

ARRL Periodicals Archive – Search Results A membership benefit of ARRL and the ARRL Technical Information Service

ARRL Members: You may print a copy for personal use. Any other use of the information requires permission (see Copyright/Reprint Notice below).

Need a higher quality reprint or scan? Some of the scans contained within the periodical archive were produced with older imaging technology. If you require a higher quality reprint or scan, please contact the ARRL Technical Information Service for assistance. Photocopies are \$3 for ARRL members, \$5 for nonmembers. For members, TIS can send the photocopies immediately and include an invoice. Nonmembers must prepay. Details are available at www.arrl.org/tis or email photocopy@arrl.org.

QST on CD-ROM: Annual CD-ROMs are available for recent publication years. For details and ordering information, visit www.arrl.org/qst.

Non-Members: Get access to the ARRL Periodicals Archive when you join ARRL today at www.arrl.org/join. For a complete list of membership benefits, visit www.arrl.org/benefits.

Copyright/Reprint Notice

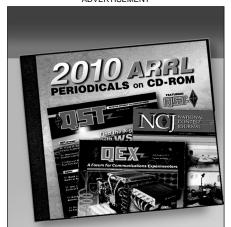
In general, all ARRL content is copyrighted. ARRL articles, pages, or documents-printed and online--are not in the public domain. Therefore, they may not be freely distributed or copied. Additionally, no part of this document may be copied, sold to third parties, or otherwise commercially exploited without the explicit prior written consent of ARRL. You cannot post this document to a Web site or otherwise distribute it to others through any electronic medium.

For permission to quote or reprint material from ARRL, send a request including the issue date, a description of the material requested, and a description of where you intend to use the reprinted material to the ARRL Editorial & Production Department: permission@arrl.org.

QST Issue: Mar 1960

Title: Long Antenna for a Short Lot **Author:** William Walker, W3NUG

Click Here to Report a Problem with this File



2010 ARRL Periodicals

on CD-ROM

ARRL's popular journals are available on a compact, fully-searchable CD-ROM. Every word and photo published throughout 2010 is included!

- QST The official membership journal of ARRL
- NCJ National Contest Journal
- QEX Forum for Communications Experimenters

SEARCH the full text of every article by entering titles, call signs, names—almost any word. SEE every word, photo (including color images), drawing and table in technical and general-interest features, columns and product reviews, plus all advertisements. PRINT what you see, or copy it into other applications.

System Requirements: Microsoft Windows™ and Macintosh systems, using the industry standard Adobe® Acrobat® Reader® software. The Acrobat Reader is a free download at www.adobe.com.

2010 ARRL Periodicals on CD-ROM

ARRL Order No. 2001 **Only \$24.95***

*plus shipping and handling

Additional sets available:

2009 Ed., ARRL Order No. 1486, \$24.95 2008 Ed., ARRL Order No. 9406, \$24.95 2007 Ed., ARRL Order No. 1204, \$19.95 2006 Ed., ARRL Order No. 9841, \$19.95 2005 Ed., ARRL Order No. 9574, \$19.95 2004 Ed., ARRL Order No. 9396, \$19.95 2003 Ed., ARRL Order No. 9124, \$19.95 2002 Ed., ARRL Order No. 8802, \$19.95 2001 Ed., ARRL Order No. 8632, \$19.95



three holes in the Apache cabinet. The holes should be located so that adjustments can be made from outside the cabinet with the chassis fully assembled. Location of the three holes is

FRONT

43/4"

BOTTOM OF CABINET

6"

3/8"HOLE FOR ACCESS TO MODULATION BIAS CONTROL

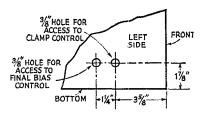


Fig. 4—Dimensions for placement of access holes.

shown in Fig. 4. If the diagram is followed exactly, the slotted shafts of the controls will line

up in the center of these access holes. The holes can be covered with snap hole plugs available from most radio supply houses. Remember, always make adjustments with an insulated tool or screwdriver.

- Peter H. Shavney, sr., W3FFR

TAKE-OFF FOR R.F. SAMPLER

Anyone who is using a coax switch with a spare A unused fitting can easily convert the device into an r.f. sampler for feeding a specimen signal into a scope for monitoring purposes. Simply connect a low-value capacitor, about 5 or 10 $\mu\mu$ f. for medium-power transmitters, from the center conductor of the unused connector to the center conductor of the input connector. The monitoring device is then connected to the spare fitting.

-Paul Goldman, K2GKU

HOOP RULER

Before the hula hoop becomes extinct, every ham should acquire one for his shack since it can be used as a measuring device for finding the dimensions of lots for that rhombic or for measuring actual antenna wire. Roll the hoop along the ground and record the number of revolutions. Merely multiply the number of revolutions by the circumference of the hoop to find the distance.

— Frank Andrews, W3MRZ

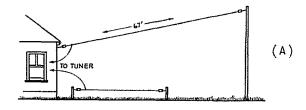
LONG ANTENNA FOR A SHORT LOT

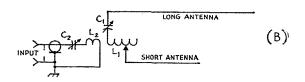
Many amateurs don't operate on the lower frequencies because the size of a city lot does not permit the erection of suitable antennas. The antenna described here permits operation on 80 meters even though space may be limited.

Fig. 5A shows the physical arrangement of the antenna. A wire 67 feet long extends from a pole (my pole is 25 feet high) to a connection on the antenna tamer. A second wire, also connected to the tuner, drops from the shack to a pair of stakes where it is supported a foot or so above the ground. This second wire, of some random length, is positioned directly under the top wire.

The circuit for this antenna arrangement is shown in Fig. 5B. Capacitor C_1 resonates the antenna to the desired operating frequency while the inductance L_1 acts as a loading coil to compensate for the shortage in length of the lower wire. It also provides a means of coupling the antenna system to the transmitter. For operation on 40 meters the antenna should be connected as shown in Fig. 5C. Capacitor C_1 should have a plate spacing similar to that of the plate tank capacitor in the transmitter.

- William G. Walker, W3NUG





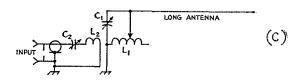


Fig. 5—A—W3NUG's low frequency antenna; B—circuit of the antenna tuner for 80 meters; C—circuit of the antenna tuner for 40 meters,

March 1960 49