

# SCOUT Projects:

## *Solo Docking Line Holders*

*m/v SCOUT (Great Harbour N37)*

*Ray Henry*

### Description

The GH N37 has a pilothouse door on the starboard side only. Another owner mentioned that when solo docking, and needing to come in port side-to, a way to have some lines out and available for the dockhands would be nice. One or two removable brackets or “arms” that could be placed on the port side rail with pre-fed lines from the bow and stern cleats would be the ticket. They should not be permanent, and should be easy to deploy while idling outside a marina or dock.

I decided to see what I could come up with cheaply for his and my own use.

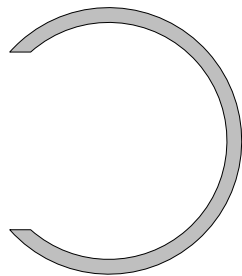
### Parts Used (for each arm)

1. Two 2in sections of 1-1/2” PVC pipe
2. Three 2in sections of 3/4” PVC pipe
3. One 8in section of 3/4” PVC pipe
4. One 1-1/2”-to-3/4” PVC tee fitting
5. Three 45 degree 3/4” PVC elbow fittings
6. One 3/4” PVC end cap
7. PVC glue

The PVC parts were less than \$10 for each arm.

### Design

I had made other PVC clips for the 1-5/8” rail on the Great Harbour boats to mount solar lights, etc. using 1-1/2” PVC with a section cut out.



I thought that this same clip mechanism could be used. I thought with the weight of the dock line on a lever arm, it could be braced by locating the clip at a station to prevent rotation.

I arbitrarily used an 8" section of pipe for the arm, and then the 45 degree elbows to create a small hook area to put the coiled dock line into.

I would have to glue a couple sections of the 1-1/2" pipe into the tee in order to use it as a clamp to extend the hook arm. I could then cut the pipes and tee at the same time to for the clip, with the 3/4" stub pointing the right way.

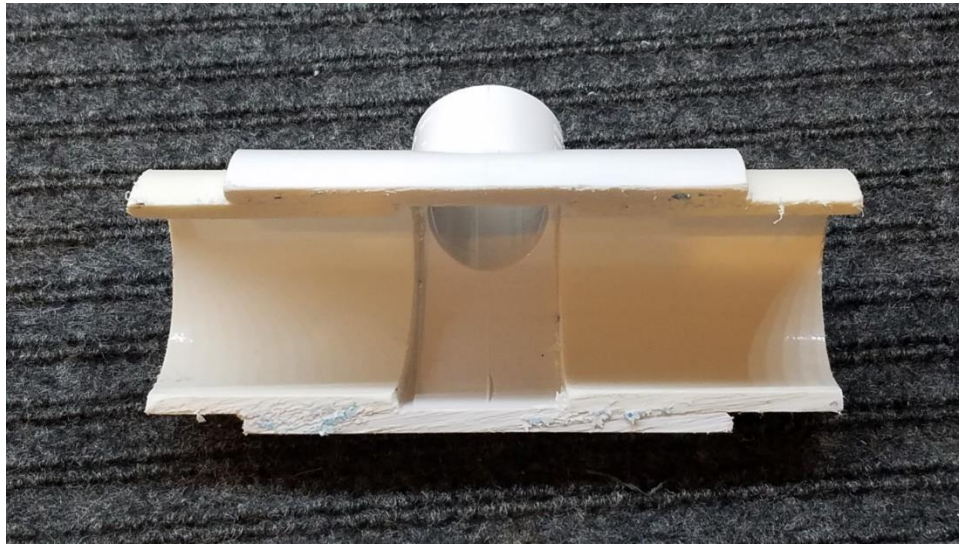
There is an inverse tradeoff between clamping pressure and the ability to remove the clip once connected by varying the amount of the cutout and/or the length of the PVC pipe along the rail. I arbitrarily chose about 45 degrees to be removed.



## Assembly

I first glued in the two short sections of 1-1/2" pipe into either end of the tee fitting and then cut the clip section out once the glue dried using a hacksaw.



