

Blade Barge

by **Z**

Last check -2 packs of wooden boat plugs, some bigger cones to plug bigger holes, and one piece of plywood with some foam backing and threaded rod patch even large holes if it needs to be. Almost on the road throwing some underwater epoxy to be well prepared to handle the call.

Heading down to the city responding the call to put some patch on the barge which is taking on water.

Not my first rodeo, I'm well prepared, and I can even handle a bigger patch.

This is how it started for the diver on this call. Little did I know that the barge is 10 ft. shy of 300 ft. and only half the deck is visible. Barge walls are 20 ft. tall and completely underwater.

Where is that barge??? It is hard to believe that this small Island of the steel deck is the barge. Completely flush with the mighty Hudson. Looking back at the pickup truck all "well prepared patches" seems obsolete.

There are some pumps on top of the deck screaming madly and water is gushing out from the hoses.

Seems like a desperate weeping of the monster. As the tide reseeds a little more of the deck is awash.

Some hatches otherwise under the water are now offering a peek inside the rusty giant.

Stuffing hoses from the pumps into the hatch openings and over 10 pumps are rumbling the deck and throwing water back to the Hudson in a desperate attempt to refloat the giant.

We all hope that massive steel monster will start emerging from the water. Three days later and many gallons of gasoline burned by the pumps no one imagines that days will become weeks. The Mighty Hudson has its claim on this one.

As the tide reseeds, I notice some hand sized holes on the side of the barge wall, and see perfect fit for my "big" cone foam plugs. With lots of enthusiasm, they take a place in the rusty walls and pumps go mad again, rumbling pumping water out.

Finally, the decision is made to move our work operation for nighttime when the river is at rest, and we can also light up the

inside of the barge. At low tide, the diver jumps into the river and can see the light penetrating throughout the holes. Great way to locate holes! Night is working great for us so far.

Alarm goes off and not much later I'm in the truck driving. I feel quite tired and sleepy and at about 2 a.m. taking a bath in the river to investigate the carnage. River is calm, hmmm I rather be in bed.

Massive 5000 lumens light goes inside to the barge belly and I can begin to see light show on the other side.

OMG- marking on the barge sides the location of all holes. Some are small 4x4 inch going to 2x 4 ft.!!!

And more and more and even more. Over 40 ft. of the side is rusted and was patched many times before. Hudson is venturing in and gushing out with brute force with every wake. Nothing stays in the way of the mass of water.

As the water rises against the side of the barge it rushes in with whirlpool forming on top.

Very easy to take a ride with it. Not sure how navigating over the rusty edges of the holes would go.

My thoughts are more like vegetable shredder.... Does not get much better when the wake recedes and water is seeking its way out of the barge-walls are flexing some about 8 inches in and out. Holes are opening and closing almost like giant jaws.

As I'm holding onto the sides of the hole, water rushes in with the force around me taking my mask out and on its way out I fly like a kite. My mask is pushed against my face when I look directly in the giant jaws. I find it somehow fun and refreshing. I'm seeing a lot of light. It looks beautiful as the river gets illuminated from the side of the barge. Following new positions of the light, I keep marking the locations of the holes. Some looks easy to deal with. I'm noticing shapes of the holes, sea horse, giant fish and so on. None of these images are easing my mind thou.

At the low tide, approximately 2 ft. of the side of the barge is visible above the water line rest of its 20 ft. is below water with giant holes.

By 4 a.m., the tides comes up again, I'm tired and the deck of the barge is crayoned with yellow marker to locate and describe the underwater carnage. At first it looks like a kid's playground... we are engaged.

Night has its charm in NY City, and the river is nothing but gentle. Down below I have great Caribbean visibility with my head lamp, just shy of 10 inches.

Lots of questions, constructive thinking, my brain is restless and a short dream about how to make it happen is what makes my 3 hrs. rest after I got home. By daylight we are all back, pick-up trucks loaded with 2x4 lumber, plywood, hand tools, carpentry setups, all hardware, screws and so on...

A Home Depot sign would be appropriate, that's is how much stuff we have here.

Phone call discussion yielded to this scenario and we start again.

It will be easy -screw plywood over the holes and pump the water out. That's it.

Now a diver goes in.

Being tossed around like a leaf -this is the Hudson River being in business-ferries, charters, big DEP vessels, tug boats, and strong wind gives way to 5 ft. wakes.

I'm being thrown 10 ft. each direction along the side of the barge catching myself on the beams extending over the barge



deck. Many times just not to hit my head against them as the water literally throws me 5 ft. up and gives up on me when I go down again. My foot just caught the edge of the big hole on the side of the barge as I went down....I take it as a warning sign.

Plywood attached to the 2x4 lumber goes down from the top deck against the hull where the hole is.

I go down holding onto the lumber and began to drill holes through plywood and steel. My shoulders is in pain as I hold myself pushing against the drill, kicking, swimming, and moving my whole body to compensate for the surge. Seeing absolutely nothing. I only know when my drill bit breaks. Coming up and after few broken bits, plywood catches wake from the side and like a giant hand pushes me away along the side of the barge. That is it!!!

