

# TESTED LIFEJACKETS

GEAR TEST  
WITH BRUCE JACOBS



## WE ASKED PROFESSIONAL SKIPPER, BRUCE JACOBS, OF RUBICON 3 EXPEDITIONS, TO TEST OFFSHORE LIFEJACKETS

**A**s I plunge into the sea off the east coast of Iceland, the water temperature shows 6°C and the cold is enough to take the breath away. I am wearing a drysuit but my face, head and hands all feel like they have been hit by a block of ice. I'm instantly fully submerged but already I can feel and hear the reassuring pop and crackle as the automatic inflation system on my lifejacket activates.

Resurfacing, with the big yellow bladder of the inflated jacket all around me, I need to get my face covered by a sprayhood as quickly as I can, find my whistle, check my light is working and then hopefully have the rescue boat extract me from the water. In just a few seconds my hands are going numb, even with my sailing gloves on, and my body is aching from the cold; the thought of being in this situation in the dark and with stormy seas is hugely sobering. In real life, survival can be measured in minutes and everything has to work perfectly, yet we faced problems with each jacket we tested.

Rubicon 3 expeditions head off to some pretty inhospitable waters throughout the north Atlantic and up to the Arctic. Last year alone we completed more than 100 practice man overboard rescues. With our own lifejackets approaching the end of their useful life, we were interested to put three of the leading products to the test. We selected the Spinlock Deckvest 5D, the Helly Hansen Inflatable Racing Jacket and the Crewsaver Ergofit Extreme 290N.

We look for three key criteria in a lifejacket. First, it has to be comfortable and practical to wear. It is going to be on the shoulders for hours at a time and you should be able to forget that it's there. Second, we look for ease of use and adjustment. Sailing often requires the rapid donning of a jacket or foulies and the extra bulk means the lifejacket harness needs to be easily adjusted to keep it properly fitted. Third, the jacket has to perform perfectly if a casualty were to fall in the water.

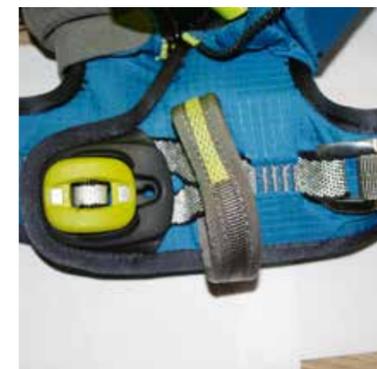
There is no margin of error here. It has to work first time, every time and it has to be idiot-proof. On most boats, neither the casualty nor the rescuer is likely to have seen the jacket in its deployed state. Its sprayhood, equipment and lifting strop have to be intuitive, easily accessible and highly effective.

**Main picture:** Inflatable lifejackets have a single chance to get it right



## How they performed

### Spinlock



**Above:** The Spinlock Deckvest 5D featuring a bespoke easy-to-use high tensile fibre buckle

Older lifejackets had a habit of weighing down on the shoulders and rubbing against the back of the neck. It made them uncomfortable to wear for any period of time and probably acted as quite a disincentive to wear one. On that front, all three jackets we tested were superb. So much thought and design has gone into each one and they sit nicely on the shoulders and away from the neck.

Of the three, we found the Helly Hansen jacket to be the most comfortable, possibly as a result of it also being the smallest. Considering its size, the Crewsaver was far more comfortable than we thought it would be. The Spinlock seemed to sit the highest on the shoulders and very slightly obstructed the neck when looking up, but any differences were so minor as to fall

### Helly Hansen



**Above:** We found the Helly Hansen Inflatable Racing Jacket the most comfortable

into the personal preferences category. Indeed, greater experience with the fitting of each jacket could well have eliminated any problems at all.

We wore each jacket for many days at a time and were very happy with each.

### Fitting the jacket

Each jacket has a different fastening system. The Crewsaver has very seductive dual plastic fastenings that take just a second to snap in to place. Anyone who has struggled to get a metal buckle inside another buckle (the traditional lifejacket fastening) will recognise the appeal of this system. The Spinlock has a bespoke high tensile fibre buckle that always proved easy to use, while the Helly Hansen jacket sticks with the metal buckle in buckle.

