Z Boucher 200 Strickland Avenue South Hobart TAS 7004

18th January, 1999

Mr Peter Bush C/- C.Y.C.A. New Beach Road DARLING POINT NSW 2027 Lane,

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Dear Sir,

I am writing to you in regard to the inquiry that you are conducting in to the 1998 Sydney-to-Hobart Yacht Race. In particular I would like to comment on the issues raised regarding liferafts.

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I have been involved in the marine industry for over 23 years, the past 18 years have been as a liferaft surveyor. I have sold, serviced or been involved with the majority of brands of liferafts on the market in Australia today and I have had personal contact with numerous people from a variety of marine backgrounds. This includes yachtsmen, professional fishermen, marine police, search & rescue, merchant marine etc. I believe I have the experience necessary to support the following.

### 1. A.Y.F. Liferaft Specifications

The A.Y.F. have published a set of design requirements for liferafts that are deficient in several areas.

- (a) Liferafts are only required to have a fitted canopy with '... provision for supporting it to cover the occupants' (Appendix II 1d). This is completely inadequate and an immediate change to an automatic inflatable arch tube or similar should be mandatory. Paddles or similar supports could become lethal projectiles in heavy breaking seas.
- (b) No specification is made for the sea anchor size, type or attachment point strength. As several survivors complained of drogues being carried away this also needs urgent attention. S.O.L.A.S regulations would be the best solution.
- (c) Water ballast pockets are an important part of the stability of any liferaft. Whilst most modern liferafts have large, multiple bags, many older rafts only have 3 or 4 small ballast pockets. There is currently no specification listed
- (d) The fitment of an E.P.I.R.B to every liferaft should be mandatory. This may seem excessive, especially for owners who may have up to 3 liferafts, but I am positive that if these had been required the two liferafts from 'Winston Churchill' would have been located much earlier.

(e) Emergency equipment bags should be required to be watertight and robust. Most at the moment are flimsy and are only a drawstring closure.

(f) The current requirement for rations, 'one tin of emergency rations per person' (Appendix II 2.0-n). This does not specify what constitutes an acceptable ration pack.

### 2. Liferaft Standards

There is no doubt that some liferafts currently available are inadequate and some design elements need higher specifications. This is true not just of the A.Y.F requirements but also of the current Uniform Shipping Laws requirements for 'coastal' liferafts carried by vessels under State Survey.

S.O.L.A.S. requirements are without doubt the best available and result in robust, seaworthy liferafts. However they are 2-3 times more expensive than standard liferafts.

However some changes need to be made to existing requirements and I suggest the following to be a minimum. Some existing liferafts could be modified.

(a) Sea Anchors

Upgrade to S.O.L.A.S. regulations for design, size, materials, hawser & attachment point.

(b) Canopy Entrance Closures

Some liferafts have entrances that are difficult to close or are not fully watertight.

(c) Canopy Material

Fabric specifications need to be upgraded as some liferaft canopies are very flimsy and rip easily on stitching.

(d) Canopy Attachment

On some types this is inadequate. One design on the market is only attached by shock cord and tie points. A fully watertight attachment to the buoyancy tube must be specified.

(e) Ballast Pockets

Ballast pockets on some brands of liferafts, whilst adequate in size, are made of lightweight materials and have inadequate attachment to the raft. (One popular liferaft has un-reinforced PVC pockets fastened to the liferaft with thin welds). The currents S.O.L.A.S. regulations should be applied.

(f) Emergency Kits

As previously mentioned kit bags must be watertight and re-sealable.

# 3. Liferaft Stowage

Under current A.Y.F. rules liferafts packed in valises and weighing less than 40kg may be stowed below decks provided that they 'be capable of being got to the lifelines within 15 seconds' ( And Andrew A1 4.19 a &b). In my opinion this is foolish and dangerous. I have spoken to numerous skippers and crew members of Sydney-Hobart yachts and many have admitted that liferafts end up in positions that would be difficult, at best, to retrieve quickly.

I have been advised that the crew of "Business Post Naiad" have stated that they had difficulty in getting their liferafts on deck. It is reasonably easy for a fit, alert person to get a liferaft on deck in the marina, but this becomes a very difficult exercise at 2am in the morning with the crew lacking sleep, physically drained, possibly seasick and being tossed around in heavy seas!

I am aware of some owners complaining that there is no where on deck to mount a liferaft and that they get in the way. But if the rules require that liferafts be properly mounted on deck, space will be found.

## 4. Crew Training

Probably one of the most important aspects of survival in liferafts is training. The vast majority of crews would have little, if any, practical knowledge of how to properly use their liferaft. This was emphasised to me once again after reading the reports of the survivors of 'Winston Churchill' cutting a hole in the floor of their raft. This was undoubtedly the reason why the floor split when the liferaft was rolled upright. I would strongly recommend that a minimum of 50% of a vessels crew have completed a liferaft training course. There are sufficiently experienced people in every state capable of conducting such courses.

## 5. Enforcement of Regulations

No set of rules are of any use if they are not properly enforced. I have walked around the docks after the race and on several occasions I have seen liferafts that I know do not comply with the A.Y.F. regulations. I have also noticed liferafts in valise's that exceed the 40kg weight limit.

- 6. In summary I make the following recommendations:
- (a) Liferaft requirements be upgraded and tightened as a matter of urgency.
- (b) Below deck stowage of liferafts be banned immediately.
- (c) Crew training be a requirement of any future offshore races.
- (d) Enforcement of the rules be strictly adhered to.

It is my sincere hope that the issues I have raised are of assistance to your inquiry and will result in increased safety standards for all racing yachtsmen.

I freely offer my knowledge and experience if I can be of assistance to your inquiry.

Yours Sincerely

Zane Boucher