. So far as giving updates of weather to the C.Y.C.A. is it also your responsibility to give those updates to Young Endeavour at the same time or one or the other?

A Well, it, it's, I suppose it's set up so that people can contact us - - -

Q82 Right.

A -- if, if they deem it has to be the case.

083 O.K.

A We, like, I assume that our, well, our products go to AMSA and, or well, they do, AMSA and the Eden Coast Patrol, but they were rung. We felt at the time that it was prudent to do that, to set AMSA on notice and Eden Coast Patrol since Eden is generally, can be a busy port of call for yachts, yachts retiring - - -

Q84 Yeah.

A --- or exercising prudent seamanship and waiting for conditions to moderate before pushing on. Q85 O.K. Now in your weather brief did you in fact, you mentioned previously that there were no questions but did you in fact encourage any questions?

A I, it's always thrown open to questions.

Q86 Right. O.K. Now was the, the points of 40 per cent added to wind speeds and 87 per cent added to wave heights discussed at the briefing?

Not at the briefing, it's, it's in material that has been issued by, it's public relation, public relations material issued by the Bureau that essentially that's the case.

Q87 Right.

A It's in, some are in texts.

So from your experience in the last 7 years that you've presented these weather briefings, has it been your thoughts that it would be natural to assume that these persons know this formula?

A Yes. Because, let's put it this way, I've never been asked.

089 Right.

A I've never been asked at any stage what constitutes a gust - - -

Q90 Right.

A - - by, the Bureau, in Bureau forecasts, observations, warnings, are they average speeds.

Q91 Right.

A Without the questions you just assume the people know.

Q92 Right.

- And the literature that's been made available to them via pamphlets, via courses, to, to me it's pretty standard stuff and in, in conversations with, with yachting acquaintances and friends, they're aware of it.
- Q93 Have any of your weather packages ever pointed it out in written form, even though you didn't mention it orally, that you can recall?
- A Well, suppose what springs to mind is that I will stress that speeds issued in, speeds used in forecasts, warnings and observations are average speeds - -
- Q94 Yeah.
- A - and wind gusts can be stronger.
- Q95 Right.
- In, in a, in a, in an article I put together for the Offshore Yachting magazine before the 1997 Hobart race I mentioned there that wind gusts can be 20 knots more than the average speed.
- Q96 O.K. Do you recall what the attendance might have been at the briefing, approximately how many heads?
- A I, I guessed around about 250.
- Q97 O.K. And that would usually be made up of skippers and navs?
- A Skippers, navigators, some others get in the media, etc. Yes.
- Q98 O.K. Is there an actual update to the yachtsmen on the day of the race, a verbal update from yourself? (Tape Beeping)

No, the Cruising Yacht Club has always been happy with an early, early warning, sorry, early morning, like, around about 5.00am from memory, at 5.00am the first special race weather forecast goes out at 9.00am and then another one at 10.00am.

Q99 O.K.

A And then 13.00 and then it goes into a regular pattern, like, twice, twice a day.

Q100 Right.

A It coincides with the race scheds.

Q101 Right.

The two, two position scheds have existed in the past over many years and the ability to, to include it, I suppose, the safety, the safety sched, the Young Endeavour can actually read out anything that's come to light.

Right. Now would it be the case that if there hadn't had been the storm warning issued it wouldn't be usual practice to, I'll say that again. If the storm warning had have been issued late in the afternoon, I'm talking sort of that evening instead of at 2.14pm or whatever time it was, would there still have been communication between yourself or, or one of your colleagues to the C.Y.C.A?

A I'm sure there would have been, yes.

Q103 O.K. The time on my watch is now 2.56pm. We'll just suspend the interview for a tape change.

INTERVIEW SUSPENDED

INTERVIEW RESUMED

SENIOR CONSTABLE UPSTON

Q104 The time on my watch is now 3.06pm. This interview between Batt and Upston continues.

DETECTIVE SENIOR CONSTABLE GRAY

Q105 Right. If I can just take you back to the question,
Ken, authorities in addition that you or the Bureau
contacted on the 26th of December, 1998, are you able
to enlighten me on that?

