



LIFE JACKETS OR DEATH JACKETS?

Too often derided or ignored, the importance of the humble life jacket, and of maintaining it in good condition, should never be denied.

We explain why...

Words: Meuryn Hughes

The RNLI life jacket poster campaign, 'useless unless worn', has adorned the walls of marinas and yacht clubs across the country for long enough now for us to believe that the message is finally hitting home: your chances of surviving an immersion overboard without a life jacket are minimal.

And so, all those who have now got the message and are wearing a life jacket are assured of surviving an unscheduled man overboard event – correct?

Not so. The following statistics speak for themselves: in 900 cases between 1991 and 2001, deaths occurred in 3% of those wearing life jackets, 1% of those wearing buoyancy aids, and 45% of those wearing neither (source: UK National Immersion Incidents Survey. See also: *Essentials of Sea Survival* by Golden and Tipton. ISBN 0-7360-0215-4).

While the RNLI message is

a strong and memorable one that has caught the attention of the water sports community, the less known but perhaps more important message is the one on the back of one of my life jackets which reads: 'This is not a life jacket until fully inflated.' A sobering thought as you hit the water on a chilly November morning. Up until that moment, anyone faced with the reality of entering the water unexpectedly would be absolutely convinced that their life jacket would do its job. However, without proper maintenance and care, the chances of the jacket not deploying increase to a disproportionate level.

And yet, time and time again as I go to sea, both as a commercial skipper and an instructor, I come across sailors of all disciplines, from cruising and racing yachties and sports boat enthusiasts to flybridge skippers, who have made the transition, be it under duress, to '... wear a life jacket at

all times unless it is deemed safe not to do so...' (RYA mantra), only to find that their life jackets are faded or old, rusty, poorly fitted, missing crotch straps or unlit. I name only a few of the problems which in the event of a failed deployment would result in the pointless and tragic death of the wearer.

It would take only a few minutes for a person to do a life jacket check to ascertain whether that jacket was usable and safe for the wearer, and yet this most basic of safety checks is overlooked as a matter of course by the vast majority of seagoing persons. I know this as I have been instructing for very many years and I am yet to meet a client or candidate who says to me: 'This life jacket check is familiar to me.'

Is it wilful ignorance or too much trust in our equipment? I think both. I was instructing only recently a very experienced mariner who had

decades of work on offshore rigs and platforms behind him and had graduated to maritime security. During the life jacket check on the morning of the first day's training, I thought he would balk at having to do the exercise with all his experience of survival drills, yet I was shocked to learn that in all his years offshore he had never seen a life jacket with crotch straps, let alone worn one. 'What are they for? They are uncomfortable ... How do I remove them?' I heard. I then outlined the absolute importance of crotch straps: to ensure the deployed life jacket would lift the casualty's body into a near horizontal position when in the water. Without crotch straps, the casualty would struggle to keep his head above water after a short time of immersion as his body was near vertical in the water, and in time fatigue would overwhelm the casualty and he would drown. The RNLI crews refer to these as 'reeds'.

life jacket bobbing on the surface with the now deceased wearer's face approximately 8 inches below it. Very quickly the casualty would have been overcome by exhaustion, and then drowning would follow quickly thereafter.

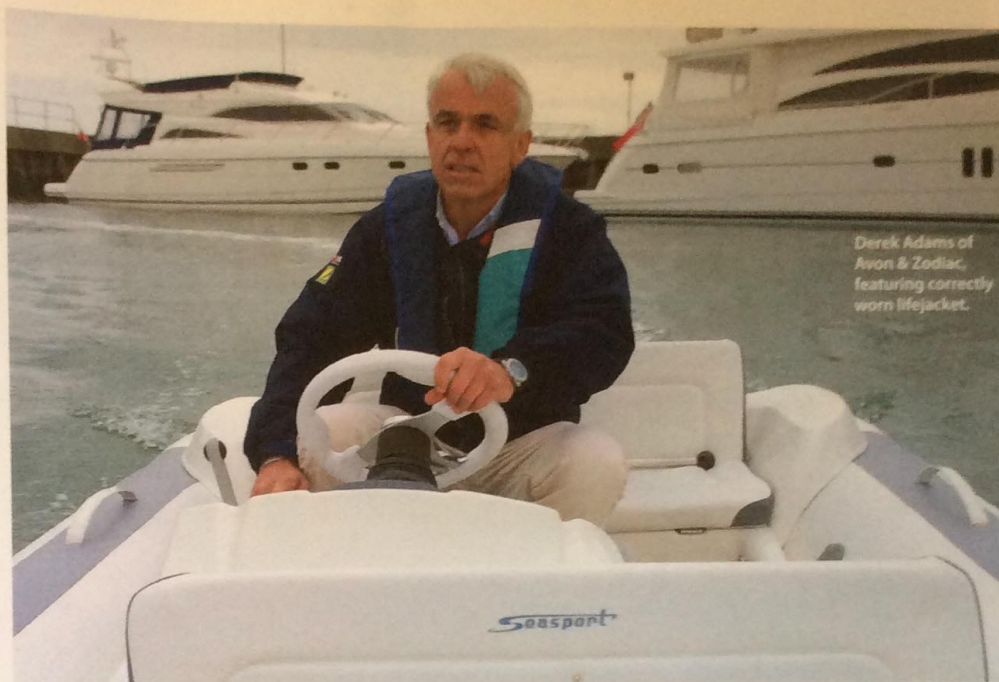
The RNLI, in conjunction with the RYA and MCA, have made a video demonstrating the importance of wearing crotch straps (see YouTube: How to wear a life jacket correctly – brought to you by the RNLI, RYA and MCA: <http://www.youtube.com/watch?v=NNFXMLG5pl4>). The casualty is in a wave pool wearing a life jacket with crotch straps and is lying high in the water with clear airways, supported by the life jacket, whereas in the following sequence the same casualty is without crotch straps and is

