To construct the 160m loop you'll need 20ft on RG-59. Fold the RG-59 in half. On the 160m loop, it would be about 10ft from the end. On the 80m loop, it would be about 5 ft. from the end. You then mark the center, then measure 1/2 an inch on both sides. Strip away the outer cable, the braid, and then the foil covering the center conductor insulation. I then usually use heat shrink to weatherproof what I've cut away. Then cut some schedule 40 one inch PVC pipe into 3 lengths. Each should be 45 inches long. Cut one to 56 inches. That one will be the mast. Assemble the lengths you cut into a "T" configuration. Measure from the center 43 1/4 inches on the three 45 inch lengths. Drill a hole large enough to pass through the RG-59. For the 80m loop, drill three holes 20 1/2 inches measured from the center of the "T". Loop the 20ft RG-59 through the holes drilled at 43 1/4 inches, then loop the 10ft length through the holes drilled at 20 1/2 inches. Install the male type "f" and weather boots on the RG-59 you just looped through the "T". Attach the 20ft cable to the 160m matching box. Also do the same with the 80m box. I find it easier to aim the 160m box with the SO-239 down. And the 80m box with the SO-239 up. That way the it will keep the harness short. Drill the mounting holes through the box, once you pull the loop tight. To tune the loops, attach each loop separately to your transceiver. DO NOT APPLY RF TO THE LOOP. This will damage the components, and probably your transceiver. Place the dial of your transceiver to the part of the band you want to use the loop on. Then adjust the the trimmer capacitor for maximum noise. Do this for both loops. Then attach the harness. The
loops should be ready for use. I usually weatherproof the boxes and frame. And I add a wood dowling to strengthen the mast. Construction of the boxes appears on the next page.