Hot air or helium, you be the judge. WB2DSH lofts us through thermal dynamics, Murphy's Law, and the power of positive thinking.

How To Get A Wire Antenna Up 70 Feet, Easy

BY BRIAN LONGWELL*, WB2DSH

like construction articles. I always read them, but like most people I usually don't build them. When I do follow through and try to reproduce an author's results, I generally run into a "surprise" or two along the way.

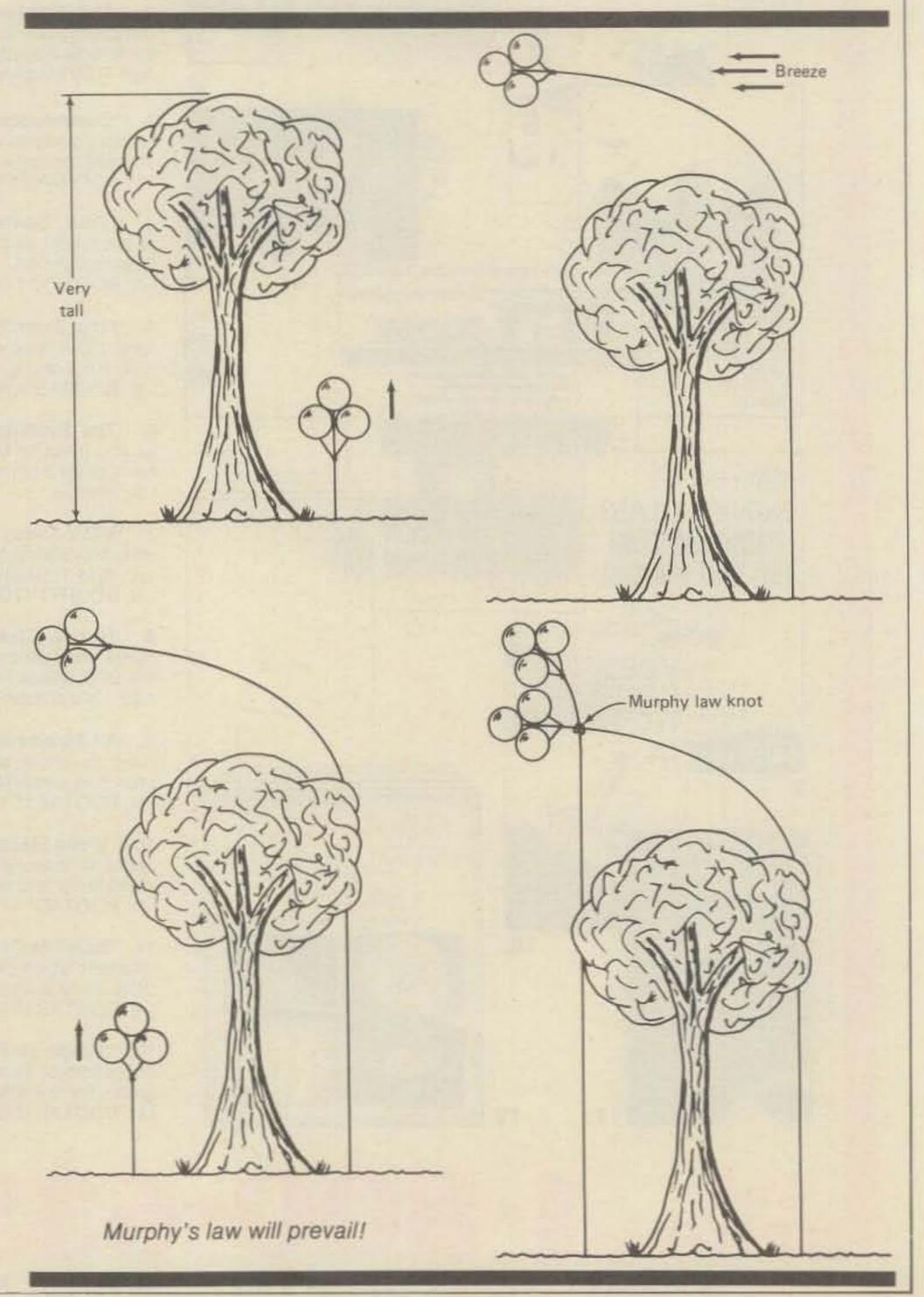
The most common surprises I come across always remind me of a routine that comedian Steve Martin does. He starts out by repeating several times that he has the secret to "how to make a million dollars and not even pay taxes." He then says, as if an insignificant detail, "First get a million dollars," followed by "and then don't pay taxes." This closely parallels the "how to get a 2 kw linear amplifier cheap" type article that tells you, "First find someone selling a 2 kw linear amplifier, and buy it from them cheap."