... your chances of surviving an immersion overboard without a life jacket are minimal.

clearly struggling after only a few seconds: he is unsupported and taking in water with each breath. The latter sequence shows the effect of not wearing these essential items, and it takes little imagination to conclude that the casualty would not survive very long in a real-life event at sea.

It is a matter of great concern to me that crotch straps are not fitted as standard; but in truth, if they were they would only be removed. I once worked for a company that did not insist on the use of crotch straps and so they languished in the bottom of a locker below deck. This, I fear, is so often the norm.

So many people accept a life jacket on trust without a thought that it may not be suitable for them, or the correct size, or indeed whether it actually is a life jacket. Firstly, one should only wear



Derek Adams of Avon & Zodiac, featuring correctly worn lifejacket.



A lifejacket is a vital component of your personal kit.

with the Essential Health and Safety Requirements set out in the European Directive (89/686/EEC). There is plenty of information on the Internet, but in summary the directive refers to the safety of Personal Protective Equipment (PPE). The directive outlines statutory requirements for the equipment in order for it to be granted CE approval.

It is folly, then, to even consider purchasing a life jacket without this mark. Yet, I have been at a boat show where life jackets were on sale for £16 – yes, 16 pounds – with queues stretching across the field to purchase. A quick inspection illustrated to me the poor manufacture of the items, with unfinished stitching, no CE mark, low-quality webbing and dubious chamber integrity.

When I demonstrate a life jacket check, there is real reluctance to open the jacket and check out what is on the inside. The first check has to be the cylinder – found on the outer part of the chamber on manual and automatics but inside the chamber of a hydrostatic. The former are straightforward to check: if the cylinder is rusty or pockmarked in any way the performance will be compromised and the cylinder may fail to deploy at all. Checking a hydrostatic life jacket cylinder is not possible without compromising the integrity of the sealed unit that remains outside the jacket. In this instance, the only option is to have the life jacket serviced professionally.

Yet very few people – even those who work commercially

Rusty cylinder – though this cylinder has not been deployed the integrity is in question due to its condition





It is the skipper's responsibility to ensure that all members of the crew are properly fitted with suitable lifejackets.

the cylinder is spent or not. I once did a voyage on a cold February night with an experienced commercial diver and skipper on board. Her boss had lent her a life jacket to wear for the passage. I did a pre-voyage check and to her horror she found that the life jacket she was given had a spent cylinder attached. Combined with the unfavourable conditions that night and the time of year, her chances of survival had she gone overboard would have been next to zero. Too often I hear of situations where a life jacket has deployed inadvertently and the wearer has simply deflated it and repacked it without the owner's knowledge, the fear of a reprimand outweighing the reasoning and forethought that the next wearer may need to deploy it in an emergency.

So, go online after reading this article and buy a replacement cylinder for your jacket and keep it in your grab bag. Simple common sense.

How many people follow the manufacturer's instructions to have their jacket serviced annually by an accredited centre? One per cent of one

per cent, I imagine. With the regular costs of running a vessel, this essential service is overlooked as a matter of course.

I was glad one November early in my commercial career to have heeded my own advice of getting my life jackets serviced annually. The weather forecast for the following day was an F9-10. Even though my work was in the lee of the land, the prospect of being at sea in such unfavourable conditions filled me with fear.

To counteract this, I decided to do a full kit check. When I checked my life jacket all was well until I decided to manually inflate it via the oral inflation tube. I was stunned to find a tear in the seam of the chamber. This life jacket was a death jacket. I used another the following day and thanked my lucky stars I had done the check. The alternative outcome doesn't bear thinking about. The question remains as to how long I had worn this jacket with it in this state.

