LEGEND

- V. 1 = Detective Constable Rod Bush
- V. 2 = Senior Constable Rod Stacey
- V. 3 = Zane John Boucher
- v. 1
- V. 2 It's recording, is it? This is a interview with Zane
 John Boucher, the time is 8.58am, Thursday, 21st of
 January, 1999, at the City Police Station, Hobart.
 Zane, before I go any further Lejust want to tell you
 that this interview's being electronically recorded.
 Do you understand that?
- V. 3 Yes.
- V. 2 O.K. Could you state your full name, please?
- V. 3 Zane John Boucher.
- V. 2 And your date of birth?
- V. 3 20th of December, 1959.
- V. 2 And your address?
- V. 3 200 Strickland Avenue, South Hobart, Tasmania.
- V. 2 O.K. And what is your position, title, what, what are you employed at?
- V. 3 I'm a life raft technician, life raft surveyor. I'm employed at Peter Johnstone Ship Chandlers, in Morrison Street, Hobart.
- V. 2 O.K. And how many years have you been doing that work with life rafts?
- V. 3 I've been servicing and selling life rafts for 18 years.

- V. 2 O.K. And just briefly, explain your background as far as your, your working history?
- V. 3 I've been employed at Peter Johnstone Ship Chandlers for 23 years, started off in the chandlery itself, for the past 18 I have been solely involved with the life rafts, inflatable equipment, aviation life rafts and life jackets, sales and service thereof.
- V. 2 O.K. And what, what brands of life rafts do you normally service?
- V. 3 R.F.D. Roaring Forties, Viking from Denmark, Dunlop Beauford, Avon, we're also approved to do. We also service rafts we're not approved for, e.g. Zodiac for private owners and if we come across odd brands, provided they're not under any current survey that we can't touch, we'll also service those.
- V. 2 O.K. And you're an agent for, for a number of these different companies?
- V. 3 Yes. We are agents for R.F.D. Roaring Forties, Avon, Dunlop Beauford and Viking.
- V. 2 O.K. So who do you mostly service your life rafts for?
- V. 3 The majority of our life rafts at the moment will be for R.F.D. R.F.D. now own Dunlop Beauford in the U.K. so that well and truly covers most of those.
- V. 2 O.K. And what type of boating people do you service them for?
- V. 3 Um - -
- V. 2 Mainly yachtsmen or - -

- V. 3 No, the majority of the market is the commercial market, commercial fishing, State Government, commercial shipping and yachtsmen would be on the smaller end of the scale now.
- V. 2 O.K. So what sort of training and qualifications do you have to, to service the life rafts?
- V. 3 Initial training was a week spent in the factory at Melbourne when R.F.D. originally produced the life rafts in Australia. After that it's been refresher courses every 3 years for all the major brands, R.F.D. and Viking in particular. Dunlop Beauford, because of its checkered history in Australia, with changes of agents and that we have not had regular 3 yearly updates, but we have had updates over the last 10 years.
- V. 2 O.K. How many people would you say are in Australia with similar qualifications - -
- V. 3 With experience added on, probably only a dozen.
- V. 2 O.K. All right. Zane, how often are boat users required to have their life rafts checked?
- V. 3 Racing yachtsmen or anyone under State survey or a, a survey requirement, every 12 months. For private owners there are at the moment no requirements whatsoever.
- V. 2 O.K. Do you think there should be requirements - -
- V. 3 Yes, yes.
- V. 2 - for anyone with life rafts?

- V. 3 Certainly those under survey, but use their vessels a lot or racing yachtsmen who'd spend a fair amount of time at sea, definitely every 12 months based on my experience. Cruising yachtsmen who occasionally go to sea you could probably get away with every 2 years but certainly not any more than that.
- V. 2 O.K.
- V. 3 Our experience has found that if you leave a raft more than 2 years between services it can degrade the life of a raft quite a fair bit, and if you do have problems they are certain exacerbated if a raft is left too long.
- V. 2 O.K. What sort of problems would, would happen with a raft if it is left too long?
- Depending on the material. There's quite a few v. 3 different material types used in the manufacture of life rafts. They've all got their own idiosyncrasies Natural rubber for instance, if it's and problems. left in a container for any length of time and the container, if the container's damaged and the raft gets wet, you get a release, cylinders can rust, you can get the acids from the rust coming into that, mixed in with salt water and you get what we call copperisation, that's copper acids, I can't remember the correct term, but it actually breaks down the, the rubber coating of the fabric. Other brands, other types of materials have different other problems depending on their age and characteristics. And also depending where they are

in the country too. We find down here in Tasmania with a more temperate climate and probably more a, a smaller temperature range we find we don't have as many problems as say northern Queensland, where they have a huge temperature range and much greater humidity and constant heat problems.