I'm out of the water, deck of the barge is awash as the tide is still low. Looking into the hatch on the side of the barge I see that water is below the deck inside of the barge approx. 2-3 ft. down. I see whirlpools as the Hudson makes its way in, and when it rushes out. Yes this is the side of the barge where we need to patch. I'm inside.

Light, tools, tape measure all with me as I proceed deeper down inside the barge. Pipes, broken pieces of steel, all in the way. Climbing down underwater, stepping on the side beams. I feel the water gushing around my legs as I'm getting closer to the holes. Now water wiggles my mask. I'm inside the giant mouth. Big rusted out opening is right in front of me.

Holding onto the sides of the hole inside the barge, water pushes my mask against my face and quickly returning its favor trying to take it off on the way out. Wall is flexing, and a lot!!!

I take out the tape measure and measure the hole. Next step: pushing a plywood against the opening with brace against the opposite wall-and it seems to work. Great job up there as they attached the brace on the hinge on the plywood so I could wedge it against the opposite wall, and it holds!!!! This patch is approx. 2x2 ft. Underwater cordless screw gun gets my grip, my feet against some metal piece and I squeeze the trigger and start drilling the hole to begin a merge of the plywood with the steel. It is hard task. Steel is still hard, and the surge is strong even inside the barge. I can feel how the wall bulges in

and out. Swapping the drill for an impact gun, loading the self-taping metal screw, and after about the 5th one, this one begins to make a bond between the barge and the wood. Seems like that neither the barge nor plywood like this merge! I'm pushing hard and impact is struggling. 2 inch screw is making its way in. Unwillingly, but now it is tight. Fantastic, this will work! I'm convinced. So far 10 broken drill bits, 4 hrs. of work, taking a beating the first screw is in. I'm heading up. My head almost collided with the barge ceiling as the water got up inside because the tide is going up. Tight space in a sunken vessel, with little space above. It is like in the movies..."you pick one "...

There is maybe 10 inches from the ceiling. Swimming to the hatch awaited by top support crew.

Crawling out and the side beam I'm standing on underwater just broke. My suit rips as my hands are out of the hatch and my torso is half way down. Bracing my knees against the rusty walls, getting hatches deck bolts pinched into to my underarms I lift myself up. I'm glad I was not told that this would be the scenario for next 3 + weeks ...

Well, today we got proof of what works. Patching will begin at night time. It is better to locate the holes with light, I get better visibility underwater, and sneaking up on the resting Hudson pays off with minimum surge= we can make progress.

After each night my routine is conducted by good planning, getting all my dive tanks filled up, dive gear maintenance, lights, tools, charged, and cleaned up. Now I'm packed again and ready to carry it all down 2 flights of stairs and go for the night run. It is easier now rather than brining it all up after coming exhausted after night work. All that takes away from my resting time. We have to be working with the tide, low tide. Tonight I meet with top support crew at 8 p.m. It takes a good effort to set everything up. Everything is precisely organized: 3 different kinds of drill bits, screws and washers all sized up so I can keep going. By 9p.m., the barge deck is filled with tools right next to the yellow crayon marks locating the holes down below-we are engaging in the game. Heavy rain comes right with the storm. Counting less than 10 seconds between lighting and the thunder. Storm is close- just a little over 2 miles.

Sky is illuminated by lightning, so is the deck of the steel barge and tall steel barge spuds. Earning on the smart side we step out



from the magnetic tray stuck to the side of the barge and now the impact gun is having its time driving the screw in. Each patch takes about 40 drills and screws with washers. Drills break often, and we use a lot of them. It is getting harder to find a Home Depot having any of those bits left. Every day I buy about 20! I come up, my crew is there loading the tray with more screws, and plywood is handed to me cut to the size I measured. My shoulders are in severe pain.

The River is kind to us during the night. We installed 2 patches and with the tide coming up flooding the top deck, this is it for this trip.

It is around 3 a.m. and my truck is loaded, well to be exact, all the stuff is thrown in, to be cleaned, organized, and washed to be ready for the next one. It takes me 3 hrs. to get back,

taking naps on the side of the road. Getting shopping done and everything else ready and later that afternoon, I crash into bed, just to be back before 9 p.m. This is the second week, and I'm starting to feel it. At least I'm getting fresher top side help. The key is for me to not to loose it and keep it calm in any situation. I feel overworked. On a rare occasion it takes 2 shifts at the same day. Starting at 4 a.m. finishing with the high tide later, and coming back the same day in the evening as tide is low again. That is a real test! 50 miles later I get some rest for 2 hrs. and 100 miles in total I'm back in the game. I know that big day is coming. Patches are taking a beating by the busy Hudson River.

of the barge and wait out the storm on land. Count is now well over 20 seconds. Stronger rain with less lighting. We are going for it! My female help is the brave one! I'm in the water and light is on inside of the barge. The water gets illuminated like under some luxury yacht, as the light passes through the holes to the outside of the barge.