A SOLAS-approved life jacket light is available to purchase for £17.50 – the price of a round of drinks with friends, or a curry. We don't give a second thought to spending on the latter, but the former seems out of the question. The excuse that you don't go to sea at night is unacceptable. You don't have to be out at night to need a light. Reduced visibility at any time of day is a fact of life at sea in the northern latitudes, and this year has been especially demanding



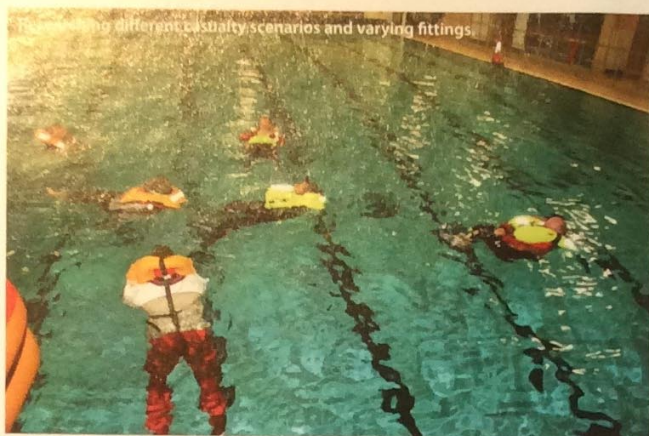
Spent cylinder - note the pin hole in the cylinder head. This cylinder is empty.



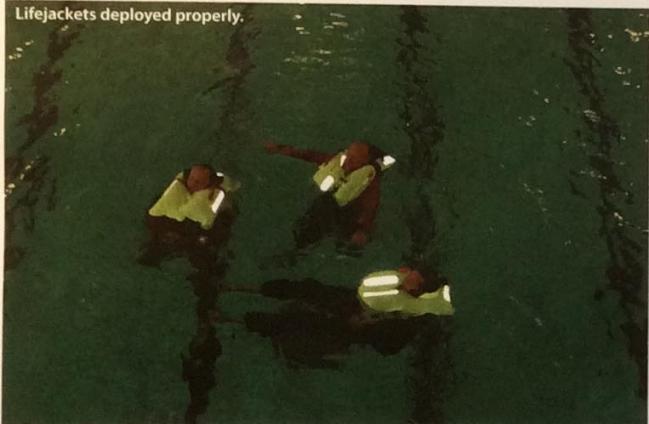
This is not a lifejacket until it is fully inflated. With a missing cylinder it will not inflate when the casualty pulls the toggle.



A correctly worn lifejacket.



Lifejackets deployed properly.



Yamaha PR guru Ken Watson boasts a properly fastened lifejacket and kill switch.



Crotch straps are recommended as they prevent the lifejacket from riding up.

with relentless poor weather for most of the year. That said, very few sailors I speak with even consider wearing a life jacket light.

I recall training with the RNLI one summer's evening around dusk. There was still plenty of residual light about, with only a slight reduction in contrast following a magnificent sunset. The coxswain decided to jettison a partially loaded 20-litre water canister to emulate an MOB situation. The canister was unlit, and on throwing it overboard we powered away for a good few minutes before making a return to retrieve it. We followed sector search protocols and there was extensive local knowledge on board, yet we could not find the floating canister at all.

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With all the expertise on board we managed to locate the canister a full hour and three-quarters later. If this had been a real situation searching for a casualty, we would have been recovering a body. No question about that. Had the canister been lit we would have located it within seconds – indeed we would not have lost sight of it – and we would have retrieved it within a few minutes. This is just one example of the importance of wearing a life jacket light.

I cannot stress too much the importance of this. I was speaking to a search and rescue helicopter pilot earlier this month about many subjects. The subject of survival at sea was ever present and he said that a casualty in the

water wearing a strobe life jacket light would be spotted in nominal conditions by an SAR helicopter 30 miles away. Buy one now, and then regale your story of being rescued to your mates over a few drinks and a curry ...

If you still need to be convinced (and I am sure this is the case from reading various sailing forums, where the subject of wearing life jackets is commonly derided), I must refer you to the MAIB (Marine Accident Investigation Branch) Leisure Safety Digest, which ... is published to provide information about the general circumstances of marine accidents and to draw out the lessons to be learned ... The articles do not assign fault or blame nor do they determine liability. The lessons often extend beyond the events of the incidents themselves to ensure the maximum value can be achieved' (source: MAIB).

The articles themselves will send a shudder down anyone's spine, as the objective and factual recounting of events leading up to a person's death is conveyed. Sitting at home, reading the articles, it is difficult to comprehend the events as they unfolded, and I can only hope that if I were involved in a similar situation I would be as prepared as possible and that my personal protective equipment was up to the mark and assisted in my survival.

Without question, my most important asset on board after my training, experience and instinct is my equipment, and without full trust in my equipment I would not head out to sea.

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