- V. 2 O.K. All right. So who, who is required to, to service the life rafts? You have to be a, a qualified agent to - - -
- V. 3 Anyone that's going under survey yes, you have to be qualified and you have to have a certificate from the manufacturer, or be approved by that State's authority. As far as yachtsmen are concerned the A-Y-F-D state that they should be approved by the manufacturer or the manufacturer's agent, State Survey definitely. If you're under a National survey, A.M.S.A. you definitely have to be approved by the manufacturer and your premises also has to be approved before you can service that raft.
- V. 2 O.K.
- V. 3 Private owners once again can do as they please. Private owners can even service their own rafts if they really want to.
- V. 2 Mmm.
- V. 3 It's something I do not recommend, having seen the results of a few that have tried it but it's certainly not uncommon for it to happen.

- V. 2 Right. O.K. So say you do a, a service of a life raft, what exactly do you check for? What are some of the, well go through the steps that you would take?
- V. 3 Open the raft up, take it out of its container, vacuum bag if there's one there. The raft it'll be, all the bits and pieces, remove the cylinder, the emergency pack will be removed, the raft will be inflated on, on compressed air, not on its own bottle. The raft will then be inspected visually for any signs of damage or moisture. It will then be pressure tested, the valves, the pressure release valves will then be tested to ensure they, A, open up at the right pressure and B, will also close within the limits specified by the manufacturer. If a raft has an inflatable floor that will be tested as well - -
- V. 2 Right.
- V. 3 - again according to manufacturer specifications. Whilst this is happening the contents to the emergency pack will be opened up, inspected for any damage, any time expired items e.g. flares or water or rations, will be replaced as required. The raft will then be re-deflated, repacked, and of course the container will have been, depending on the sealing mechanism used, the container would have been cleaned and redone.
- V. 2 O.K. What's the cost of a, of a service? Obviously it varies between life rafts?
- V. 3 Yeah. Every size is different for price wise, and it also depends on the type of raft. As far as the

yachting and say the local fishing industry is concerned, let's take a, say a six person raft, well your service fee at the moment would be 205, and an eight person raft is 225. After that it depends upon the contents, as to what's replaced 'cause they have different life, different items. For instance your flares are every 3 years, water and rations are every 5, first aid kit, part B of that, which is your expired items, are every 2 years, so it does vary. But on a six person raft the average cost over a period of time will be round about 300 odd dollars.

- V. 2 O.K.
- V. 3 Or fractionally more.
- V. 2 O.K. All right. As I explained to you earlier, prior to the start of this interview, myself and Constable Rod Bush, who is also present, we are making, assisting with inquiries as far as the coronial inquiry into the Sydney Hobart Yacht Race of 1998, in relation to the deaths that occurred during that race, during that time. I'd like to refer to some, some racing rules of sailing from a, a book that you, you described as the blue book, the actual title of it is The Australian Yachting Federation, or A.Y.F. Racing Rules of Sailing for 1997 to 2000. O.K. I've got a photocopy of, of some sections out of that, that book that you did for me yesterday.
- V. 3 Mmm.

- V. 2 O.K. Would you say that this is a book that would be known amongst most yachtsmen, racing yacht, yachtsmen?
- V. 3 Oh, absolutely, it's, as we call it the blue book, well it's the, it's the Bible as far as racing yachtsmen are concerned, as far as the rules and regulations go for their particular sport.
- V. 2 O.K. What I'd like to do is go through some of the sections out of that. You've raised some concerns of different sections in a draft letter that I have that you've addressed to the C.Y.C.A. to Mr Peter Bush. What I'd like to do is just go through some of those sections and perhaps discuss some of the points that you've raised.
- V. 3 Certainly.
- V. 2 O.K. Firstly, I'll turn to rule and this is from the blue book, rule 419A, little 3, which talks about stowage of life rafts and I'll just read that out, number 3 is, Stowage shall be either packed in a valise, is it?
- V. 3 Valises.
- V. 2 Valises, each not exceeding 40 kilograms, securely stowed below deck, adjacent to the companion way. O.K. Now is there anything you'd like to talk about as far as that?
- V. 3 Yeah. I totally disagree with stowage below decks on a racing yacht. It really is in my opinion, only there as a performance advantage as far as yachtsmen are concerned. They give you a limit of having, being able

to get the raft up to the life lines in 15 seconds. Well that's fine in a marina with a fit work crewmen who knows what he's doing. Take that same guy and put him in a race like the Sydney to Hobart where he's probably been knocked around for a couple of days, he's had very little sleep, if they've got to use a life raft because chances are the sea conditions are going to be pretty bad, now get that same guy there, and if he's been sea sick it's even worse, get him then to go down below and grab hold of a valise, close, close to 40 kilos, struggle up the companion way with that, and then get it out on deck. It'll take a damn sight more than 15 seconds. And a yacht can sink in some conditions if it's a container or if it has major structural problems it can sink in less than seconds, that's been a recorded fact. So to my opinion stowage below decks is downright dangerous. It should not be allowed. I know plenty of owners complain that there's no room on their working deck to put a life raft, but if it's in black and white and says it has to be stowed on deck and properly secured, they'll find room for it. The other thing that happens with below deck stowage and valises is that owners will sometimes carry up to three life rafts, three, usually a four person, maybe a six person lightweight these days, they'll sometimes carry up to three below deck, which means to get the whole crew into life rafts, they've got three life rafts to bring up up on deck, I think