A Well, we, we contacted the C.Y.C.A. and the, the AMSA -

Q106 Right.

the onus is, the onus has always been on the C.Y.C. to contact us but we thought that the, the situation was evolving such that we had to make sure that they were aware, the Cruising Yacht Club and AMSA and Eden Coast Patrol. The way the situation was panning out they needed to know because, you know, with those forecast winds we knew that in roughly 18 to 24 hours time that it would be, the situation in Bass Strait would be bad and AMSA should, should be primed ready and Eden because a lot of boats that retire actually go into Eden.

Q107 So AMSA and Eden, is that a protocol or was that ---

A That was - - -

Q107 - - - something that was decided amongst a group of forecasters?

A It was decided amongst the group of forecasters that we do that.

Q108 Right. O.K. Did you have any contact with Mr Roger Baddam at any briefings, weather briefings - - -

A No.

Q108 --- prior to the race?

A I know that Roger stands at the back of pre-race
briefings and - - -

Q109 Right.

A -- has been there for a number of years, but we do not converse.

Q110 Right. David mentioned to you before about whether you'd seen the report from, from Mr Baddam in relation to the storm. Have you seen the report, his actual weather notes, which I'll just show you now - - -

A I've seen them, I - - -

Q110 - - - which he issued to boats that paid for that particular package?

A Yes, I have looked at it.

Q111 And do you have any opinion on that, professional opinion, that is, on predictions and forecasts and that sort of thing?

A Um - - -

Q112 Don't take that from the, from the Bureau, I'm talking about you as a - - -

A Personally?

Q112 --- personally as a forecaster?

A Um - - -

Q113 Was he right? Was he wrong? That's what I'm saying to you.

A Well - - -

Q114 Was he close? Was he off? Was he - - -

Well, I, I, I, you know, I looked at the first couple of lines and, and Roger says that this is going to be a typical Sydney to Hobart Yacht Race - - -

Q115 Right.

A --- and I think that sums it up, no, you know, at no stage does Roger in there portray the wind speeds that were encountered in Bass Strait.

Q116 O.K. That's fine. Now I don't know whether you've seen an article, May, 1999, Vanity Fair, in which there's a, have you seen that article at all?

A Yes.

Q117 O.K. There's a quote here which says that, Those poor people are heading into a massacre, said forecaster Ken Batt, after a moment he began to cry. I don't want to get you emotionally upset or anything, are you able to sort of explain the circumstances surrounding that?

It was on receipt of a high resolution computer model output that the 45, 55 knots sustained winds just jerked an emotional streak in me 'cause it took me back to 1993 and I knew how I felt then and I knew how yachting colleagues, I had an inkling as to how they would be feeling - - -

Q118 Right.

A --- later on, 18 to 24 hours time. So, yeah, it, it,

I was quite teary and had to go out bent at the back.

O119 Mmm.

A And it's only taken me, it's only been within the last couple of months that I've been able to talk quite freely about it - - -

0120 Yeah.

A --- without being emotional, I suppose I am a bit now.

Q121 Yeah. That's fine, that's no problems, I won't, I won't touch on it any further. In relation to what you said in that high resolution model, the output on that model what time was it then or what day was it - - -

A That was on Boxing Day.

Q121 - - - when this occurred?

A On Boxing Day.

Q122 On the 26th?

A On the Boxing Day, yeah.

Q123 O.K.

A Around, it was around about 1.00pm that we obtained the output, that standard, the standard time when we - -

0124 Yeah.

A - - - when we get that run.

0125 O.K.

A It's a mesalapse.

Q126 Now further in this article too on page 161 there's a mention here of a Peter Dundar, is he a - - -

Α

0126 - - - employee of the - - -

A Peter was, is a senior, senior meteorologist, he's a shift supervisor.

Q127 Right.

A He was the shift supervisor between 7.00am and 7.00pm on the Boxing Day.

Q128 O.K. Are you aware if he contacted the C.Y.C.A. at any stage?

A On the Boxing Day when I was in the office we, it was Brett Gage that essentially made the call.

Q129 Right.

A And, and I was around the office for a few hours later because then I had to go off and do the Pittwater to Coffs Harbour Yacht Race briefing.

Q130 Right.

A So I, I'm not aware.