Well, this article is no exception. First off, the title "How To Get A Wire Antenna Up 70 Feet, Easy" is nice and deceptive. (You've read this far, haven't you?) Second, there is the "First get a million dollars" part, which is, first get a lot with two trees 70 feet tall and far apart enough to fit your antenna.

Okay, so I lied a little like everyone else. You still can use the idea described here to make antenna installations involving trees a lot easier. If you have a tree that you would like to use as an antenna support, but find it too difficult or dangerous to climb and too tall to throw a line over, then read on. If not, read on anyway. You might as well since you've wasted this much time already.

It all started after I bought a house in New Hampshire. My new lot has several pine trees over 70 feet in height, which I shortly realized was a mixed blessing. Having those trees there made me feel that I had to use them. I soon found that it was easier to just wish I had them.

I started out with conventional wea-



^{* 4} Hunt Road, Kingston, NH 03848

pons. The "string tied to a rock" trick proved to be feeble. Climbing was quickly ruled out, for pine trees tend to have many dead lower limbs, and 70 feet gets to be pretty high when you're clinging to a tree. I needed something different.

After some meditation I thought kites might do it, but control seemed as if it would be a problem. More thought. What about balloons? I decided to give it a try. With this in mind I waited for a calm day. When the first one came, I went to a department store and bought approximately 300 feet of strong, yet lightweight fishing line on two rolls. I then got six helium balloons from a place that sells them for parties and returned home.

I tied three of the balloons to the end of a roll of fishing line. Then standing on the side of the chosen tree from which any breeze would come, I began to let the balloons rise by releasing some fishing line. After the balloons reached the top, I waited for a breeze to pull them over. When it did come, I let off about another 40 feet and tied down the line.

At this point I took the other balloons and tied them to the second roll of fishing line. I released these balloons on the opposite side of the tree from the first set. My objective this time was to get the two groups of balloons to become sufficiently tangled so that I would effectively have a loop formed over the tree.

Now you might ask, "How dare he rely on such an unpredictable situation?" Contrare. Very predictable. Recall from childhood Murphy's law concerning kites: "Any two kites flying anywhere in sight of each other will become hopelessly entangled without exception." I figured a law so powerfull must spill over to include balloons.

Sure enough, with a little maneuvering all six balloons became adequately tangled. (I would, however, recommend tying knots in the line near the balloon to assist in the tangling.) I then began pulling the balloons down using the second fishing line until I retrieved them. The rest was quite simple. I tied a heavier rope to the fishing line and pulled that through to replace it. Now I had a way to take advantage of my tall trees.

I would suggest using a long-lasting cable or rope to finally loop through the trees. This may require the use of an intermediate rope after the fishing line, for the fishing line likely will break if it is used to pull a heavy cable. Also, placing a pully at the end of this rope/cable would be a good idea. That way the raising and lowering of the antenna would involve a pully and not the cable passing through the tree limbs. This becomes important when you realize that after about a year the tree has done some growing around the cable and it won't budge.

Results

I hate antenna articles that give signal reports at the end. They always give some baloney about getting signal reports of 10,000 dB over S-9 from an outer Mongolian mobile or from a submarine at the bottom of the Indian Ocean while on 75 meters with ½ milliwatt output during the daytime, during a contest, and during a thunderstorm. Well, you won't find that here. Anyway, I haven't finished putting up the other leg of the antenna.

Seriously, try it. It's easier than it sounds, and more than that, I was able to do it. So what if the neighbors think you're crazy!

NEMAL ELECTRONICS COAXIAL CABLE SALE



CABLE LOSS CHART—IN FALL '83 NEMAL CATALOG — FREE WITH ORDER OR SEND SASE 100 ft. RG8U with PL-259

** SATELLITE TV-TYPE "N"	**
UG-21D/U Male for RG-8, 213	\$3.00
UG-21D/U Silver Plate	\$3.35
UG-23B/U Female for RG-8	\$3.75
UG-27C/U Elbow, Silver	\$5.25
UG-29B/U Barrel, Silver	\$4.25
UG-57B/U Double Male, Silver	\$5.25

Same Day Shipment!

