

LOVE AT FIRST SIGHT: ADVENTURES IN FORTITUDE

-by Leonard G. Kavanagh

"Ships are the nearest things to dreams that hands have ever made."

-Robert N. Rose

A small sailing craft is not only beautiful, it is seductive and full of strange promise and the hint of trouble.

-E .B White

Fortitude is her perfect name.

Aware of the luck that might come from a new name, we re-christened her on the new moon.

She is the original Alberg 30, built to the exact specifications of Carl Alberg by the crew under his watchful eye at the Graves Lower Yard in Marblehead Massachusetts in 1959. Cedar over oak, 41 ft boxed spruce mast, fractional rig, 3000 pounds cast iron keel. She was built at the same place Ted Hood once hung around as a boy, sweeping floors and doing odd jobs just to earn a spot and learn, a shop down the road from L Francis Herreshoff's castle.

It was love at first sight. When we discovered her in York, Maine I could immediately see her potential. Cosmetically off-putting, plagued by a dozen broken frames, rot at the stern and chain plates, the missing garboards were actually a godsend. For that allowed the keel timbers to remain strong and unaffected by freshwater that could accumulate there.

And her lines were as exquisite as the day they were drawn.



She endured her time between owners with dignity. From what I learned about the owner we met that day, as well as the man he bought her from, she was blessed with good stewards: intelligent with a vision Alberg himself had for what she was and what she could be. She was launched under the name Venture IV. Years later, owner Jonathan did an extensive rebuild and re-named her Alestra.

I thought Fortitude was a name that fit. It reflected the innate quality that saved her from the fate of so many great wooden boats. And recognized the disposition with which she would face whatever would come her way.

The previous owner, at my request, removed her big rusty inboard engine and we trucked her home to Nahant, Massachusetts. In March 2004 we set her up on the far side of our yard. It was a yard where Elliot Richardson had once played as a boy, near a house built by the sea captain reputed to be the first to fly the Stars and Stripes in San Francisco Harbor.

For this project I needed all I had learned in the '80s working on my gaff rigged cutter with Don Huston, who had rebuilt Eagle, the 1913 Wilbur Morse Friendship Sloop. The Skipper restored Eagle's crushed stem, rebuilt the keelson, and sailed her everywhere for the next forty years.

One of his better sayings was "You can get anything you want in this life - just so as long as you don't mind that dirty four letter word: w..o..r..k." Spiling planks alongside a man with that knowledge, that strength, gave truth to the saying "Iron men in wooden ships"

HOW DO YOU HAVE TIME FOR THIS?

One of the greatest under-reported issues of our time is just where physical labor and lengthy projects fit in with this age of hyper-computerized, disintermediated, always-on demands for making a living and raising a family. The surprise is: laying hands on a boat has proven to be the best preparation for dealing with the chaos out there.

You just have to steal the time from what passes for "entertainment". Not from the kids, the family, your friends, your work. The Sox and the Patriots come across great on the radio in the shop.

The work, like the sailing, is an object lesson for the children.. Our daughters, now grown women, seemed to develop their own valuable sense of self reliance from the work they were doing from a young age. They saw results.

In my business, I have come to work with prime movers in technology(such as the man who was Bill Gate's partner writing software for the first PC, the Altair) publishing (editors of the Law treatises Supreme Court Justices reference in open sessions) Lo Jack, Bose, and Internet startups. I discovered a direct link between generating revenue in the face of uncertainty and the discipline of shaping wood into a vessel that floats on its own (give or take a few bilge pumps)

Working on a boat completely dominates your attention. When time comes for a critical meeting, a negotiation in Paris or Monterrey, I find myself relaxed and poised. You are more prepared to develop workable business strategy and motivate people to carry it out. Despite what you read - there are no guarantees in life. You just work. Prudently.

A REBUILD

On Fortitude now I laminated new 6/4 x 1 oakume frames with WEST system epoxy, deploying the best materials we could find to keep her true to her original construction and make her as strong as she could be. It was good to do the heavy work in the cool of early spring mornings and evenings after work.