- Business Post had two six persons carry below deck. To my way of thinking it's just not a good idea, it's bad, it's very dangerous. I don't like it at all.
- V. 2 O.K. So how would you get around this problem, just -
- V. 3 Enforce the rules we currently have for, for State survey vessels. It's stowed on deck in a proper lashing, securely fitted.
- v. 2 o.k.
- V. 3 It could also be an advantage to the yachtsmen in some respects 'cause instead of having to carry three life rafts they could carry just one large one, perhaps, or just two smaller ones, which could be properly stowed. I'm not saying it's the ideal solution, for some yachtsmen it will be a problem but it's certainly better to have that problem than to have them trying to get rafts on deck.
- V. 2 O.K. And is, would you say that the main reason for, for yacht races stowing them below deck is simply for performance, would you - - -
- V. 3 It's convenience and performance.
- V. 2 O.K.
- V. 3 Yeah. Yeah. And I've been told plenty of times by yachtsmen, who will admit to you privately, but never officially that, you know, a life raft gets stowed somewhere out below, or we chuck them around the windward side. Each time we'd go about, give us a bit of extra weight on the side. They all admit to it

privately but that's about, well I won't say all, but a fair majority admit to it privately.

- V. 2 O.K.
- V. 3 And I've been told on plenty of occasions that the life rafts end up in positions where jeez, if they had to get them out they'd be in a struggle.
- V. 2 What percentage of yachts, I know it's probably hard to put a figure on it, but what percentage would you say of the yachts say in the 1998 Sydney Hobart Yacht Race, what percentage of those yachts would have had them, had a life raft stowed below - - -
- V. 3 I'm - -
- V. 2 -- below deck?
- V. 3 --- not to sure on that, but for local Tasmania ones

 I would estimate maybe only three or four. I've tried

 to educate my customers here in Hobart not to use

 valises but I have got maybe two customers that have

 got the valise pack rafts, and there may be a couple

 more up in Launceston, but I'm not positive. As to the

 overall percentage of the fleet, I really don't know as

 to how many would carry valises. I would imagine it

 would be a reasonable percentage ---
- V. 2 O.K.
- V. 3 --- just by walking around the docks. You notice that not everyone's got a life raft on deck, but I really couldn't give you a figure. You'd need to get the actual records probably from the A.Y.S.
- V. 2 O.K. No problem.

- V. 1 Could I just interrupt there?
- v. 2 Yeah.
- V. 1 Valises?
- v. 3 ssoftpacks, life rafts, well for the survey purposes are stowed in a hard container, either plastic or fibreglass lashed on deck.
- V. 1 All right.
- V. 3 A valise is like a kick bag.
- V. 1 Right.
- V. 3 It's a soft pack, and we pack the raft into that.

 Usually they're a rectangular shape, flat rectangular shape, sometimes a round sausage bag type shape. And under the current regs it weighs 40 kilos or less. You can stow it down below.
- V. 1 Right.
- V. 3 In a proper stowage area.
- V. 1 So it's like a, just a temporary kind of, of stowage kind of capsule, so to speak.
- V. 3 No, we leave the raft in it all year round - -
- V. 1 Yeah.
- V. 3 - until it's services again, but it's, instead of having a hard fully water tight container you've got a - -
- V. 1 Right.
- V. 3 - usually a P.V.C. flat back, like a little suitcase if you like.
- V. 1 O.K.
- V. 3 It's soft, soft P.V.C.

- V. 2 O.K. There's another, is there anything else you wanted to say about stowage at all or recovery times?
- V. 3 I'll just quickly refer back to my own letter, just to think. No, I think that's about it. It covers pretty much everything.
- O.K. O.K. Another point I want to discuss is, is rule v. 2 number 419D, which talks about the, the life raft canopy, and it says in the rules, that life rafts shall have a canopy. It goes further in appendix 2, number 2, under equipment, just bear with me for a moment. I beg your pardon, appendix 2 number 1D. Just trying to find it, top, at the top of page 180, 184, it says the construction of a life raft shall include a permanently attached canopy with provision for supporting it to cover the occupants. Cover shall be capable of protecting, protecting the occupants against injury from exposure and means shall be provided for collecting rain. The cover of the life raft shall be of a highly visible colour. O.K. You've brought up some points in relation to canopies. Is there anything you wanted to say about those?
- V. 3 There's several, the main one being that under the current rules it doesn't have to have an automatic inflation system for the canopy, in other words you can have a canopy fixed to the tubes and you can then take your paddles or a separate solid strut support and support the canopy as long as it's not resting on the heads of the occupants in the raft. Now in my opinion