Q131 O.K.

SENIOR CONSTABLE UPSTON

Q132 Ken, just going back on the, the percentages, 40 per cent winds and 87 per cent wave heights experienced, you know, higher than what has been forecast. What are your thoughts on the fact that if I told you that the majority of sailors that we've spoken to over the last 10 months have never heard of those figures?

Well, it's a worry to me. But it, the, I can say that the yachtsmen that I've spoken to what they do is essentially add anything up to 20 knots to, to the forecast winds that they, that they get to hear, you

know, whether coastal radio or written forecast. So they, they, they're well aware that gusts can be at least 20 knots more than the wind speed as being forecast because the wind speed that's forecast is the, is the 10 minute average wind speed.

0133 That's - - -

Α

O134 That's what we've been informed as well - - -

A Yes.

Q134 - - - about the, an average speed of, of the wind blowing for more - - -

A Mmm.

Q134 -- than 10 minutes or more.

A Yes.

0135 Now - - -

And the wave heights, it's, it's always been the significant wave height that's been forecast and generally observed and, and we know that maximum wave heights can be up to double, at least 86 per cent more than, than the forecast wave height.

Well, what are your thoughts on the one in 1,000 wave?

Well, we say that one, the one in 1,000 wave can be roughly 1.06 times the significant wave height, one in every 2,000 waves can be at least double the significant wave height and that's the rule of thumb that is generally, well, I know what, that's what I say in courses.

- Q137 What are your thoughts then on the fact that the majority of people that we've spoken to have never heard of those terms?
- Well, personally I think it's, it's, it, it's sad in a way in that it's fairly well documented and in marine weather courses it's, it's standard stuff. And the Australian Yachting Federation has now for many years have had a series of courses in place, ranging from essentially crew right up to ocean, yacht master ocean courses. And part and parcel of the course content is people being aware of the Bureau forecasts, what's, what, what information is being forecast, so you go into wind gusts, giving a wave height, etc. etc.
- Q138 Right. Can you recall what the lowest pressure reading was of that, of the cell which developed in the, in Bass Strait?
- Only from what's in the, the Bureau's, Bureau's report on that event.
- Q139 O.K. What are your thoughts on, on, on that, that, that pressure that was received? What would you, what would you normally - -
- A Well - -
- 0139 - assume from that?
- An intense low pressure system, one could say a very intense extratropical low pressure system.
- Q140 When you, when you say extratropical, what, what -
- A Meaning - -

Q140 - - - what do you mean by that?

A Meaning outside of the tropics or one could say mid latitude, intense, very intense mid, mid latitude low pressure system.

What are your thoughts on the words, cyclonic, mentioned if, in relation to that, that pressure cell?

Well, I can't, I can't recall the Bureau ever using the term cyclonic. If the media's using the, the term cyclonic or some other people are I suppose the winds conjure up, the wind speeds associated with that event conjure up similar wind speeds as to those associated with tropical cyclones.

Q142 Well, when you say that they're ex-cyclonic - - -

A Extra.

0142 - - extracyclonic, meaning outside - - -

A Extratropical, meaning outside of the tropics.

Q143 O.K.

A Probably a wrong term, it's, it's a right term but it'd probably be more precise, a mid latitude low probably describes it best.

Q144 Would those pressures though be experienced in tropical revolving storms?

A Oh, yes.

Q145 So - - -

Α

Q145 --- one could assume though that that would be very similar then to a cyclone?

- Well, the winds that are wound up by a cyclone are of similar pressure, yeah, they, you know, they're on a par, lows that move through the southern ocean on a regular basis have pressures on a par if not lower, lower than that central pressure, much lower at times.
- Q146 Do you feel that perhaps warning should have been, that warning could be given in regards to cyclonic conditions instead of, instead of storm warnings?
- A No, we, we forecast using international terminology and that's what we're taught to use, you know, we classify it as, as, as a very intense low.
- Q147 And for that region that would be the maximum that you would, you would forecast for that, is a, is a storm warning even though the conditions experienced in the tropics would be cyclonic?
- A Well, the cyclone, a tropical cyclone warning is, is separate to this.