### Crewsaver



**Above:** We loved the Crewsaver's plastic fastenings but couldn't get on with the adjusters

We do love the Crewsaver system for its simplicity, but have that nagging worry that it will get damaged. Equipment and people get thrown around at sea and it could just take someone standing on the mechanism to break the plastic. The Spinlock and Helly Hansen systems are effectively unbreakable and, of the two, the plastic version is both easier to use and quieter when attached to a metal tether hook.

### Adjusting the jacket

We really liked the Helly Hansen's big, adjustable straps at either side of the body, which pull forward, making it straightforward to put on a loose jacket and then adjust to size once on.

The Crewsaver jacket has a similar system, but its adjustment buckles are further back. To



### Sprayhoods

Not all jackets have a sprayhood fitted but if you are ever likely to be venturing out into heavy weather it is a small, cheap addition that you should definitely have. In heavy weather, there will be a great deal of spray above the water and there is a very real risk of spray inhalation and secondary drowning.

prevent them locking against the body, they have to be pulled out sideways rather than forward. Crewsaver says this buckle placement makes for a stronger harness. Maybe, but for us it simply made the jacket difficult to adjust and was a frustration.

The Spinlock has small adjuster buckles that can be pulled tight at the front. These worked very well and allowed for rapid adjustment. It was also the only jacket to have an adjusting buckle at the shoulders.

### Deployment

If the worst happens and a casualty ends up in the water, everything needs to work and the jacket has to be completely intuitive.

First on trial was the **Spinlock 170N**. Having jumped in, the sprayhood was immediately available, was a great size and was very easy and intuitive to fasten under the bladders. I looked to my right and quickly found the inflation tube, the whistle and the pylon light (an optional extra). The jacket also had the Lume-On system that enables the jacket to glow in the dark. This additional security at night is a huge bonus for the Spinlock and should not be underestimated.

With the deployment complete, the rescue boat came over to pick me up. It was at this point that we realised the lifting strop was nowhere to be seen. The rescuer will attach a line to the lifting strop and haul the casualty out of the water. It's vital but the rescuers searched around in the water for a good 30 seconds and ultimately had to give up.

Only when I had clambered in to the boat did we see the very clearly marked, bright red lifting strop hanging down from the jacket. It was clearly meant to be popped on to the left bladder, where it would be easily visible to any rescuer. We believe that as the jacket inflated, it simply blew off the bladder poppers. From what we saw, this lifting strop could and should be the best system of all three jackets, but when the time came and it had to perform perfectly, the set-up failed.

Spinlock has said it is not aware of this ever having been a problem before, but on our test the set-up failed and without finding that strop any chance of me being successfully rescued was undoubtedly diminished.

### Sprayhood issues

A little surprised, we moved on to the **Crewsaver**. This jacket has a massive 290N of buoyancy, giving vast amounts of flotation, even when wearing heavy clothing. I expected the size of the bladder to be a problem once inflated, but actually found it had little impact on my manoeuvrability or visibility. Again I felt safe and stable. Not only that, it has a very reassuring inflatable chin guard that ensures the wearer's mouth stays out of the water. This jacket also had a surprise in store for us



### Thigh/crotch straps

It is essential that you have a crotch strap, or straps, fitted and snugly tightened. The straps keeps the lifejacket close to the torso, improving flotation angle and keeping the airway clear. They also prevent the casualty falling out of the water. RNL research shows that snugly fitted crotch straps increase survival rates by up to 30 per cent in comparison with jackets that do not have them fitted.

however, as I couldn't deploy the sprayhood properly. It stopped at my chin, barely covering my face. I struggled with it, but couldn't find any way to secure the bottom of it to the bladder. Eventually I had to resort to holding the hood down over my face. Again, this is a serious issue: in heavy weather a man overboard without a secured sprayhood is in grave danger of inhaling spray leading to possible secondary drowning.

The rescue boat came over and this time the lifting strops were easy to find, popped to the bladder with bright orange tabs. It would be better to have them clearly marked as such. The wearer may be familiar with the jacket, but a flustered rescuer shouldn't have to second-guess anything. Having been hauled on to the boat, it became clear that the jacket did in fact have a superb sprayhood – actually the best of the three. It had fantastic visibility, a hoop to keep it off the face and lots of lateral protection.