in, in breaking seas or heavy seas that can downright dangerous. First of all in a breaking scene a life raft canopy if you've got solid supports inside the raft they could become fairly lethal projectiles if They could also puncture the raft they're dislodged. or puncture the canopy, and of course they don't get a lot of protection as far as impact goes. inflatable tube up there there's a bit of give and that, so if, if you got hit by a wave whilst the canopy will collapse around you the actual inflatable section's got a bit of give in it. I'd sooner be hit in the head with an it's not going to hurt that much. But having just ordinary physical supports up there in the way of paddles or, or struts in my opinion is dangerous. Once again I think this goes back to the early days when the A.Y.F. introduced life raft rules that they were trying, because of what was available in the early days as far as life rafts were going and costing at that stage, they were trying to make it as, as reasonable as possible to buy a life raft and go yacht racing. I think now with the number of life rafts and choices on the market that should be wiped out and all canopies should be made automatic, the same as applies to State survey regulations. The other thing with canopies is that it states it should be attached to the buoyancy tube but it doesn't state it has to be a water tight attachment and there are some out there that attach in a fairly flimsy way, and some of them certainly are not water tight, they're only attached in at least once case, on one size only I might add, with a bit of shot cord and some tie points so that the canopy's pulled in tight between the two tubes, but that's not a water tight attachment.

- v. 2 o.K.
- V. 3 Also canopy materials, some of them are a little bit on the flimsy side and their fastenings are not water tight, so that once again under severe stress and the conditions that were encountered canopies could be damaged.
- V. 2 Right. O.K. So what sort of costs would be involved in a manufacturer to include an inflatable tube?
- V. 3 It does add a bit to the cost, certainly for that, I couldn't give you exact figures off the top of my head. It probably adds about three or \$400.00 to the cost of a raft, that's a rough guesstimate. I couldn't give you the exact figures off the top - -
- V. 2 O.K.
- V. 3 -- of my head
- V. 2 O.K. Are the later rafts that have been brought, coming out with these inflatable tubes, most of them?
- V. 3 The majority by far, yes. The two that were commonly available, I believe, and they're no longer produced or are no longer sold in Australia. They were sold here because they were obviously cheap. But there are quite a lot of those still around and there are certainly a lot of the old Beauford ones, which had a manual canopy

- attachment, which were manufactured in the early 80's, there's quite a lot of those still around which are still in use today.
- V. 2 O.K. All right. Is there anything else you wanted to talk about as far as the canopies, itself?
- V. 3 No, I think I've just about covered that. Apart from the canopy entrance closure, sorry. Some of them are difficult to close and aren't really water tight when they're closed, that's something that really needs to be looked at.
- V. 2 Right. What needs, what in your opinion, needs to be done to make them more water tight?
- V. 3 Well there's a simple rule in the S.O.L.A.S.

 Regulations that canopies have to be water tight and they have to withstand a certain amount of force, which I believe is basically a fire hose directed at the entrance for about 10 minutes and it shouldn't let any water in.
- V. 2 O.K.
- V. 3 You can cover that. It probably doesn't have to be quite that strict, 'cause we're talking about S.O.L.A.S. Regulations, which are for ocean-going commercial vessels, but certainly it needs to be tightened up as regards to how they're closed, effectively closed.
- V. 2 So when you say the, the ones that are closed is it by, by a zipper or by velcro?

- V. 3 Some are zips, some are velcro some are tie Yeah. There's quite a, quite a few different points. configurations around. Some have very effective canopies which clip over the top of the, top buoyancy tube and are pulled down on velcro closures, which are, are based on some of the S.O.L.A.S. Regulations, they're quite effective. Some of the ones using zippers are a bit suspect, I think, and, and once again going back to material construction, that we have had them during servicing actually rip on the stitching lines, when you close the zipper up. So if I can rip it when I'm just closing the zipper during servicing I wonder what would happen on a decent breaking wave.
- V. 2 Mmm. Just one thing. You've mentioned quite a few times about the S.O.L.A.S. Regulations.
- V. 3 Mmm.
- V. 2 Just basically explain what - -
- V. 3 S.O.L.A.S. - -
- V. 2 - what are the S.O.L.A.S. - -
- V. 3 Yeah.
- V. 2 - what do you mean?
- V. 3 S.O.L.A.S. stands for Safety of Life at Sea. It's a set of regulations formulated by the International Maritime Organisation for commercial shipping, international shipping. It's reviewed about every 3 or 4 years and they set the regulations and the signatory countries to comply to. Not every country in, in the world is a signatory to it, like most treaties, but it

certainly sets down a standard which is very, very good and gives you a very robust, solid life raft. The disadvantage of course as far as yachtsmen are concerned is that they are very expensive.

