

BRITISH ANTARCTIC SURVEY INFLATABLES

Simon Everett tests and compares two rugged inflatables from Humber, one with a rigid hull and the other with a fabric bottom held taut by an inflated keel, and discovers notable similarities and differences ...



Pics: You can really have some fun in the Sea Pro. Putting her to wild angles of heel like this never felt like going over.

Airing the SOLAS tape on the bottom proves how agile and stable the inflatable keel version is.

The i16 is a nimble and easily handled craft. Unlike the RIB it remains much flatter during turns due to having less angle on the hull

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WITH THE ADVENT OF the RIB, fully inflatable craft have taken something of a back seat in the boating world. Yet they are still amazing craft, capable of proper boating trips as our Norwegian exploration feature proved. And who could forget the amazing feat of Alain Bombard in crossing the Atlantic in a 4.5m inflatable in 1952? So the ability of these boats to perform remarkable feats isn't in doubt – being light and compact, these versatile boats really have got an awful lot going for them.

Anyone who grew up around the flat, skin-bottomed inflatables that were so popular in the 70s and 80s – the Avon Redcrest and Redstart, for instance – will know the handling quirks of having no

grip on the water, other than the dimple created by one's feet and gear. Those wealthier owners who fitted wooden bottom boards had even less grip on the water, but they were divorced from the flexing of the skin beneath their feet. The boats would slip sideways in a turn, but they served a purpose – mostly as tenders, but also to get youngsters out on the water in very safe and affordable boats.

Humber have been making inflatable boats for more than 50 years, and in that time they have built up a solid reputation, especially among commercial operators, for reliable, rugged workhorses. They addressed the problem of those flat skin bottoms to give more directional control

and far better comfort at speed over waves by making an inflated keel that gives a shaped, taut skin bottom, rather than the flat, floppy skin of old. The shaped bottom makes a big difference to the handling – the boat is altogether more rigid than a soft bottom and handles more precisely, rather than like a giraffe on ice, which is what those old flat bottoms were like. Even with only 3hp on the back, the old inflatables would slide about, going as far sideways as forwards when you tried to turn at speed. It needed a real knack.

Humber make two similar boats, one with a moulded, rigid hull called the Sea Pro 4.8 and their 16i, which has an inflatable keel and taut skin bottom. We





... THEY SHRUG OFF THE ICE AND ROCKS AND EVEN THE ATTENTIONS OF AMOROUS ELEPHANT SEALS!

had the chance to pit one against the other in an identical format under the same conditions. Both versions were outfitted with the same equipment and rigged with 40hp Mariner 2-stroke outboards. These boats were both repeat orders by the British Antarctic Survey and were fitted out to their requirements, with similar layouts and features. When you are 1000 miles from anywhere, having a simple, rugged, easily repaired boat has its advantages, and these Humbers are further strengthened and armoured where it matters.

The Humber 16i is fitted with marine ply bottom boards and a transom with lifting eyes fitted. It is MCA approved for hoisting with 500kg of payload in the boat, so it can be hoisted with the crew aboard, which makes life so much easier when deploying at sea. Even though they only needed an SWL of 500kg, Humber tested them with 1.3 tonnes in the boat with no adverse effects. The eyes are fitted to the floorboards and transom and the boat attached to the floorboards by a fabric loop, taking the weight on the duckboards

rather than the inflatable sections. The actual weight of the boat hanging under the duckboards is negligible – 50kg perhaps.

The same problem doesn't exist on the rigid hulled boat, which has the moulded hull to fix the lifting eyes to. Once aboard there is little to tell the two apart – the inflatable collar is the same and both have the fabric bow dodger, armoured collar protection and fabric pockets on the inflatable collar. The only difference is the moulded hull on one and the inflatable keel on the other. I was hoisted down to the water in the 16i, charged with taking her out of the way while the Sea Pro was lowered to the water. The spread of the



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stops made the boat very stable in the air, and it is easy to see how the approval for hoisting loaded was gained.

Both boats are tiller steered. There is an aft thwart held in place on Velcro pads, but I preferred to sit on the tube, to leave plenty of room for ferrying personnel and equipment ashore in the frozen wastes. I prefer to use my left hand – against convention, but I find it gives me more

room to swing the tiller. Using my right hand and sitting on the port tube I get hindered against my body. The wide tube gives a soft seat and good visibility over the bow dodger, which provides good protection against waves or spray.