* FRANCHISED DISTRIBUTOR, KING'S CONNECTORS
POLYETHYLENE DIELECTRIC

HG6A/U double shield 75 ohm	25¢/11.
RG8U 96% shield mil spec \$29.95/per 100 ft or	32¢/ft.
RG11U 96% shield 75 ohm mil spec	25¢/ft.
RG58AU Stranded Mil Spec 96% Shield	12¢/ft.
RG58U mil spec 96% shield	11¢/ft.
RG59/U 100% foil shield TV type	10¢/ft.
RG59/U mil spec 96% shield	12¢/ft.
RG62AU 96% shield 93 ohm mil spec	12¢/ft.
RG174/U-mil spec 96% shield	10¢/ft.
RG213 noncontaminating 96% shield mil spec	36¢/ft.
LOW LOSS FOAM DIELECTRIC	
RG8X 95% shield \$14.95/100 ft or	17¢/ft.
RG8U 80% shield	19¢/ft.
RG58U 95% shield	10¢/ft.
RG59/6/U 100% foil shield 18 Ga. 75 ohm	12¢/ft.
	100000000000000000000000000000000000000

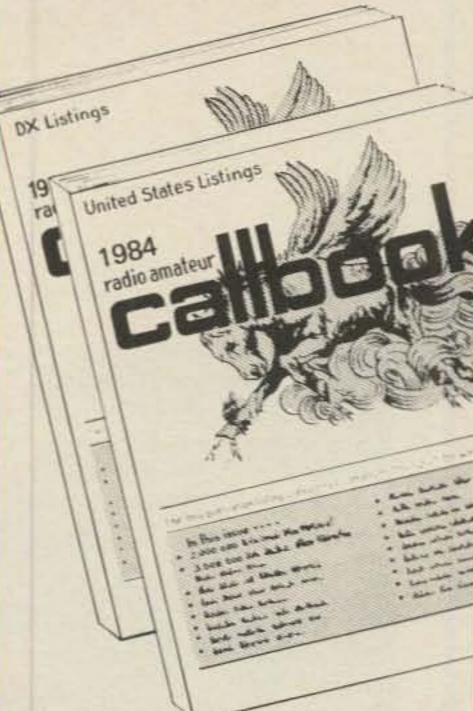
Cable—shipping \$3.00 1st 100 ft. Conne COD (cash only) add \$2.00—FLA. Res. add 5% Sales Tax ORDE 12240 N.E. 14th Avenue, Dept. 4X, North Miami, FL 33161

100 II. AGOO WIIII F L-259	
on each end \$19.95	
RG8U 97% shield 11 Ga	
(Equiv. Belden 8214)\$31.00/100ft.	
RG214/U (Double Silver Shield-	
50 ohms)\$1.55/ft.	
3/8" tinned copper ground	
strap 30¢/ft.	
RG-217/U mil spec, double shielded,	
non-contaminating, 1/3 less loss than	
RG-8, 5000 watt rating 85°/ft.	
ROTOR Cable 8 Conductor (2-18GA/6-22GA)19¢/ft.	
HEAVY DUTY ROTOR cable (2-16GA/6-18GA)36¢/ft.	
CONNECTORS MADE IN USA	
PL-259 Teflon/Silver\$1.59	
Amphenol PL-259	
Amphenol BNC UG88C/U Male for RG-58\$1.25 PL-259 push-on adapter shell	
PL-259 and/or SO-239	
Double Male Connector	
PL-258 Double Female Connector	
Reducer UG-175 or 176	
JG-255 (PL-259 to BNC)	
Elbow (M359)\$1.79	
F59A (TV type) built on crimp ring 10/\$1.99 JG 21D/U Amphenol Type N Male for RG8 \$3.00	
JG-273 (BNC to PL)\$3.00	
Connectors—shipping 10% add'l. \$3.00 minimum	
Julilleutora - ampping to 74 aud 1. 90.00 minimum	

ORDERS UNDER \$20.00 ADD \$2.00 ADD'L. HANDLING

Call (305) 893-3924

1984 CALLBOOKS



Order today! NEW 1984 RADIO AMATEUR CALLBOOKS

Known throughout the world for accuracy, the 1984 Callbooks are a better value than ever before. The U.S. Callbook contains over 433,000 listings; the Foreign Callbook has over 413,000. More than 100,000 changes have been made in each edition since last year. Special features include call changes, Silent Keys, census of amateur licenses, world-wide QSL bureaus, international postal rates, prefixes of the world, and much more. You can't beat this value! Order your 1984 Callbooks now.

Each Shipping Total

□U.S. Callbook \$19.95 \$3.05 \$23.00

DForeign Callbook 18.95 3.05 22.00

Order both books at the same time for \$41.95 including shipping within the USA.

Order from your dealer or directly from the publisher. Foreign residents add \$4.55 for shipping. Illinois residents add 5% sales tax.

Keep your 1984 Callbooks up to date.

The U.S. and Foreign Supplements contain all activity for the previous three months including new licenses. Available from the publisher in sets of three (March 1, June 1, and September 1) for only \$12.00 per set including shipping. Specify U.S. or Foreign Supplements when ordering. Illinois residents add 5% sales tax. Offer void after November 1, 1984.





925 Sherwood Dr., Box 247 Lake Bluff, IL 60044, USA

Tel: (312) 234-6600