- V. 2 O.K.
- V. 3 They also have to comply to a set of tests and standards which are certainly much more rigorous than anything that would be applied for, for yacht racing or for cruising.
- V. 2 O.K. Is there anything else you want to talk about? All right. We'll move on to the equipment that the rules it lists under number 2, on the top of page 185, it talks about equipment that each raft should have. The list goes down, as you can see there, I'm just going to hand that to you - -
- V. 3 Yeah.
- V. 2 --- to look down. Is there anything there that you think needs adding to or changing or is insufficient?
- V. 3 In general the equipment they put on an A.Y.F. category 1 life raft is quite good. The only things that need looking at from, if you going to cover separate, might be with the sea anchor. Requirements there are very very loose. The other thing is N which is one-tenth of emergency rations per person. It doesn't specify what constitutes a ration and what requirement, will be per person requirements. That can be interpreted very loosely. The State Survey Regulations or S.O.L.A.S. Regulations actually specify what the rations sort of

constitute in the way of kilojoules and how it should be packed whereas this does not. I could take that there and say, O.K. I'll open up a packet of rations, I'll divide it into whatever number people are, and put them in separate packets and say that's one ration per person. It doesn't specify anything so it could mean anything. Emergency rations could also be a bar of chocolate. Well you wouldn't do that but - - -

- V. 2 Yeah.
- V. 3 --- there is no specifications for it.
- V. 2 O.K. All right. So you would say that we need to specify, or the authorities need to specify exactly what constitutes a ration?
- V. 3 Yeah. The authority should specify exactly what it is the same as they do for State and International S.O.L.A.S. life rafts.
- V. 2 O.K. You mentioned sea anchors as far as equipment.

 Do you have any thing, anything to say about sea anchors as far as the current situation?
- V. 3 The current sea anchors we're using on most coastal and A.Y.F. life rafts are very light. Like the, the ... or lines on them are probably only about a 4 mil cord. Quite often we hear, and especially during this Sydney to Hobart I had several sailors, or I read in the media that they'd lost their sea anchors or The majority of sea anchors on the yachting life rafts have only got very small light attachment points. They're not really strong enough for conditions that they did

encounter at the time, and this is an area I think that needs to be tightened up quite a lot. The best regulation currently for sea anchors once again is the S.O.L.A.S. Regulation. The majority of life rafts on the market at the moment could be quite easily modified unless there was additional testing required to check the strength of the fabrics, whether the larger attachment point could be affixed to the actual raft, and certainly the sea anchor itself is much more efficient that the current thing that we, we are using, of which there are about three different types. Some are better than others, but none of them would be as good as the actual S.O.L.A.S. sea anchor which has undergone a large degree of testing in the U.K.

- V. 2 O.K. We've also talked about the water ballast pockets.
- V. 3 Yeah. Once again water ballast pockets are a bit of a problem. Once again it varies quite a lot across the range. Some life rafts, current new ones have very good ballasting systems. We have got weighted ballast pockets for about a 50 litre capacity, which are very much the same as the S.O.L.A.S. standard, and there are quite a few on the raft around the perimeter which help ballast the raft and help stabilise it in the sea. A lot of the older rafts in the early 80's probably only had very small ballast pockets, and they only had two or three on the raft, so their effectiveness was limited. They were also slower to fuel because they

had no weights in it to sort of drag the pocket down so it couldn't be trapped underneath the floor of a raft. There are also some rafts on the markets at the moment which use very flimsy materials in the construction of the ballast pockets. Some are weighted, some are not. At least one brand's only got a very thin unreinforced P.V.C. or a very thin weld to the bottom of the floor, which might be O.K. when it's brand new but I question it's effectiveness and strength after a few years. Others around have very light attachments to the floor, so once again I think you could very easily damage them in heavy seas. They'd probably be O.K. in most conditions but if you get to the heavy seas when you really need your ballast pockets they could come off, or could be damaged.

- V. 2 O.K. So how much of a problem would it be to, for the life rafts that don't have sufficient ballast pockets, to attach any additional - -
- V. 3 It could be easily modified, in fact some years ago we modified quite a few S.O.L.A.S. life rafts to come up to a, to a new standard. We put new ballast pockets on. It's no great drama to put new ballast pockets on. The manufacturer supplies them. Any service station can fit new ballast pockets.
- V. 2 O.K. All right. Is there anything else you wanted to talk about at far as that? You - - -
- V. 3 No, as far as ballast pockets go I've been - -
- V. 2 O.K.

- V. 3 ---....
- V. 2 Nothing at all?
- V. 1 No.
- V. 2 Right. There's another point which you, you mentioned. You were talking about E.P.I.R.B. mandatory fitting of E.P.I.R.B. to every life raft. Would you like to just discuss that?
- V. 3 It's not required at the moment for yacht racing to have an E.P.I.R.B. in the life raft. Now this could be overkill, but in my opinion once again I believe they should be fitted to every raft carried on a vessel, especially where, if you look at the Winston Churchill incident, you had two life rafts in there, they were separated by the seas. If they'd both had an E.P.I.R.B. in the raft I'm quite positive that both of those life rafts would have been located much earlier than what they were, and quite possibly people may not have died because of that. They're quite inexpensive these days and an E.P.I.R.B. to buy is probably a bit over \$200.00. It's not an expensive piece equipment, but as far as getting a quick response and saving a life, especially when you've got a situation where people are yacht racing and there are a lot of yachts at sea, and the search and rescue authorities are aware that you're out there to begin with, and they're aware of what the sea conditions are like, then they're be a pretty good response time to an E.P.I.R.B. going off in those situations.

