BIG CANOE & VOYAGEUR SAFETY:ADDING FOAMAlan Thomson

There are quite a few big canoes
mainly Voyageurs or canot de batarde
(Langleys) being used in BC. They are often used where the wish is to take out on the water groups of people, many of whom do not have experience of canoeing. Using the big canoe allows one skilled sterner
to introduce 10 or more non-paddlers to the water in relative safety.

The 'term 'relative' safety is deliberate. Big canoes are in general very safe craft, especially the bigger boats with more of a U-shaped than V shaped hull. Paddling on calm water with a full boat means that even if one paddler forgets to sit in place and moves to the other side, the boat will rock, but not tip. However, in conditions where there are waves, or where the big canoe is not fully loaded, tipping is more probable. And once a big canoe has tipped, there are anything from 6 to 14 people in the water and often either no or insufficient rescue boats on hand to help.

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The RCABC Big Canoe courses, whether Basic or sterner/leader level, require participants to take part in a big canoe rescue. This involves righting the upturned canoe, getting someone into the hull and starting bailing. As the water level drops, more paddlers get into the canoe until all are out of the water. In flat water, this can be done in a few minutes – see

https://www.youtube.com/watch?v=H2of iCdv_UE for a real-life demonstration.

It is also possible, although difficult, to do a canoe over canoe rescue, although the weight of the boat and the beak at stern and bow make this a difficult manoeuvre that needs at least two strong people to get the swamped boat bow or stern over the rescuing boat gunwale.

However, if the big canoe is an older, heavier version, the freeboard is often under 6" and the water in the canoe is above the level of the seats. In these circumstances, the presence of even small waves can make the task of emptying the canoe of water either very difficult or impossible. Paddling the swamped canoe to shore is possible. but hard to do even with experienced paddlers as the canoe will continually tend to tip to one side or the other, requiring a difficult balancing act and strong bracing. This is not likely to be possible with novice crews, the commonest circumstance.

Because of this, the use of big canoes by schools is often frowned upon as too risky, which is a pity, as it deprives the children of the chance to experience the pleasures of paddling and seeing the land from a water-level perspective. One approach is to lash beams across two big canoes to turn them into a catamaran, which is very stable, although harder to paddle and stern. Another approach, used on moving water, is to add airbags for flotation. This certainly adds buoyancy, but at the expense of capacity for paddlers. Canoes made of Kevlar or other lightweight composites are also safer because of their higher freeboard when capsized, although their lightness also tends to make them less stable by reducing the inertia that resists temporary tipping forces.

In Victoria, there are some 11 big canoes, mainly voyageurs, but also a Langley and a Salish-style big canoe. The Victoria Canoe & Kayak Club has 5 big canoes, Shoreline School has 4, and Glen-Lyon Norfolk School has 2. Shorelines voyageur canoes are older, heavier boats (350lbs) dating from the **1971** Centennial celebrations. Practice capsizes showed that these heavier boats had little freeboard once capsized, even after flotation was added under all the seats. As a result, the taking of children out in these boats was restricted to times when the conditions were perfect, something that is guite

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PADDLING QUILTS STOLEN

Paddling quilts have gone missing and are presumed stolen from a church in Vancouver. They were part of a show about "Quest" -specifically reflecting artist Katie Stein Sather's experience in the Yukon River Quest. Katie has been part of a voyageur crew in the race, and captained a crew in the Quest twice. Like they say, it's an addiction. The rest of the year she creates textile art, and these pieces were part of a two person show at the Unitarian Church of Vancouver.

For more info, follow link http://www.cbc.ca/news/canada/britishcolumbia/art-theft-from-vancouver-church-shocks-local-fabricartists-1.3819562 (From Western Canoeing and Kayaking)

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limiting, especially in Victoria where the ocean is the main paddling venue. At the first Big Canoe Instructor level course in 2015, one of the trials was to see which righting techniques lead to the least water in the swamped canoe. We found that using a righting line lead to 1-2" less water in the canoe than turning the boat over by hand. This probably happens because the swimmers almost always exert some downward pressure on the swamped vessel, in spite of wearing PFDs. Another experiment saw some blue foamies rolled into long cylinders and tied and duct-taped to the inside hull of the canoe under the inwale. If the canoe was rolled with that side under the water, the lift provided by the foam lead to another 1-2" drop in the water level inside the canoe when righted. From there,

the decision was made to glue a strip of 2" foam to the inner hull between the inwale and the seat stringer so as to have a permanent flotation enhancer. The thought was that only one side needed to be 'foamed' -2" closed-cell foam is expensive – and it would be simple to ensure that this side was underneath when righting. But Tim Marks suggested that it was worth 'foaming' both sides of the hull, to add more floatation. It was also suggested that the effect could be increased by adding a strip of foam below the seat stringers. This was done to one voyageur canoe and some testing carried out. The results showed not only that adding more foam allowed the swamped canoe to be righted with less water in it, but, more importantly, the presence of foam on both sides meant that the swamped, righted, canoe was verv stable in the water. As soon as the gunwale dipped down so

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that more water could enter the canoe, the foam on that side forced the gunwale up – an automatic stabiliser. So now the postcapsize plan was to right the (next page) canoe and get everyone back into it. Most of the paddlers could start paddling the canoe to shore while a few could start baling. In this way, the margin of safety has been greatly improved and the confidence level of the sterners has correspondingly increased. See

https://www.youtube.com/watch?v=1zaubBQzhc&feature=youtu.be to see the effects of adding foam. (The swimmers were Roy Scully, Tim Marks, Ellie James and Alan Thomson; filming was by Edmond Duggan.)

The added foam adds to the cost of the canoe; about \$300-\$400 per canoe depending on how much foam is added (in this case, from behind seat 2 through to

seat 5). It also means that paddlers cannot get their hips quite as close to the hull as before. This may be an issue for racers, but not for novice paddlers. The foam is attached with contact cement and time will tell how well it holds up to use and abuse. A minor practical issue is to not bring the foam right up to the inwale; there needs to be room for hands to get a hold on the gunwale for carrying and lifting.

This idea isn't new. External sponsons have been used on canoes for over 100 years, with Sportspal being the commonest variety in recent times. Mark Lund of Edmonton, Alberta, tells me that he added foam to big canoes there more than 20 years ago, but the racers didn't like the extra distance it kept them from the gunwale. I have also seen strips of (non-closed cell) foam Zaptied to the hull of Montreal canoes, but not being glued in, the utility of this is debatable.

Cance Games Sharks and Guppies: If you've taught children at Deer Lake,

you'll likely know this game. One canoe is designated "the shark", the rest are the "guppies". The shark chases the guppies, and each time it touches one, that guppy becomes a shark too. In a matter of time, all the canoes have become sharks, chasing down the one last guppy. If you can imagine how hard it can be to keep a group of children together in a teaching situation, you might appreciate that a game of Sharks and Guppies can corral the scrum well. Thanks to Jim Slade for the description, and to Peter Hiebert for sharing the game with his peers.

Western Canoeing and Kayaking presents a Paddle Sport Expo –

on the water – April 23rd at Cultus Lake More info in next CANEWS – Mark your calendars

(And if you don't have one, Western is introducing a Paddling Calendar - \$5 - available this week)

