An Inexpensive 3-Position Offhand Stand

As a beginning 3-Position Air Rifle coach I wanted to get my shooters firing without spending a bunch of money up front. Most of our cash went into buying rifles, so even now we make do with “home-built” accessories. One of the more successful projects is our shooting buckets. These $25 offhand stands work very well, and many of my shooters prefer them to the $100 commercial stands. Some of our smallbore shooters borrow these as well.

This simple stand can be made from parts purchased at your local hardware store. The parts list is pretty simple:

1 ea – 5 gal bucket *(paint it or leave it VISIBLE!)*
1 ea – 4 foot ¾” extending painters pole
1 ea – 1” pipe flange
1 ea – 8-inch 1” pipe nipple
1 ea – 1-1/2” PVC coupler *(not shown)*
1 ea – 1” PVC pipe adapter
1 ea – ¾” PVC slip joint
1 pkg – wooden fittings for painters pole

plywood/OSB/chipboard for flange base

drywall screws & glue

The first step is to measure the inside bottom of your bucket. Surprise, surprise, they are not all the same! Then cut a few circles out of the chipboard and glue them together to make a steady base. I use my router with a circle cutting guide to make nice circles.
Next, screw the pipe flange to the center of the wooden circle stack and screw in the pipe nipple and the PVC nipple adapter.

Now you have to modify the slip joint. The slip joint holds the extending pole, but it must attach to the PVC adapter. Here you get a 2-for-1 … we saw the slip joint in half. Use the 1-1/2” PVC coupler to join the PVC pipe adapter and the slip ring using PVC pipe glue. I like to insert the extending pole in the assembly as it dries to hold the proper alignment.

After these are dry, I place them into a bucket and screw them in from the sides of the bucket. If more weight is required to prevent tipping, a sandbag, gravel or even a 5 lb round weight can be added. We use these without extra weights.
Next you make the top and ammo holders. I use a 4x6 piece of ¾ plywood for these as I want some stability.

I cut the top and mount it to the painter pole adapters. I also like to get some old (or cheap) mousepads and glue fit pieces to the top so the guns do not slip. If you do not have any old mousepads, office supply stores often have their brand name one for about $3. You can get two stand tops covered with one of these.

I then cut out the ammo holders to grip the top portion of the extendable pole. I use a 3/16 bolt and wing-nut to clamp the holder in place. I’ve also stapled Velcro to the top of the pictured holder and then can place the other side of the tape to a pellet tin or pellet holder to keep it from falling off during slight bumps.

As you can see the stand also doubles to keep the rifle off the ground, as well as being a convenient storage bucket to haul equipment to and from the line. My shooter can put their pellets, gloves, sweatshirt and other items in the bucket and keep them from being lost (hopefully). If you have to travel to matches, the parts easily come apart, the buckets can be stacked, and many of these can be transported together.

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