- V. 2 O.K. Perhaps we should just for the purpose of the interview, explain what an E.P.I.R.B. is.
- V. 3 An E.P.I.R.B is an Emergency Position Indicating Radio Beacon, operates on 121.5 and 243 megahertz. They are, use a low altitude satellite and so there is a delay in response time depending on how far out to sea the vessel concerned is, and they don't give you total global coverage, but certainly around coastal Australasia and New Zealand you get a very good coverage from an E.P.I.R.B.
- V. 2 O.K. All right. With, with E.P.I.R.B's you mentioned the cost of them. Is, is it a realistic proposition for people to say hire E.P.I.R.B's for a particular race, such as the Sydney Hobart Yacht Race and have it on a temporary basis?
- V. 3 Certainly it could if you were putting it in the, in the vessel, putting it in a life raft could be a more expensive proposition because you're going to have to open the life raft when they come back and take the, the unit out and you'd have to reseal the raft down, which would involve cost, because there is a fair bit of time, and once again depending upon the type of raft. Some are very quick and easy to open and reseal, others have a glued strip which has to be removed, and all the old adhesive has to be removed before you can reglue, and a new strip would have to be put on. So that would add a fair bit of time and expense - -
- V. 2 O.K.

- V. 3 --- to actually doing that. I'd still think that the best proposition would be to put one in, in a life raft and leave it there. I know some owners do this, but they don't do it to every raft they have on board, and if they have two or three rafts on board as happened with Winston Churchill as I said, if they get separated there's not much point of only have one raft with an E.P.I.R.B.
- V. 2 Yeah. O.K. All right. There's nothing you want to mention?
- V. I No.
- V. 2 O.K. Well what I'd like to do, you've mentioned some points in relation to life raft standards themselves. In your draft, in your draft letter that I have in front of me two of, two or three of the things that you've mentioned we've already discussed as far as sea anchors, the canopy, the entrance closures. Perhaps we could go down them if, if you're happy. You've got a copy of it in front of you?
- V. 3 Yes, yes.
- V. 2 You've mentioned here canopy material. Perhaps you, you could just discuss, you know, your concerns as far as that?
- V. 3 Some of the canopy materials used, once again it'd be a cost cutting measure I'd imagine, appear to be very flimsy and as I said before we have had problems with, with stitching, actually ripping along stitching lines because there doesn't seem to be enough inherent

strength in the fabric itself once it's sewn. It might have very good tensile strength when you sort of grab it and pull it apart, but once you put some stitching down there, or sewn a zip in it seems to be able to rip really easily. Once again this varies across the whole range of rafts. Some are very good, some are not. But because there is no, or doesn't appear to be set specifications to what the fabric strength will be or, or what type of fabric should be used there's quite a variety of choice.

- V. 2 O.K. What sort of fabric is, is usually used or is there two or three different types?
- V. 3 There are two or three different types, yeah.
- V. 2 O.K. What are some of the, the types of fabric that are causing the problems?
- V. 3 The lighter weight P.V.C's with little reinforcement would undoubtedly seem to be causing the most problems or the lack of reinforcement or sufficient reinforcement in the actual woven material, not necessarily the coating of the, of the fabric, the coating of the fabric appears to be quite adequate. It's the actual woven fabric itself on some of them is definitely not up to scratch.
- V. 2 O.K. The next point you mentioned was the canopy, the canopy attachment itself. You've just talked about that.
- V. 3 Yeah.

- V. 2 And the ballast pockets we have mentioned. You've, you've discussed emergency kits. What, what are your concerns with that? Is there any concerns - -
- v. Currently in, once again in, in yachting and local Survey life rafts there is no requirement for the actual emergency kit, or the actual bag that holds it altogether to be water tight, and by far the majority are simply a lightweight drawstring bag. There are some out there which have got a dry bag style closure or just a roll and fold arrangement, but the majority by far are simple drawstring bag. Yes, the material is probably water tight but a drawstring bag which just simply sticks together is not going to stop much water getting in. And there's not much point having a good emergency kit with flares and a first aid kit and all the bits and pieces in there if you can't reseal it and keep it dry. If you're in a life raft for any length of time you will get water in the raft, it can't be avoided. And having water in your kit can cause damage to some of the contents. Whilst water torches are supposed to be waterproof they are only a very simple basic torch. If the actual bag itself was required to be water tight so that they could reseal it and keep it dry that's certainly much better. current requirement is not sufficient. Once again, the S.O.L.A.S. requirements for emergency kits is that they be water tight and resealable.