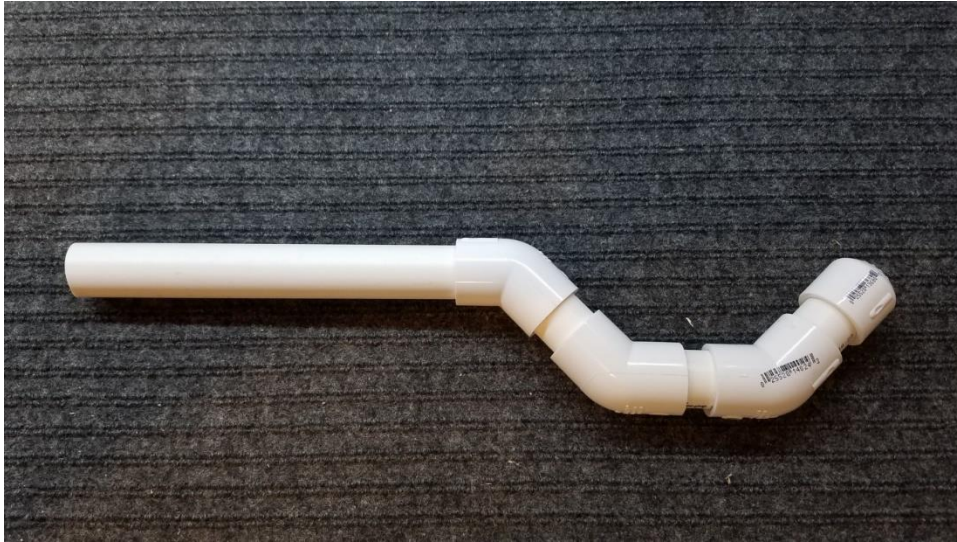


I then cut a semi-circle out of the front so that the clip could be aligned with a station when installed and prevent it from rotating around the rail. Sanded and rounded all the edges and corners.

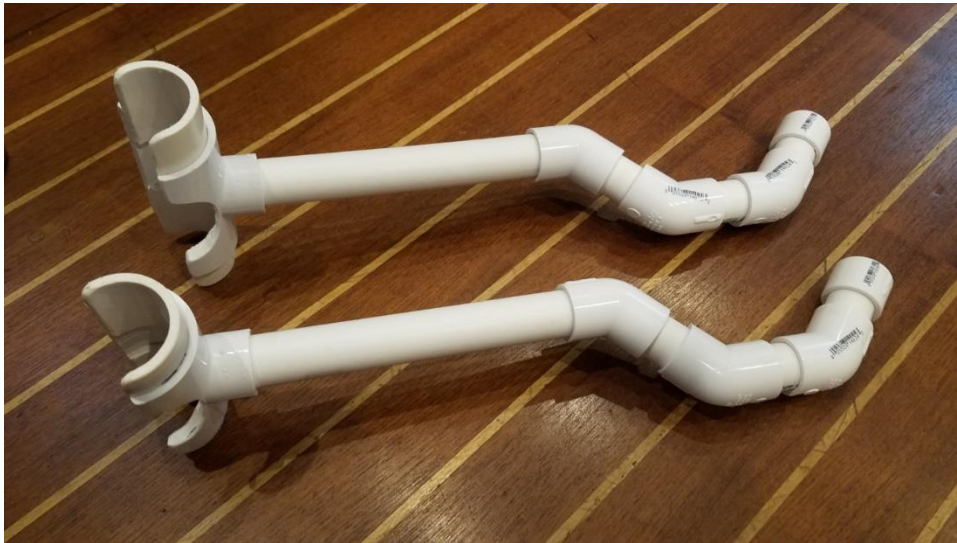




I then assembled the arm using the 8" and three 2" sections of 3/4" PVC and the associated fittings.

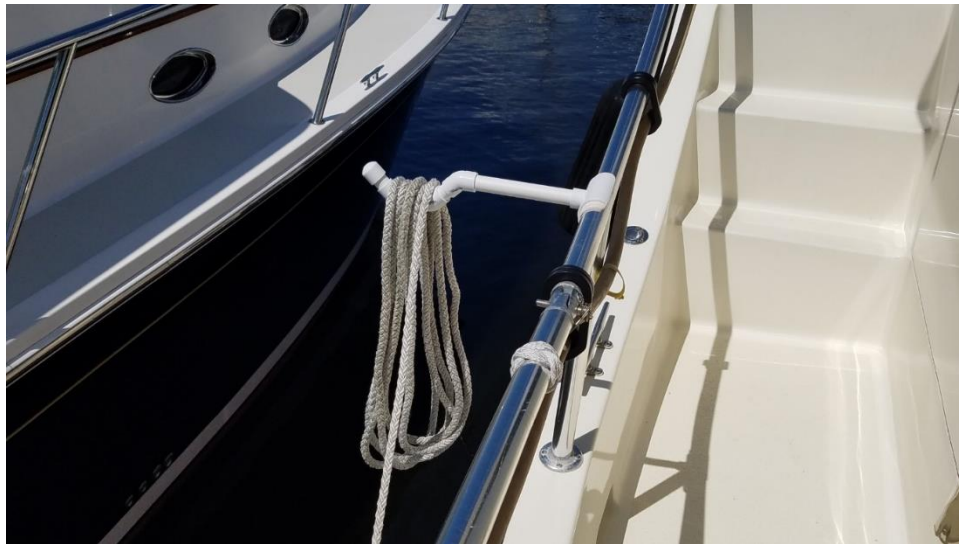


Finally, I inserted the hook arms into the tee fittings. I did not use glue here, so that they could be removed and adjusted or the tee fitting changed if things didn't work out quite right.



## Completion

The arms seem like they will do well. There are two mid-ships stations that can be used, one for the bow line and one for the stern.



### Comments and do-overs

It appears that the hooks work really well but may be just a bit too easily popped off if a large, heavy wet coil of line is used, or if someone pulls on it aggressively. Otherwise, the clip on/off and stow easily and the dip is just enough for a bit of coiled line. The station base keeps the clip from rotating downward.

I think I will make some new tee fittings eventually with a little more circumference (grip strength) to them – keeping in mind that they may be harder to clip on and remove.