I reefed her seams- all 62 of them - and caulked her the way Don showed me once. That is, with the boat hanging from her stringers with no support below, just like she would be hanging free in the water. She took almost a fifth of a mile of cotton.

Wherever practical (for floors and planking) I re-used white oak and cedar harvested from La Mouette, our beloved 1890 gaff rigged cutter that Joan and I and our daughters had nurtured into her third century. Old boats never really die.

The heat arrived in time for the painting and varnishing and we launched July 29, 2004. She took up quickly at the mooring. She really loved being on her own, pointing freely into the wind. I slept aboard that first night, per tradition, "with one hand in the bilge". The pumps got a fair amount of work, but she never had to accept the generous invitation to use a slip at the nearby marina. After a week of swelling tight we stepped

her 41 foot mast to the plate on the cabin roof. She repaid us by looking beautiful from each and every point.



We loved sailing her as much as we did the rebuilding. She would go on to her lines at about 15 degrees, and hold there steady as a freight train on rails. Carl Alberg said his intention was to have a boat that was meant to be enjoyed by a family without the need of a bunch of deck apes.

With the fractional rig he preferred, she pointed, someone said, "like a Townie on steroids"

She took special pride in never- I mean NEVER - requiring the engine hung alongside as suggested by the Alberg 30 circumnavigator Yves Gelinas. In the trickiest winds she would point and respond more nimbly than the Sparkman & Stevens gold plater, the Lyle Hess cutter, and the various plastic jobs moored nearby in our harbor. We opened the last beers in salute whenever we heard their engines fire up at the channel's last dogleg.

The day we launched it was 87° and calm. When we hauled that first year, she carried three inches of snow on deck and jumped to the truck as happily as she splashed in the summer.

Upon inspection over the winter, all the work looked good.

THE STORM

On a howling July afternoon in 2008 we got the call.

As we sat down to cocktails on the front porch and watched the rain sweep down through the trees, the phone rang. It was the harbor master. "I think your mast is down."

We grabbed the inflatable strapped it to the top of the car and raced through the ever deepening puddles of the causeway. At the far end we could barely see 5 feet in front of us. As I unleashed its straps, the inflatable tried to sail off in wild pulsating gyrations. I stashed my cell phone in the crash bag and told Joan to stay safe in the car. I would call in if the situation was overwhelming. The scene was like something out of Master and Commander. Rowing downwind, the scud flew past the oars in clumps. When I got out to Fortitude I could see the mast was indeed down and hanging off the stern, held only by a mass of tangled rigging. I jumped aboard and hauled as much as I could, slipped the boom and secured the stick, leaving ten feet hanging, but tied tight, off the stern. Fortitude was being pounded by wind and waves but she was pointing up nicely now and handled that shattering force in stride.

"Must've forgotten something"...I said to myself over the gale. ..".must've forgotten to fasten something, a**h*le"

In the clear calm the next morning, as I was launching the inflatable from the beach again, two separate people came up and say they were nearby when the storm hit

"Did you see the lightning? We thought the boat exploded. We saw it hit the top of the mast. Incredible flashand the sound was like a howitzer going off."



Lightning, scientists have recently established:

- Contain X Rays and Gamma Rays, powerful enough to turn silica to glass
- A lightning bolt is one inch wide, a mile long, travels 53,000 miles per second, and delivers more than 100 million volts. The effect is one thousand times stronger than touching a 120v outlet.
- Lightning temperature averages 50,000 degrees F, four times the temperature of the surface of the sun.
- North Americans are twice as likely to die from lightning as from hurricanes, tornadoes and blizzards combined.
- The 1 Millisecond bolt contains 300 times the power it takes to kill a person in an electric chair

Had Benjamin Franklin known this ahead of time, he may have thought twice before putting any keys on any kites.

“Your boat has to be strong enough NOT for the average storm - but for the worst storm!” My brother Joseph said this more than once as we would head out for the Gulf Stream 40 miles off Nags Head on one of his boats. I thought of this often while using my father’s tools doing the re-build. Joseph was right.

THE MAST

I got the whole mast aboard, hanging it off the cabin and lashed to a boat hook aft for support. Its boxed spruce was banged up but intact. The forestay turnbuckle broke where it was melted by the lightning.