- V. 2 O.K. All right. Is there any other points that you wanted to make as far as life raft standards, as far as manufacture or design at all, any other points at all?
- V. 3 No, I think what I've got there just about covers most of it. Most of the rafts on the market are fairly good but there are, is without a doubt, the current A.Y.F. specifications especially, are too loose and can be interpreted very openly.
- V. 2 O.K. All right. Nothing more?
- V. 1 Yeah. Just, just I mean I've got nothing, have no idea about sailing or, or the sea or anything, but just I mean, bearing in mind that the term life raft, you would suggest that it's there to save your life or provide a safe environment when you had to abandon the actual yacht or ship or something. In your experience and your knowledge of them, are there ones where you would, would not get into?
- V. 3 Yes. Well no, let me rephrase that. Given a choice between staying on a sinking boat and stepping into life raft the life raft's always your best choice, but there are certainly some life rafts on the market I would not buy.
- V. 1 Right.
- V. 3 If I was given the choice.
- V. 1 And the reasons being that they're just, they're just not up to, they're not up to standard to - -

- V. 3 They're not what I would consider sufficiently robust to meet the majority of conditions that can be experienced in Australia.
- V. 1 And just from dealing with, obviously the, the competitors in Sydney to Hobarts that, that arrive in Hobart each year are there yachts that carry, carry those ones that you'd consider to be - - -
- V. 2 Oh, yes.
- V. 1 -- unsafe?
- V. 3 Yes. Unfortunately the majority of the safety equipment appears to be sold on, on a dollar basis, sorry, bought on a dollar basis. From my experience here over the years people will ring you up or come in and say you know, what's the best price you can do me on a life raft? I have to have one, it's in the rules
- V. 1 Mmm.
- V. 3 - what's the cheapest? And whilst I've successfully over the years managed to talk people out of the real cheap ones which I consider unsuitable, I won't say everyone does that and I will also say we've undoubtedly lost business because we haven't always successfully sold the cheaper one, we've tried to get people to buy something which is more suitable, and I have no doubt we've undoubtedly lost sales because of it.
- V. 1 Yeah.

- V. 2 O.K. While we're on this topic of the safety of them themself, I'll just pass to you, this is a transcript of an article that was in The Mercury newspaper just after the Sydney Hobart Yacht Race, and it talks, there's, there's an interview with a 50 year old Sydney architect by the name of Mr Peter Stronak, and he's the skipper of Mercedes Four - -
- V. 3
- V. 2 - which was in the race. He makes some quotes there. One of them, his quote was, In seas like, in seas like we had this year stepping into a life raft was like stepping into a coffin. They are not a real survival tool in those conditions. How could they stay upright when yachts were being knocked down and capsized? I could only step into a raft straight off a sinking yacht which I think is what happened to the Winston Churchill. Have you got any comment in relation to Mr Stronak's comments?
- V. 3 Oh, well I'll come to the last point first, and that is stepping into a raft off a sinking ship, well that is, yes, that is the sensible thing to do. Whilst the vessel is still upright and floating it is certainly much more preferable to stay on the vessel. First of all it's, it's bigger, so it's easier to be seen. You certainly got some access to more survival equipment on, on a boat than you have on a life raft, but as far as being a coffin, well it depends on what sort of raft you're, you're in, I suppose. As to the, the criticism

of them well it comes back to the fact that these loose rules as we have at the moment have been driven by yachtsmen themselves, who keep demanding cheaper equipment as much as possible. Once again I've, I've found in my experience that people don't come in and ask for the best life raft they can have,, they come in and ask for something that complies to the rules. And if the rules are driven by yachtsmen then you end up with a situation where the rules are very loose, as against in independent authority, who says well thou shalt have this, and this is how it shall be done. to being a, not a real survival tool, well I'd like to point out that even though there were several life rafts used in the Sydney to Hobart there were only two drownings, or two who lost their life because of it. Everyone else who was in a life raft or taken from a life raft by helicopter survived. So as a survival tool I think they did fairly well all things considered, in that respect. So I think they are a, a very important survival tool, so I disagree with him on that point but I'll certainly agree with the fact you don't take to your life raft until you can't find your boat underneath your feet, that's also definitely a trap.

V. 2 O.K. In relation to the use of life rafts do you think that the training involved in using life rafts effectively is insufficient?

Extremely insufficient. I would say that the majority v. 3 of crew on racing yachts would hardly have ever seen a life raft let alone have any practical experience with them. Whilst yacht clubs around the country do regular displays and drills, I don't think they cover enough of it. Quite often they're treated as social nights. I haven't done one down here for several years. The last one I think I did at the Royal Yacht Club some years ago was not well attended. We did one at the Belrose Yacht Club some time after that or before that which was very well attended, but it was pretty much a social night. Crew training I think, you should have at least 50 per cent of the crew on board any vessel, should have some practical experience or training in how to use their life raft. I'll call your attention to the, again the Winston Churchill sinking. When the life raft was turned upside down, the four person one, again according to media reports that I have read, the crew stated that they were more stable in an upside down position and didn't attempt to to right the life raft and then cut a hole in the floor to let some air in. And of course as soon as the next wave rolled them back over the four bodies hitting the floor, of course the floor ripped, if you put a hole in it you've got to expect that. They put a slit in it and just kept slit, cutting along those lines, with four big bodies hitting The right thing to have done there would be to have got out of the raft, right it, and then got back

in, so certainly crew training and how to use a raft and the, what to expect in it, where to find the equipment is, is a necessity. There are plenty of people throughout Australia more than amply qualified to conduct courses, whether it's done in a swimming pool, at least if they get some in water experience, or it's done on the, the floor of a yacht club, where at least they're taken through it is, is better than nothing at all. But certainly the current crew training at the moment is inadequate, no doubt about it.