Clamping long 2x4 lumber from the top deck down to the mud line about 14 ft. below the water right next to the holes. Adding some clamps as handles for my one arm pull ups, while my other hand is squeezing the trigger of the drill and pushing the bit to go through the plywood and barge steel. Grabbing a screw



Last day or I shall say last night of patching. Last few feet to go, my arm tendons are hurt and my arm gets numb. I get out of the water unable to hold the drill. Do not know what to do. Taking a 5 minute break -and strong imagination of my pain free arm takes place! Back down there holding a drill and going again. We cannot lose it now! Morning will be testimony of our efforts. Big pumps I suggested are delayed for one more day. Next day is here and I moved inside the barge to continue. We are able to pump one compartment dry and surrounding outside water line is 20 feet higher. Giant force of water is pushing against the walls. Water is gushing through small holes the size of a fist, splashing all over my body, while pushing a piece of plywood against it bracing it and screwing it in. Feels like saving a submarine except here it is all rusty. Water is gushing in and one plywood after another quiets the loud water sound. It is hard to comprehend that there is a whole river outside separated only by thin wall of rusty steel. Ok I'm done, I'm out of there, walls are flexing with each wake out there. Crawling through out the openings, climbing upward using the steel wall beams. Whenever they break under my feet, I catch myself somewhere on another rusty piece hoping this one is good one. About 8 more feet and I'm up. Pushing myself up, through the hatch, my strength is gone. It is replaced with achy muscles.

Pumps are confirmed and next morning all gets assembled, heavy houses connected, and dropped in the hatches. Every pump is deployed, about 12 smaller ones and 2 big ones on shore. We are ready to remove about 7000 Gallons per minute through over 300 ft. of hoses. Lots of work to put this maze together. Rumble is loud!

Now we are all together on the barge and I get to meet everyone who was helping me at the same time here on the deck.

Water is being pumped all over the place, and the river seems to pick up on its wakes today! Just like it is fighting against its defeat. Battle is on! All we want to do is to reunite the trapped river back with its mighty Hudson majesty.

Running around with gas tanks and filing thirsty pumps is a full task for one crew member at all times. It is over an hour and we go to check our marks on the barge spud. Yellow line says: 1.p.m. and here we go! Barge moved up about 2 inches!!! We are starting to feel great joy and relief. More marks are being drawn, and the yellow marker is in high demand now as a symbol of good news. It feels terrific to make mark after mark. By 10 pm 4 headlamps are running around moving hoses and keeping pumps going. There are a few more holes to be patched. Tips of installed patches are starting to emerge from the water. Barge is about 6 feet up. "Okay one more patch," I say quickly! Running to check the size of the plywood before I go back in the water. We have to be fast, one pump quits and we are not gaining anymore! I follow my headlamp, eying the size of the patch, as my buddy is bringing it over. It looks good. I'm focused on it as I walk over the running pump, the patch suddenly disappears. With the pain in my elbow and chest I'm face down on the deck exhaling heavily into the water puddle. All I hear is the pump rumble, and now I hear, "are you OK???" I realized that I fell through the hatch. I'm signaling

the diver signal OK sign, and in an effort to get up, my right shoulder is badly hurt and my arm is numb. Well, finally I got to stop for some time. Get me that plywood we have to put it in. Being helped to my feet, adrenaline rush does its trick and I'm installing the last patch.

Holding my other hand with another one trigger gets pressed on the drill and each hole takes new sharp bit because I cannot press any more. Patch is in and I get help to come up. Past midnight, ironically we awaken the monster! The huge 20 ft. tall barge emerged into the night. With the city lights in the background, it feels like riding a Godzilla when it slightly moves side to side with wakes of the river. It is an amazing feeling! Our band of brothers and one sister is dead tired, pumps gets switched off for the most part and we are all enjoying the NY city sight from our own ship... at least for now! I feel fortunate to be part of such an operation!!! Colossal 290 feet of the aged steel barge is again seeing the sight of New York City. The next day I understood the magnitude of the barge. This is happy picture time, from every angle, every detail. It is huge! Barge is proudly displaying all patches like a veteran still standing. They are all well above water with hundreds of screws. I got one comment that screws are all in a nice straight line. Yes that is true... I'm proud of everyone I worked with.

It is worth of a good party. Filled with joy, coming the next day to take more even pictures, now in nice clothes and clean Poseidon T shirt. Shoulder still reminds me of the massive successful operation. Sleep was 4 hrs. on average, close to 800 screws, 3 weeks of effort and millions of gallons of water moved. More than a week of recovery time for me. Time well used to put all expenses together and final bill. All went smooth and I even received an email from one of the owners. "Thanks for the effort. " Nothing matters to me now, the monster is up as an undisputable memo of good planning, determination, great team effort and perseverance!!! Another day in the waters of the Big Apple. By Diver "Z" Marine Diving Service. "Saving little bag with wooden plugs for next one..."

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