Gear stowed in the covered bow is likely to stay totally dry. The anchor tackle is stowed in a dedicated box on the inflatable but on the RIB can be lashed direct to the rigid deck. There are fabric pockets for other essential items. The fuel tank is strapped down to the bottom boards and the water trap fuel filter is mounted on the reinforced transom, where it is easy to get to and is the only feasible mounting point.

We weren't here to pull the boats apart, though. How they are rigged depends upon the end-user. We were here to see what difference, if any, the rigid hull makes over the angled fabric bottom, held taut by an inflated keel. It is as close to identical boats with different hulls as you can get. I had forgotten how much fun

small boats can be.

As we cleared the confines of the River Hull and broke out into the Humber estuary, we opened the boats up and spanked across the waves. It was more comfortable to sit on the tube than the loose thwart held in place by heavy-duty Velcro. At normal speeds and usage, the thwart would be fine. I was pushing the boats to their absolute maximum, but not their limit – these boats are actually rated to take a 60hp.

The boats have heavily reinforced transoms to take upwards of a 40hp motor to help with heavy load carrying. I was surprised at the minor difference in outright top speed – just 1 knot between them with the rigid hull having the edge. The handicap of the extra weight of the moulded hull was negated by the ability to plane higher and reduce wetted area.

It wasn't just the ride height that was changed by the moulded hull, though – the handling was transformed, with the boat able to heel and the extra rigidity



The dodger is attached to the tube and the shape is created by the use of a stantion fitted to a step on the duckboards





Neat, seamanlike rigging and reinforced transom

of the build lifting the boat over the waves. The triple-chine hull provides a remarkably efficient ride – I was able to keep the boat absolutely nailed and she flew over the little waves. We had swells of maybe 3 feet, but a decent distance apart, with wind chop of perhaps 2 feet at most, but in a light boat this is enough to get airborne and give the boat a real spanking. In bigger seas you would have to ease off, but that sealed bow dodger increases the weathering massively. It



Secure mounting for the fuel tank

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is an old-fashioned idea that has largely been replaced by GRP moulded foredecks and the like, but on a small boat like this the weight saving from a fabric dodger is significant. If you wanted more shelter, it would be a simple matter to ask for the tent to be cut larger and use a longer stanchion to keep the tension.

Getting out of the inflatable i16 and into the Sea Pro gave me the chance to feel what those RIB innovators at Atlantic College must have felt on that day back in 1965 when they produced what is considered to be the first RIB. The transformation is obvious – instead of flexing over the waves like the inflatable, the RIB deflects over them, especially from its position of less boat in the water and

greater bevel to the hull. The extended tubes give early lift to the stern on both boats and ensure steerage is maintained by keeping the propeller in contact with the water for longer. Those extended cones also offer some protection for the motor. Sitting on the tube was fine, but for normal use the thwart offers a better position and is flexible to soak up some of the jolts.

These Humber inflatables are meant for serious work, with each type having a benefit over the other depending on the role intended. Humber supply these craft to various organisations around the world, including the RNLI and British Antarctic Survey, and they shrug off the ice and rocks and even the attentions of amorous elephant seals! **PBR**



SPECIFICATIONS

	i16	Sea Pro 4.8
LOA:	4.77m	4.77m
Internal length:	4.35m	4.35m
Beam:	1.9m	1.9m
Internal beam:	1.11m	1.11m
Tube diameter:	.48m	.48m
Chambers:	5	5
Boat weight:	200kg	225kg
Payload:	790kg	780kg
Max. persons:	8/600kg	8/600kg
Max. power:	60hp	60hp
Max. transom weight:	120kg	120kg
Fuel/baggage:	44kg	44kg
RCD rating:	C	C

PERFORMANCE

i16: 23.8 knots
Sea Pro 4.8: 24.7 knots

PRICES

Workboat i16: Starting from £6,083

As tested, MCA Coded Cat 4, with type approval for hoisting with 4 personnel aboard: £18,125

Sea Pro 4.8m: Starting from £6,000 (open boat)

As tested with all equipment and type approved for lifting with 4 persons, MCA code Cat 4: £17,140

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