- V. 2 What courses are available then to
- V. 3 Well here in Tasmania - -
- V. 2 training?
- v. 3 - - - the Australian Maritime College has a very good small boats course, which covers life raft handling. It's probably the best in Australia. But I know other official courses, most life raft manufacturers or importers or their agents will run demonstrations at their local yacht club. Once again if there was a set format for them I think it would be better. And I'd prefer to see them done at the very least in pools, so that people can have some experience in getting in and out of a rafts in the water. It's too easily done on dry land. They really need to get in pools, get them in the water and get them used to getting in the raft, close the canopies down and let them see what it's like inside a life raft, tip them upside down and let them

get out and right the life raft, so they know what's happening. Once again that could be easily done. We have done them down here over the years, people like the C.S.I.R.O. for their scientific staff have run a couple over at Clarence indoor pool over the years, which have been very good. And the people there concerned have all come away with a much greater understanding.

- V. 2 O.K. How often would you say people should be trained?
- V. 3 They'd have to have an initial practical course and I'd probably upgrade it or uprate it maybe every 3 years. If they've done one practical course you could probably just put them through a refresher every 3 years, but that would be quite sufficient. I can't see any need to do it yearly, apart from say once again, new people coming into racing who haven't had any training. They should be done on a yearly basis, but people who have been through a course once would probably only need to be upgraded well every 3 years, maybe every 5 years. It depends on how thorough the course is and what format's used.
- V. 2 O.K. Is there anything you want to add to that?
- V. 1 No.
- V. 2 All right. There's only one more point really that I want to discuss and that's the enforcement of boat users, yachtsmen, in complying with the A.Y.F. Regulations. To your knowledge how do the yachting

- organisations enforce the regulations that are, the rules that are there?
- V. 3 The A.Y.F. have inspectors in every State, and say for a race like the Sydney Hobart everyone has to supply a certificate for their life raft to say it's been services. Unfortunately I would say that not all the inspectors are aware of the different types of rafts on the market and what they've got and I've walked around docks here at Hobart after races on several occasions and I've seen life rafts on the decks of boats which I know do not comply with the specifications as laid down, and should not have been on there. I have also seen, and I know of life rafts stowed in valises which end up below decks, would certainly weigh much more than 40 kilos.
- V. 2 O.K. So how do we get around that problem?
- V. 3 So enforcement wise there should be a list of life rafts which are approved, given to each A.Y.F. inspector. If a life raft does not appear in that list they should supply specifications for it, as to what type, either from the manufacturer or the importer, or in case of an overseas vessel, if it's approved in that country, I don't know how they get around international competitors, but if it's not on an approved list it should not be able to be used. Every valise pack raft should be weighed and have its dates, its weight stamped on it and signed by an inspector. So if it is going to be stowed below, if that law is still allowed,

so that they know what it is and any, any heavy weight valises should be banned, simple as that. If it's over 40 kilos, as in the current regulations and it's in a valise then they shouldn't be allowed to carry it. It should be put in a hard pack and put on deck. But I certainly know of over the years of yachtsmen who've had a heavier than 40 kilo valise pack and they have stowed it below. But once again in my opinion as far as that goes, below deck stowage should be banned anyway.

- V. 2 O.K. All right. Is there, we've discussed quite a few different things in relation to the life rafts. Is there anything at all, anything else at all that you wanted to mention or discuss in relation to anything that we've talked about today or - -
- V. 3 No, I think - -
- V. 2 - in relation to the race or the life rafts themselves?
- V. 3 I've think we've covered a fair bit of ground as far as they go. Once again I don't want this to be a witch hunt for people either, but certainly I think there needs to be a tightening up as to what we've got at the moment. Certainly the A.Y.F. rules need tightening up and the specifications need to be set out in black and white. And this needs to be done and enforced for the simple reasons I said before. Manufacturers of life raft will comply to a standard, but if manufacturer A is complying to a standard and sells his life rafts for

\$200.00 cheaper than manufacturer B who goes a bit higher and produces a better raft, then they'll simply stop producing better raft and make a cheaper one because they're not selling any equipment. Manufacturers are there to make money, as well as supply life saving equipment. They're certainly there to make a profit like any private enterprise. So if the rules are not in black and white they will do the minimum they have to, like anyone else.

- V. 2 O.K. One thing I neglected to do at the start of this interview was just to introduce myself. My name is Constable Rod Stacey, I'm stationed at Marina Rescue Division in Hobart, Tasmania Police, and also present is Detective Constable Rod Bush from Hobart C.I.B. If there's nothing further you wanted to, to say - -
- V. 3 No, I think we've covered it pretty well.
- V. 2 O.K. We'll conclude the interview.
- V. 3 Right.
- V. 2 The time is 9.44am. Almost been finished, wouldn't it, the tape?

INTERVIEW CONCLUDED