0148 O.K.

You know, we would, we have or the Bureau has use of hurricane force winds but they're only, that hurricane, hurricane wind warning's only issued in relation to severe tropical cyclones. So outside of the tropics a storm warning is the ultimate and it's 48 knots plus average winds, minute average wind speeds.

DETECTIVE SENIOR CONSTABLE GRAY

Q149 Ken, would you like to make a comment on this? I'll just read it to you, 3 hours later, this is from Vanity Fair, 3 hours later as the boats spent their final hour

in Sydney Harbour, Dundar received his next set of satellite photos and lapse models. What he saw took his breath away. In the year or so since the Bureau had begun working with the new detailed computer models, he had never encountered anything like that picture that now appeared on his screen. It showed an unusually strong low pressure system forming not safely east of Tasmania but at the eastern mouth of Bass Strait directly in the fleet's path. The system looked like a boxer's left hook, a forearm of white clouds jutting from the vast empty spaces of the southern ocean north-east into the strait, its northern end a curled fist of thunderheads. The model predicted winds of 30 to 40 knots in the area by nightfall rising to 55 knots by Sunday afternoon with gusts as high as 70 knots, more than 80 miles an hour. Dundar's phone rang, it was Melbourne, Have you seen this, his counterpart there asked, the alarm clear in his voice, It certainly looks like a storm warning, yes.

A Poetry in motion.

Q150 O.K.

A But I must say that the, the phone call, you know, clutching at, but the phone call, Peter actually rang the Victorian office and discussion resulted and bingo, a storm warning was it.

Q151 Right.

A Because the Victorians are responsible for eastern Bass Strait as, as a, as a matter of course. Q152 O.K. It says also here, At 9.04 Dundar issued what the Bureau called a priority gale warning. Is that correct?

A (NO AUDIBLE REPLY)

Q153 Right. It also says something, I mean this, this article's been written, you know, with you, you know, being mentioned in it - - -

A Right.

Q153 — — I just want to check that this is right so that, you know, no one's having a go at you. Down at the yacht club's modern brick building on the harbour, where the Bureau had set up a booth to hand out packets of meteorological charts and predictions, a forecaster named Ken Batt had given the fleet's weather briefing on Christmas Eve wearing a jaunty Santa's cap quickly photocopied Dundar's alert and jammed it into his packets. Was that, do you recall that?

A What had happened was that three of us had volunteered to go down to the Cruising Yacht Club on Boxing Day.

Q154 Yeah.

And that means an early start. So what had happened we'd, I'd come in a little later than the other two and they'd started to put together the race packages. We had problems with the photocopying machine but nevertheless we sent them away with at least 40 packages - - -

Q155 Yeah.

A --- so that they could start handling the number of inquiries and what had happened of course, whilst I was still here the gale warning was issued. So what happened I, I'd rung the guys on the mobile to say, Right, we're going with a gale warning, hold everything, don't hand out anything yet. And I rang the Cruising Yacht Club, the sailing office, to say that a gale warning was, was out, was, was being issued, just to stand by and also asked them whether they could run off, run off the new weather packages.

Q156 Right.

A So nothing was handed out until the gale warning had arrived there and had been copied along with the rest of the information that was handed out.

Q157 So you were just doing your job and ensuring that everybody was fully conversant as to what was - - -

A Indeed

0157 - - - happening?

A Yes.

Q158 O.K. Anything further you'd like to say in relation to the interview today or any views or - - -

A I - - -

Q158 - - - ideas you have?

SENIOR CONSTABLE UPSTON

Q159 Is there anything you'd like to add that may assist us with our inquiries?

A No. I, I'd just like to add that, that the forecasts and warnings that were issued over the period were

essentially issued based on best practice and best of information that was available to the forecasters at the time.

DETECTIVE SENIOR CONSTABLE GRAY

- Q160 Yeah. There is one thing further, if I just ask this.

