



Boats with flotation collars are ideal for Alaskan waters—not only are they safer, but they also provide a drier and softer ride.

## Extreme Safety BY KEITH JACKSON

It used to be that a safe boat was one that had a stash of those old, kapok life preservers on board. Now, safety is level flotation—enough flotation material that will keep a boat floating upright and level should it swamp.

The idea here is that it won't sink if there is enough foam in the right places to keep the boat floating until help arrives.

The extreme version of this is the design that has a hull with an inner liner and foam in between the two. Think Boston Whaler, not that I'm picking on that design. Whalers have a great reputation for safety, and there are other boat lines that have the same feature.

Here I'm reminded of ads that feature one of these foam-filled boats that has been cut in sections and still has enough buoyancy to keep passengers high and dry.

The problem with these foam-filled boats is that if the liner cracks and isn't repaired, you'll get water infiltration into the foam. This situation is made much worse if the boat is stored outside in the rain, or is tied up to the dock in weather. Get enough water into the foam, and you'll lose performance—to the point that the boat will turn into a slow-moving turtle—requiring all the saturated foam to be removed. In other words, the boat will be toast or require a lot of time and expense to rehabilitate.

It could well be that the next level of safety we'll see as a requirement is a boat that incorporates a flotation collar as a

required design component. I think that's a pretty good idea, and when I next go boat shopping, that's something I'm going to look for. I do know that if I was fishing in the Gulf of Alaska on a regular basis, it's a feature in a boat I would insist on.

What are flotation collars? You've probably all seen RIB boats—they're frequently used as tenders on larger craft. A RIB, Rigid Inflatable Boat, looks to be a cross between a raft and a hard-hulled boat. The bottom is hard up to the chine level (approximately) and then the inflatable collar—the part that looks like a raft—is attached to the sides.

These RIBs are usually small, frequently overpowered for the size of the boat, and wet. Personally, I wouldn't take one fishing far offshore in waters that can kick up rough.

However, that's not the case with the larger boats now being built with flotation collars. Three come to mind right off the bat: Aluminum Chambered Boats, SAFE Boats and Stabicraft.

What makes these boats different from the RIBs is obvious. First, these are not raft hybrids but boats that blend a flotation collar into their design, rather than have a bottom onto which a collar has been grafted.

In the case of the first two brands, these boats were designed for both industrial and military uses with recreational applications secondary. That's not a bad thing, in my mind. It proves the strength and reliability of the designs.

In fact, the Aluminum Chambered Boats' design was the first (and only) aluminum design approved by the Coast Guard for use without any foam flotation material. The integrity of the aluminum flotation chambers makes the boats virtually unsinkable, even if you hole the bottom and puncture several of the airtight chambers. That sounds pretty safe to me.

Stabicraft is the third boat line, a New Zealand import that is built for recreation only and is starting to gain a foothold in the Northwest waters. Because it is recreational only, the Stabicraft line offers different, and smaller, craft well suited for fishing.

What makes this style of boat stand out is safety. "For all intents and purposes," says Jim Moore, president and

COO of Aluminum Chambered Boats of Bellingham, WA, "these boats won't sink on you. I have to say 'virtually unsinkable,'" Moore adds, "because some wise elbow will come along with a situation where a chambered boat could sink (also legal ramifications require the use of 'virtually'). However, in normal situations, you'd be hard pressed to sink one of these boats—and that's a measure of safety hard to ignore."

What makes Moore worth listening to is his history. He's past president of both Lund Boats and Weldcraft, and has a wealth of knowledge about boat performance, having been in the business since dirt was invented. When he speaks, I listen—at least about boat design and performance. Fishing, however, not so much . . .

Not that you have to go by his testimony alone. If you do some searching on the Stabicraft website, you'll find a story about a boat that was found floating, barely above water. The boat was still hitched to its trailer, had what was left of a motor and had a thick covering of barnacles. Once it was cleaned of sea life and repowered, it was put back in service and functioned as new.

Aluminum Chambered Boats designs feature the "flotation collar" concept, a ring of at least eight chambers (depending upon design) that stretch from the transom to the bow. These chambers are watertight and air-filled, and provide the measure of safety we're talking about.

But there are other benefits of this design. First, and most obvious, the chambers give the boats more beam without adding significantly to the weight. More beam makes for a more stable boat. Also, for boats of equal weight, a wider boat sits higher in the water, and that gives you a boat that will, generally, come on plane quicker.

For those who don't know, planing boats (and these are) run more efficiently—burn less fuel—when on plane where they are riding ON the water instead of pushing THROUGH the water. The faster a boat can come on plane, the more efficiently it will run.

"Yeah, that's one of the beauties of the chambers," says Moore. "They act like a reverse chine, and that gives more lift. The more lift, the faster they get up and the better they run. That really means

better fuel mileage.

"I should say that the average owner might not notice how much more efficient these hulls are unless he's kept good records and has run a lot. But in the long run, you'll use less fuel running a chambered boat.

"And one thing you will notice is that the ride is a lot softer than in a regular hull. The beam does help that as well as the lift."

Of course, you'll notice that there are other attributes of boats with the chambers. The obvious one is that there isn't as much interior room as you would see in other boats of the same beam. Of course, that's a no-brainer—the chambers and the foam collar on the SAFE boats take up space.

It's a tradeoff, like anything else in boats. In those boats that don't have a collar, you'll find interior spaces filled with foam, limiting their usability for storage.

Of course, flotation alone doesn't provide safety. Numerous boats meeting Coast Guard standards sink or flip each year. Wider boats for a given length are more stable, and they take more energy

to flip. For most skippers, the issue doesn't come up. However, it does give one something to think about if you boat in hazardous waters.

Another thing worth noting is the build of the boats sold to military. The standards to which these designs are held are impressive (I'd say "bullet-proof", but I don't want to be punny.) Not only is the aluminum in the hulls of the highest quality, but it's of a thickness to withstand hard use. So is the internal structure of ribs, stringers and braces.

While this build standard is impressive and will last several lifetimes, it's more than most recreational anglers need or even want.

The good news is that both Aluminum Chambered Boats and SAFE Boats will build hulls to suit their customer's needs. That doesn't mean that the companies will build weak boats, but rather the customer and the manufacturer can work together to build the right boat, fitted out to the customer's needs.

In that respect both companies are like most Northwest aluminum boat builders—they will build the boat you

want the way you want using their basic designs.

Currently, there are limited sizes of these boats available. And they are all large—starting at 26 feet in the case of ACB.

Stabicraft, on the other hand, has recreational boats starting at 15 feet. Moore says he's swinging his company back to its recreational roots by adding more models.

That's a change sport fishermen should welcome. Since most of us don't haul six people out to fish, a smaller, safe boat will be better suited. Not only will smaller boats be less expensive to buy, they'll be less expensive to run. And if they're truly unsinkable, then that's a winning combination in my book.



*Long-time outdoor writer Keith Jackson spends more time in boats than he does at his desk. A Port Townsend, WA, resident, Jackson fishes for whatever will bite but prefers salmon and halibut to just about every other fish.*