So why hadn't it deployed properly? The bladder attachment band and the remainder of the hood was still folded behind my head. I never worked that out in the flat calm and would have had no chance of doing so in a real-life situation. In response, Crewsaver has said the user needs to know to pull out the hood in a

particular direction for it to deploy properly, but how would a casualty know this? That hood needed to be there, accessible, straight away – but it wasn't. It was frustrating as it marred an otherwise superb jacket.

### More lifting strop issues

Finally, we tested the **Helly Hansen** jacket. At only 150N, it felt noticeably smaller when inflated than the other jackets, but no less safe. As with all of them, the light, whistle and inflation tube were immediately accessible. The whistle on the Helly Hansen jacket seemed to make a much louder noise than the others and was our favourite of the three.

I found the sprayhood quickly and pulled it over my head. It had plastic buckles to attach to the bladders. In daylight, this was immediately obvious but I do wonder if I would have worked out the system at night. Simplicity is everything in an emergency situation and the traditional attachment method of a band around the bladders is tried, tested and effective. The sprayhood itself felt a little loose, especially around the sides, and I would have liked a way to tighten it up but the buckles did not allow me to do this.

The rescue boat now came alongside, but once again we could not find the lifting strop. The rescuers could see flashes of red below the surface, but concluded that these were the red thigh straps. There was no way anyone was going to risk attaching a line to them and hauling me up. Eventually, we gave up and it was only back aboard the rescue boat that we finally saw the red lifting strop. It was an identical colour and size to the thigh straps, and positioned directly above them. It was all but impossible to distinguish the lifting strop from the thigh straps in the water. Also, there are no popped attachment points on the bladder, which means the strop is always likely to sink out of the rescuers' sight.

Again, the consequences of this in any real-life situation don't bear thinking about. Helly Hansen states that the sprayhood on its 2017 model will include elastic sides and elastic straps for attaching to the bladder, and that its designers are working on making the lifting strop easier to find.



### Bruce Jacobs

Bruce Jacobs is a Yachtmaster Ocean instructor and MCA Master 200. Rubicon 3 runs adventure sailing expeditions, with an emphasis on training and exploring. Routes range

from Spitsbergen to Morocco. Find out more at [www.rubicon3.co.uk](http://www.rubicon3.co.uk)



### What is my Newton rating?

Any sailor venturing offshore should have at least a 150N jacket. This amount of buoyancy will give a good level of protection against drowning, working with the design of the bladder to roll an unconscious casualty on to his or her back. However, bear in mind that clothes and foul weather gear can trap lots of air underwater and this can counteract the lifejacket's intended righting moment. This may mean a delay to larger casualties being brought face-up in the water. The much greater level of buoyancy of a 275N jacket reduces this delay.



### Scores and Conclusion



	Spinlock	Helly Hansen	Crewsaver
Comfort	9	10	9
Fitting the jacket	9	7	9
Adjusting the jacket	10	10	8
Deployment	7	5	7
<b>Final scores</b>	<b>35/40</b>	<b>32/40</b>	<b>33/40</b>

Ultimately a lifejacket has only two purposes: the harness is there to keep you on board and the remainder of the jacket is there to keep you alive and allow you to be rescued if you do fall in the water. The importance of those two functions working first time, every time, cannot be overstated. They also have to be utterly intuitive to operate for both the casualty and the rescuer. There is little doubt that each of these jackets is a good product and yet, in the cold light of day, not one of the three fully performed to our expectations.

Sprayhoods and lifting strops are critical, but we were unable to deploy both successfully on any of the three jackets. Without doubt, having the casualty and rescuer familiar with the jacket in its inflated state would have reduced the problems, but very few sailors jump in with their lifejackets to find out how they actually work, and

how would a rescuer expect to be familiar with all the different models?

To be used on a Rubicon 3 voyage, the Helly Hansen jacket would need improvements to be made. However, the Spinlock and Crewsaver are both very capable lifejackets and the final choice of which to wear came down to personal preference. One of us picked the Spinlock as the winner, the other the Crewsaver. We would very happily have either.

That said, as I floated in those icy cold Icelandic waters, struggling with hoods and trying to find lifting strops, my over-riding thought was that while each of these jackets would surely help keep me alive, a casualty is in a hugely perilous situation in the water. The only genuine approach to a man overboard situation remains, as ever, its prevention in the first place.