The storm itself gained a reputation on its own. It started in Southern New England, had proceeded up the coast past us and into New Hampshire where it was categorized as a full-blown force three tornado, severely damaging 200 houses. And Fortitude held her own!

Fortitude does have one of the tallest masts in the harbor, but I never thought she would end up protecting everyone else. This boat was amazing.

New turnbuckle aboard, my cousins John and Lawrence helped me to build an A Frame (thank you A30 website) right there as we hung off the mooring. In four hours we had the mast up, secured tight in perfect position and good to go.

We thought we were in the clear.

Then it happened.

THE KEEL

Three weeks later, driving across the causeway on a Friday morning, I thought her boot stripe looked high. Grounded out? At the lowest tide we have 10 feet of water under her keel. Something drift underneath? Optical illusion? I made a mental note of this as I rushed off to attend to business for the day. By late afternoon the wind had strengthened Southwest 25 and she was careening wildly at the mooring, almost as if she was trying to sail out under bare poles. I rowed out expecting the worst

But when I opened the hatch and looked down below she was dry. Dry as a bone. I sat there wondering how this could be. If anything terrible had occurred, wouldn't she be leaking? As William F. Buckley said, there are certain mysteries of the sea that shall remain forevermore, mysteries.

The next morning came up calm and clear. Rowing out, it was easy to see her boot stripe was indeed six inches too high over a flat calm harbor. As the sun rose higher I went around again. The shadow that is usually underneath the boat was no longer a shadow. The keel was gone. Gone.

I climbed aboard and set on the bunk in the bone dry cabin and stared. How could this have happened? And what was I gonna do about it?

Young Dave, who grew up working on the Java, rowed over and said he's never seen or even heard of a boat that lost its keel and didn't sink immediately. Neither did I.

Did the lightning melt the keel bolts way down inside the cast iron ballast? Who knew?

My Number One son-in-law, Eric, a tough young man of the sea in his own right, volunteered Adam to grab the Ryan Marine truck and meet me at the launch ramp for the dawn high tide.

Once that was settled, it was almost fun. Sitting high on the foredeck preparing the lines in a moderate 15 kt wind, the boat rolled completely from one side to other every ten seconds. There was no longer anything counter-balancing the force of the mast. It felt like rounding the Horn on a windjammer. It was a startling demonstration of Carl Alberg's genius. For her lines, her beautiful lines would capture and hold her right there at the edge of the roll, and come back despite the fact that she was so badly crippled.

Adam proved his skill taking her onto the truck, despite having but sixteen inches (instead of seven and a half feet) of surface to land on the trailer cross beam

We blocked her up in the yard as best we could and laid full run stringers between her hull and the jack stands, feeling like we were living through some WWII movie, improvising solutions under battle conditions.

Diver Doug went down a few days later. Thankfully he was able to find the keel fifteen feet from the mooring anchor. She was laying flat in the mud. He made up a wire bridle, yoked it tight around, and set two marker buoys.

By now, to be honest, I was totally dispirited. When the gods drop lightning on your boat, are they trying to give you a sign? Just maybe?

I left it there and began building a new boat to my own design. I drew it up as a cross between Uffa Fox's original International 14 and a Townie. It was to be named Patience.

But the countervailing sign arrived when I visited the Maine Boatbuilder Show in March 2010. I met Gordon Laco, whose name I had seen many times on the Alberg30 mailing list. I had heard of his work with a commendably conscientious crew to achieve the best accuracy circumstances allowed portraying the sailors and ships in the Russell Crowe film Master and Commander. I related my sad story. He listened politely and said, in so many words- how could I live with myself if I didn't at least try to get her back? He was right.



Further, he strongly suggested that I write up the details for the Alberg30 people. My habit is to devote all my energy to working and no time to describing that work. Over the years, I noticed an inverse relationship between the number of pictures people take of their progress and the results achieved. Compromise number one thousand five: I would write this which you read when-and -if- the keel was returned to its proper place.

