

Amateur Antenna Tripod

This project produces a sturdy tripod for small vertical antenna support using readily available electrical metal tubing (EMT) or conduit, some common hardware, and a tripod plate fabricated and made available by the Honolulu Emergency Amateur Radio Club. Order information for the special EARC tripod plate is included on the last page. The lower left photo shows the assembled tripod. The right photo shows the tripod supporting a 20 foot fiberglass fishing pole which can easily support a vertical wire HF antenna.



Assembly of Tripod Plate The three outer holes accept screw type ½" conduit connectors for the legs, and the center hole accepts a ½" conduit connector to support a 30" section of conduit, which in turn supports the fiberglass pole. The small hole is for a #10 machine screw, hex nut and wing nut, and serves as a counter poise connection point.

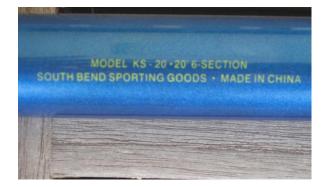
The EARC tripod plate is on the left. The connectors should be securely tightened with the set screws pointing outward for easy access when installing and removing the legs.



Leg Construction Cut a 10' section of ½" EMT into 4 pieces 30" in length. This creates 3 legs, and a center support section. Slide a rubber chair tip onto one end of each leg, install the legs and the center vertical support pole, and your tripod is complete.

The fiberglass pole used in this example is *Kwik Stix* by South Bend. It is model KS-20 and it can be found at many discount stores for about \$20.





A similar fiberglass pole pictured below is the Shakespeare Wonderpole 20' model TSP-20. It is very similar to the *Kwik Stix* but many users report the *Wonderpole 20*' is slightly more rigid. It is priced about \$20.





EARC Tripod Parts List

- 1 Tripod plate, pre-drilled and pre-formed, available from EARC. See last page to purchase.
- 4 set screw type ½" conduit box connector
- 1 # 10 x 3/4" machine screw
- 1 # 10 hex nut
- 1 # 10 wing nut
- 3 5/8" rubber chair tips for leg tips
- 1 10' piece ½" Electrical Metal Tubing (EMT)
- 1 Fiberglass 20' fishing pole
- Optional 3/8" x 24 Antenna mount (pictured on page 4) to use tripod with threaded antennas.



Tripod as a 3/8 x 24 Antenna Support

Some club members have configured the tripod to use a $3/8 \times 24$ antenna mount such as the MFJ-343 shown on the right, enabling use of $3/8'' \times 24$ threaded antennas such as Hamsticks, MBuddisticks, Outbacker, and others.

In this configuration, the tripod structure becomes an effective part of the antenna counterpoise. If needed, additional wire counterpoise can be connected under the wing nut on the tripod plate.



ORDERING A TRIPOD PLATE FROM EARC



As a club fundraiser, EARC (Emergency Amateur Radio Club) has fabricated metal tripod plates, predrilled and pre-formed from 1/8" aluminum as shown on the left, for \$18 including delivery by priority mail in the U.S.

To order a tripod plate, please make payment via PayPal to our fundraising chairman at chanebuth@yahoo.com for \$18 for each tripod plate ordered. Be sure to include your name and mailing address with the payment. We ship promptly and you will likely receive your order in 7 days or less.

All proceeds go to the Honolulu EARC in the support and promotion of Amateur Radio activities. Thank you for your interest in the activities of Honolulu Emergency Amateur Radio Club. If you have any questions about the project or your order, please email Mr. Hanebuth at chanebuth@yahoo.com.