

# Scandal or scaremongering?



Pressure is mounting to change the ISO standard on seacocks, following YM's five-month long 'Safe Seacocks' campaign. Editor Paul Gelder reports

To borrow Winston Churchill's phrase, trying to uncover the evidence to change the existing and plainly absurd five-year European ISO standard for seacocks, is like investigating a riddle wrapped in a mystery inside an enigma.

'A situation has been allowed to develop that is so incredible that most people believed it couldn't be true,' says yacht surveyor Paul Stevens, the 'whistleblower' who wrote the article that launched our campaign: 'Nightmare of seacock safety' (YM June issue).

But it is true. Brass has been widely used by some boat-builders for critical components below the waterline – seacocks and through-hulls. Many

RIGHT: Yacht surveyor Paul Stevens, YM's 'whistleblower'

people in the marine industry have known this for a long time. It was made worse by the European Recreational Craft Directive which, in 1998, set a standard that lowered, rather than raised the bar. The RCD stated that metallic seacocks and through-hull fittings

should be made of a material which, within a service time of five years, does not display any defect that will impair tightness, strength or function.'

That's half the time span stipulated by insurance companies for replacing your rigging.



During the last five months of our campaign, *Yachting Monthly* and Mr Stevens have been accused of scaremongering and sensationalism. 'A dodgy surveyor and a bunch of journalists looking for a headline,' said one commentator. Many accusations came, as expected, from within the industry – including one boat-builder who admitted using brass.

Others, including boat-builders, praised YM for highlighting the issue and getting everyone talking about seacocks – as well

as checking them. The Cruising Association backed our campaign. Our online chat forum, Scuttlebutt, revealed that many yachtsmen will be replacing dodgy seacocks this winter with bronze or Marelon, a reinforced plastic.

The use of brass for vital safety components on a yacht is 'like bungee jumping on knicker elastic,' said one yachtsman.

It's not just boatowners, but some boat-builders who are confused about the type of seacocks fitted to boats. Several

yacht surveyors and owners have shared horror stories of boats that nearly sank because of unsuitable brass seacocks below the waterline. Chandleries, too, have admitted it's difficult to establish the metal content of what they are ordering, especially when fittings are often unmarked or poorly labelled. The confusion is made worse because there are three elements in a seacock:

- the thru-hull
- the valve itself
- the tailpipe...

Each may be made of different metals. Most of the failures we have highlighted have been skin fittings and hose tails.

Even DIY testing by Marine consultant and metallurgy expert Vyv Cox (YM September) failed to give definitive answers. YM spent £800 to analyse a seacock from the 'DZR family'. The test revealed it was sub-standard.

Respected technical marine writer and lecturer Nigel Calder, author of the *Boatowner's Mechanical and Electrical Manual*, says: 'YM's campaign and the public pressure it is generating have finally lit under fire under boat-builders. Given the relatively modest cost of traditional bronze through-hulls (compared to the price of a yacht), it's been my opinion for a long time that brass simply should not be used.'

Nigel, who lives in America, where boat-builders tend to use traditional bronze or plastic Marelon, a plastic which is impervious to corrosion, says: 'The problem with brass-type seacocks is that it's impossible to predict when and where a failure may occur, and not easy to detect if a failure is in progress, though typically the corrosion will be

'There is enough concern now to warrant a review of the standard and to remove any ambiguity from the wording of the ISO standard'

RYA's Cruising Manager, Stuart Carruthers



This tailpipe from a seacock on a four-year-old Beneteau 461 sheared off at the inboard end

somewhat localised, so a fitting is likely to start weeping well before it fails catastrophically.

'Vigilance should keep you out of trouble,' cautions Nigel.

Vyv Cox stressed that failure of a brass skin fitting could happen in less than two years with galvanic current corrosion in marinas.

The Marine Accident Investigation Board made strong recommendations following the sinking of a vessel, *Random Harvest*, due to the failure of Tonval brass fittings below the waterline. Their report stated that the use of brass below the waterline neither meets ISO 9093 or the RCD.

As Paul Stevens says: 'On this basis one could challenge the fitness for purpose of a yacht purporting to meet the RCD standard yet using brass in salt water.'

Consumers have a right to

expect better service from the marine industry. The good news is that following YM's campaign, I understand that at least two big European boat-builders have changed their seacock suppliers.

And now the RYA's Cruising Manager, Stuart Carruthers, has stated: 'I do believe there is enough concern now to warrant a review of the standard and to remove any ambiguity from the wording of the ISO standard.'

### Conclusion

Beware the vast majority of silver coloured ball valves with red handles. Most are ordinary brass. In the absence of electrolytic action, they may be alright. But none measure up to the standard of DZR so why take the risk? DZR and bronze (Blakes seacocks) are approved. Anything else, apart from Marelon plastic seacocks, is suspect. ▲



RYA Cruising Manager, Stuart Carruthers



ABOVE: Blake's bronze seacocks are recommended RIGHT: Marelon plastic seacocks are increasingly popular

YM PLUS For 'Essential seacock checks' visit our website (www.yachtingmonthly.com) and click on YM PLUS

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JUNE 2011 Yacht surveyor Paul Stevens warns that boats could be in danger of sinking with through-hull fittings made of brass not bronze



JUNE 2011 What on earth are we doing using an inferior material for vital fittings below the waterline? A five year service life is not acceptable



JULY 2011 YM's campaign is backed by the Cruising Association, Britain's leading organisation for sailors with more than 3,500 members



SUMMER 2011 Nigel Saw, an advisor to the EU's Recreational Craft Directive, says standards could be changed if evidence shows failed regulations



AUGUST 2011 YM sent a failed seacock from a three-year-old Hanse 470e for analysis. Severe electrolytic corrosion caused a through-hull fitting to fall off the outside of the hull of his 40ft ketch



AUGUST 2011 Spanish sailor Julio Sanjuan described how electrolytic corrosion caused a through-hull fitting to fall off the outside of the hull of his 40ft ketch



SEPTEMBER 2011 Reader Paul Christie says: I hope Nigel Saw, who had the courage to voice his opinion, is successful in changing the RCD's ridiculous stance'



SEPTEMBER 2011 Metallurgist Vyv Cox discovers how difficult it is for the average yachtsman to find out if his seacocks are safe or suspect