

## Modify the MFJ-1919EX Mast For Use With the Buddipole

Al Duncan VE3RRD

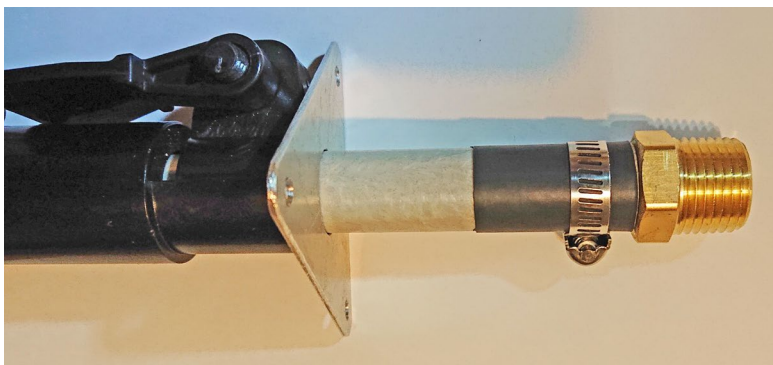
I recently acquired an almost new MFJ-1919EX heavy duty tripod with fibreglass telescoping mast that extends to 18 feet. The top section tube is 3/4 inch outside diameter with a 1/2 inch inside diameter, but the only way I could see to mount an antenna to it was with clamps, which wouldn't work very well for the Buddipole.

The solution was a 1/2 inch insert to 1/2 inch male pipe thread brass hose connector. The one I found at Home Hardware (D125-8D-BRASS, Home Hardware #8690179) would extend down into the top fibreglass section far enough for strength and screwed into the Buddipole VersaTee securely.

I had to file the ridges slightly so that it would fit snugly so it can't turn, but not too tightly into the mast top section as it could crack the fibreglass.



Top mast section and 1/2 inch to 1/2 inch adapter



Finished installation with heat-shrink and hose clamp added, also showing my aluminum guy attachment plate



Guy ropes/cords will be required when using this fully extended outdoors. A triangular piece of heavy plastic or a piece of aluminum with a 3/4 inch hole in the centre and smaller holes in each corner can be used. I hack-sawed out a triangular piece of 1/16 inch thick aluminum about 3-1/4 inches on a side for my guy attachment plate. The top mast section can be removed and the guying plate slipped over the bottom end.

I added a small hose clamp to help prevent damage to the fibreglass from the torque produced on a windy day. The top end of the tube was filled with a hard glue-like substance so I flipped it over and used the other end for the adapter. I drilled a hole through the glue to allow moisture to drain, but I will be sealing the hole in the 1/2 inch brass adapter.



Raising the Buddipole up to double the standard 9 foot height definitely improves its performance when using it with my KX3. I also have the long telescopic whips and an extra 22 inch antenna arm for each side plus the TRSB to create what some have called "the Super Deluxe Buddipole". The extra wind loading and weight with everything attached does require a sturdy tripod and mast as it is almost 27 feet from tip to tip with whips fully extended. The rotating arm kit is needed since you must angle the antenna arms up one notch to compensate for the sag. I use an 18 inch long screw-in type dog anchor under the tripod, attached with a hefty bungee cord to keep the fully loaded mast from possibly tipping over as I am raising/lowering the antenna. A suitable weight could be used instead of the dog anchor if setting up on a cement or paved surface, although you may have to be creative when finding the three guy anchor points. I use a one inch S-hook with one end squeezed closed on the end of each guy cord for easy attachment to the guy plate.