KEEL HAUL

Now I was motivated again. I did the calculations with Gregg at the Salem beer Works where we always took our eighteen month old grandson Kyle for lunch. I found 40 gallon barrels in good shape at Ed Berman's business. Six would be sufficient to lift 3000 pounds. We designed a rig for eight.

When the weather broke, I rowed the eight barrel float out to the marker at low tide. Ed Locke, our former harbormaster, volunteered a great set of chains for beefing up the haul rig. Diver Doug swam down again to double up the chains to the bridle. Later I attached the barrels and went to the beach to watch in safety.

At three quarter tide the barrels sank below the surface. And stayed there. After three more tides, and adding two more barrels, it was clear that the suction factor required something more drastic.

Like a converted landing craft that had a mooring pulling rig rated for nine tons. In May, on a good high tide, Eric cruised over from Marblehead with Damon and his beautiful Northeast Moorings rig.



This time I swam down and attached a one inch hawser to the bridle. Eric and Damon fired up the bull winch. The barge started to dip down a few degrees. Then, like the Great White Whale breaching, the nose of our 3,000 keel came up a foot out of the water.



They maneuvered it over to the head of the ramp and let her loose. As beautiful as a dream, I couldn't believe we had it back.

At low tide, I had the wrecker from Jim McLaughlin's garage come down, lay it on the bar, and bring it back to the sled I had set up ten feet ahead of Fortitude's bow. The sled

was built from the long pallet on which my good neighbor John's lumber arrived when he was building his deck next door.



When I cleaned the keel, I was amazed to discover two things:

Three of the bolts were vaporized. Lightning!

Four were corroded to less than 1/2" diameter. Old Age!



The only guess I could make – it was equal parts explosive force and electric current that caused her to drop her ballast.

I sought advice from what I considered the two best contributors on the Wooden Boat Forum and proceeded. Paladin, who had run boat yards in the Far East, and Ian, who did a similar keel job on his own boat on Cape Cod after Hurricane Bob, gave almost the same answers.

How deep the tap? Twice the diameter of the bolt. I drilled new holes $3\frac{3}{4}$ inches down. They called it cast iron, but the ballast was actually low carbon steel. It snapped bits and wore out the drills I had on hand. Fortunately, Mike Connolly, a great boat builder in town, lent me the use of his Milwaukee "Super Hawg". That monster enabled me to reduce the drilling time to 30 minutes per hole. And saved my carpal tunnel for better things



My good neighbor John gave me valuable help as I jacked the sled onto the rollers, dragged it forward with a come along, and jacked the $1\frac{1}{2}$ ton keel to within four inches of the final position.

With a ship's auger I drilled down from inside through 4 to 8 inches of her sloping oak keelson and dropped the new $\frac{3}{4}$ " steel threaded rods through.

I filled the tapped holes with West Epoxy on a dry 93 degree morning, and threaded the rods tight. When it cured, I smeared 3M 5200 over both surfaces, jacked the ballast tight to the oak, blocked her up, and wound the bolts to 100 foot pounds from the inside.



How strong was she now? My friend Jody lent me his jack stands to provide an extra measure of safety to what we already had under the bilge stringers. Next day I jacked her up six inches and removed the blocks. Joan and I watched carefully as I released that jack with a long, long extension bar and dropped her hard onto the stringers. The first time we weren't sure how it behaved, we were so nervous. So we did it two times more. She held beautifully. The bolt torque from inside didn't change either.

All I wanted was to get ten sailing trips with Fortitude before December. The weekend the truck was to arrive, late August, was the weekend Hurricane Earl was forecast. The trucks were totally booked for hauling boats out, not putting boats in.

Even our boat hauler, who could have used the money, said it was crazy to try to squeeze sailing time for the season. Five more hurricanes were being predicted by the National Weather Service. So, as usual, in the hardest way, Fortitude and I were directed to do the right thing.

Like the old red Sox -- Wait Till Next Year



Standing in that yard in York those many seasons ago, it was love at first sight.

In [French](#) and [Italian](#), the expression for "Love at first sight" is *Coup de foudre* and *Colpo di fulmine*, respectively, which literally translated means "lightning strike."

Who knew?