 Have there been any changes for the weather briefing
 for this year's race, the '99 race?
- We, we have pre and post season race meetings with the Cruising Yacht Club and we're just about to have our, our pre-season meeting with, with Phil Thomson and Hugo Von Kretsumar and, and others from the club. Pat, myself and Bruce Buckley who's supervising or manager of forecasting services here in New South Wales, we'll, we'll attend that but we are suggesting that, that we change the forecast a little and we're talking about there'd be the pre-race briefing, and this hasn't been, this hasn't been ratified yet - -

0161 O.K.

A --- but on Boxing Day having an hour available to actually talk to all the crews about the weather situation so the latest would be presented. Like, I think in the past it's been presented to the media but essentially now it's going to be presented, well, hopefully and if, if it's all ratified it's going to be presented to, to the, to the yachtpersons ---

Q162 Right.

A - - skippers, navigators and of course, you know, with the briefing, pre-race briefing now 30 per cent or four members of the crew have to be present at the briefing. So the pre-race briefing will be aimed at providing all the general information, you know, what, what could go, what sort of weather conditions could go wrong. This is based on averages, you know - - -

Q163 Yeah.

A --- talk about east coast lows, thunder storms, etc. etc. offer an outlook but essentially fine tune everything and have the forecast, have the forecast presented on, on the Boxing Day along with the forecast packages.

Q164 Yeah. So you're happy about that, the new procedure that may come into place?

A More than.

Q165 All right. O.K.

SENIOR CONSTABLE UPSTON

Q166 We understand that the Royal Tasmania Yacht Club now hold weather courses, seminars and the like at the Tasmania Yacht Club, Royal Tasmania Yacht Club. Have you been approached by the C.Y.C. for assistance in holding similar courses?

Well, the Cruising Yacht Club approached me a while back now and, and on behalf of the Bureau, yes, I, I've been presenting the weather aspect. So I already, we've conducted two of those seminars here in Sydney. I've been asked to present one at the Royal Prince Alfred Yacht Club at the end of this month. And as far as the Cruising Yacht Club are concerned, there are

another two, two to do there. So, given 30 minutes to present aspects of weather.

- Q167 What sort of attendances do you have at those briefings or those - -
- A The first one there was 180 attendees and the second around about 170.
- Q168 So there's a keen interest in, in people wanting to know more about weather?
- Well, again, it's a stipulation that 30 per cent of crew members attend so those seminars are compulsory and each yacht has to be on a check list that has to be ticked off as to the 30 per cent of the crew having attended those, a, a seminar. So that's part and parcel of a boat doing a Hobart race now which I think's excellent.
- Q169 So it's not the case that, that four members only have to attend the pre-race briefing, but they must in fact attend weather seminars?
- Say, a safety seminar, we encourage people to then or I've been encouraging people for a long time now to come along and do a marine weather course as part and parcel of an Australian Yachting Federation accredited course which encompasses navigation, seamanship, survival, etc. etc. and I think it's great.
- Q170 O.K. Are you finding that the 30 minutes is sufficient time for the weather component?
- A It's sufficient time to get through to, or hopefully get through to, to the attendees the more important

aspects, the wind warning system, gusts, squalls, etc. etc. and you know, the basic oceanographic bits and pieces such as significant wave height, maximum wave height and talk about weather problems that could go wrong. So we're not only looking at the Sydney-Hobart Race, but also other ocean races whether they be north-south, east or west, it's hard to go west from Sydney but at least east from Sydney. And we're finding now that other yacht clubs in the other states are starting to run similar - - -

- Of Meteorology's commercial ventures, but just rehashing on something that we did touch on earlier that the C.Y.C. have a contractual agreement or are you aware of the C.Y.C. having a contractual agreement between the Weather Bureau and the C.Y.C. where money's exchanged for information supplied?
- A Essentially it's, it's been that way now for as far as I can remember, it's a cost, cost recovery service.
- Q172 And, and do you recall what that figure is, that, what it has been for last year perhaps?
- A Somewhere between, I used to know the figure exactly, but somewhere between \$900.00 and \$1,000.00.
- And is that same service supplied or are you aware of that same service being supplied to other yacht clubs for other yacht races that, that commence either prior to or after the, the Sydney to Hobart on the same arrangement?

- A Yeah. The, the Bureau's been essentially contracted by other clubs to conduct a pre-race briefing and, and at times special race forecasts.
- Q174 O.K. All right. If there's nothing further you'd like to add, the time on my watch is now 3.30pm. This interview is now concluded.

INTERVIEW CONCLUDED