Hi Eric,
I've been bogged down but here's a quick summary of our recovery routine on the Endeavor with some pictures. The whole operation takes about 30-45 min after we grapple the rig.

1. We use a grappling hook + line to grab the rig and then to pull it to the stbd quarter of the ship. We have a string of small floats between the buoy and our hard hats + down line, which gives us a good target for the grappling hook.

2. We have a hook tied off to the end of the capstan line, which runs to a big block on the A-frame and is then laid out along the railing to the area where we do our hooking on the stbd quarter. We use a pole to attach the hook to one of several lines on the buoy, then let it stream aft after we get everything attached.

We will use our starboard crane for deployment / recovery

3. We haul in with the capstan until the buoy is up out of the water, then attach a tag line (or two if it's rough) to a pear link at the top of the down line below the buoy. We then haul in and make the tag line(s) fast to a deck cleat, which takes the strain and lets us lower the buoy to the deck.

4, We break the shackles on either side of the buoy, move the buoy out the way (2 people can do this), then join the down line to the capstan line.

5. We haul in with the capstan, pausing to remove the floats. Sometimes, if it's really calm, we just haul in the line manually, make it fast, and remove the floats from the pile of line on deck. We have a yale grip below the floats, and have also used running hitches to attach to the down line. Either way, it's easy to take the load if conditions allow us to haul the line in by hand. This part of the operation usually takes just a few minutes in all.

6. Once the floats are all off, we haul in until the hard hats are out of the water, take the strain with a tag line run through a pear link below the hard hats, remove the hard hats (shackles on both ends), then remake the line.

7. Once the hard hats are gone, we haul in till we have the trap at the surface. We stow the down line in a deck box (figure-8 arrangement).

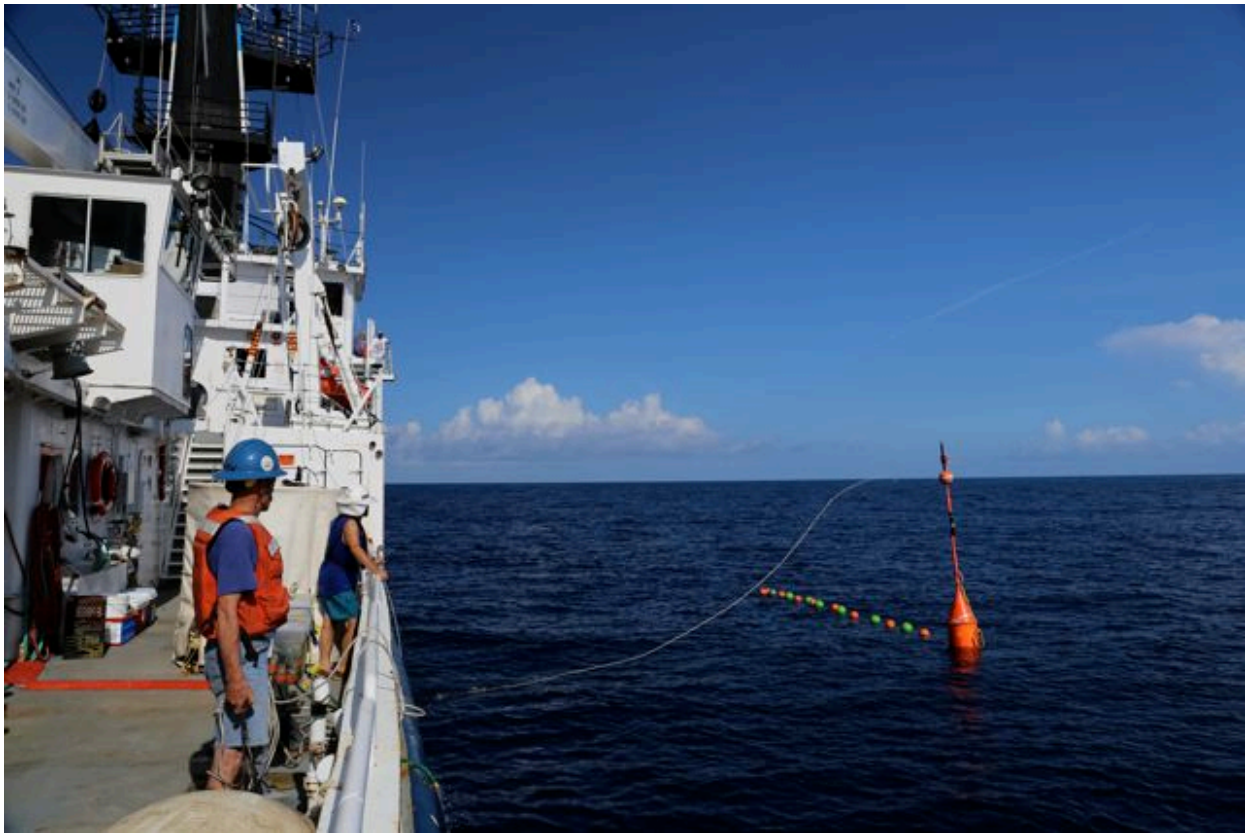
8. We bring the PIT cross up above water, get a tag line underneath it (we now have a pear link below the trap for easy attachment -- we didn't have that in the photo I've attached) so that we can keep the cross more or less horizontal, then run in the A-frame till the cross is at a convenient working spot on the fantail. We remove the tubes, then the cross.

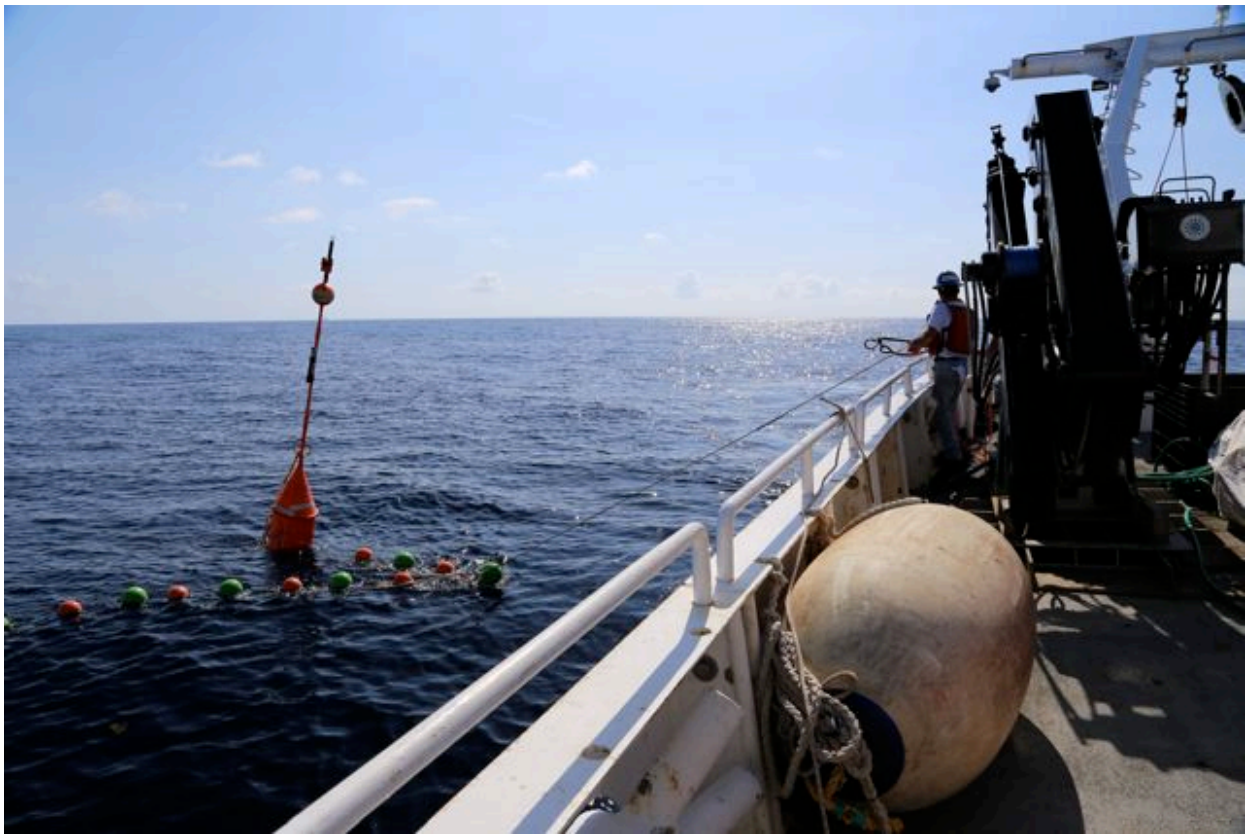
9. After the cross is removed, there's only a weight at the end of the down line.

I'd estimate that the buoy weighs perhaps 100 lb in air, and that our bottom weight comes to about 60-80 lb in air. The rest of the weight comes from the two hard hats, the series of floats (just a couple of pounds each in air, I'd guess), and the assorted hardware. I can try to come up with better estimates if you need, but the whole thing is pretty light.

Let me know if you need any other info. I have lots of other pics, but these were ones I could lay hands on immediately.

cheers,
-Joe



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HANDS
SWL
3—13

On Jan 7, 2014, at 3:17 PM, Eric Benway wrote:

Hello Joe,

Would it be possible to get some info or pictures on your Pit Traps and Spar buoy? Sizes, weights, pictures?

Is there a way to hook into the spar buoy when recovering?

Thanks
Eric

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