

"Your Antenna Is On Fire!"

Big brute amplifiers and plastic flowers don't mix.

Thomas Schaefer, NY4I

There are certain phrases in life one just never expects to hear. The night my spouse, Beth, walked into my shack and strenuously stated, "Your antenna is on fire!" was clearly one. As I had my headphones on, a little voice inside my head asked if I had really heard that right. Beth repeated, louder now, "Your antenna is on fire!" There was no mistake — that's what she said. Of course, after my disbelief subsided, I ran out to the backyard to see a sight I would have never imagined — the bottom of my Zero-Five (www.zerofive-antennas.com) 43 foot vertical in flames!

Thinking quickly, I grabbed the garden hose and started spraying water on this unbelievable scene. All the while I was wondering exactly how to explain it to the fire department. As acrid smoke billowed from the antenna, I thought maybe I could blame it on the barbeque. Fortunately, after drenching the antenna, the flames subsided and mercifully, the smoke sailed downwind.

So one might ask, exactly what do you have to do to set an antenna on fire? Well, it all started with a seemingly innocuous attempt to hide the base of the vertical. I have always liked verticals and opted for a Zero-Five. I was even fortunate enough to be able to put down quite a few radials prior to sodding the backyard.

All was great in the world. But, since the bottom of the vertical is not that attractive (with the unun, fold-over mounting plate and radial plate), I decided to put a plastic planter around the base. Of course, what is a planter without some plants? So I added some plastic flowers and some Styrofoam to hold the plastic flowers in place. This looked great. I made sure to leave enough room between the vertical radiator and the flowers so nothing was touching.

Big Amp Upgrade

Now at this point, it is important to know that I originally ran my 200 W ICOM IC-775DSP transceiver barefoot. Well, not too long before this fateful evening, I purchased a brand new Alpha 9500 amplifier (www.rfconcepts.com). As you may know, the Alpha 9500 takes care of itself. It monitors the VSWR, grid current and many other parameters. At the first sign of trouble, it goes into standby mode. With the addition of the amplifier, I carefully considered the components of my antenna system to ensure everything was ready to handle its 1500 W.

I have about 150 feet of Times Microwave LMR400. The matching unun is rated at 5 kW. The antenna itself is rated at 5 kW. I even installed a nice ground rod at the base of the vertical and ran



This is the vertical after the fire in its flower box. [Tom Schaefer, NY4I, photo]



Another view of the unun barbeque. [Tom Schaefer, NY4I, photo]



Here are the remains of the planter. You can see the charred ground braid, unun and antenna base surrounded by the remains of the plastic flowers. Note how close the braid was to the hot side of the unun. [Tom Schaefer, NY4I, photo]

heavy duty strapping between the ground rod and the ground side of the antenna.

Did I Mention the Flowers were Plastic?

While I was vigorously trying to work a pileup on 40 meter CW, something must have arced. My best guess is the proximity of the ground strap to the main radiator. Whatever the ignition source, something caused either the flowers or the Styrofoam to ignite.

In the aftermath, I dismantled the entire setup looking for the cause. The unun box was charred and melted on the outside but no damage inside so that was not the source. The insulation of the coax did melt off, but it clearly still worked as the amplifier never complained. I was still copying the pileup

even while flames were shooting from the antenna.

Other than some obvious soot on the aluminum, I did notice the large Delrin insulator between the radiator and ground was somewhat pitted. I called Tom at Zero Five and he asked me to send him some pictures of the antenna, then asked that I send the antenna's base. He graciously replaced the insulator and cleaned up the base as good as new. He still will not let me pay him for it (thanks, Tom).

The fire destroyed its case but the unit survived the ordeal. [Tom Schaefer, NY4I, photo]



Tom Schaefer, NY4I, an ARRL® Life Member, was first licensed in Florida in 1980. He obtained his Amateur Extra license in 1982 at the age of 16. Tom is the vice-president of the St Petersburg ARC (SPARC) and president of the Upper Pinellas ARC (UPARC). He has been an active volunteer examiner since 1983. Tom's interests are DXing, PSK, JT65-HF, contesting, computer station integration, SDR, Field Day, APRS and working satellites. He lives with his spouse Beth, two kids (David and Jordan) and two dogs (Leo and Sparkle). He can be reached at 323 Old Oak Cir, Palm Harbor, FL 34683-5864, ny4i@arri.net.

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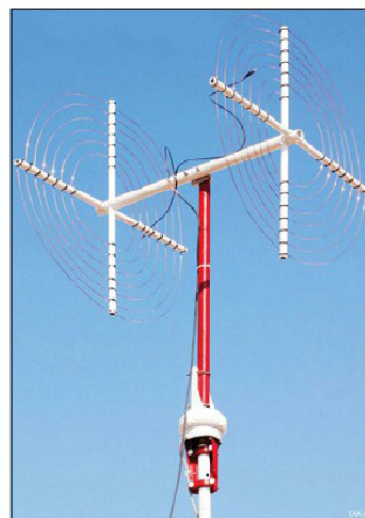
New Products

SwapMyRigs Radio Separation Kit

SwapMyRigs from Bill Jordan, AE4S, standardizes single-cable installation of mobile radios with remotable controls. By routing all connections through a common cable, any radio with industry-standard RJ jacks can be installed or replaced without using multi-cable separation kits. SwapMyRigs consists of two small field-configurable boxes called SMRs — one at the transceiver, the other at the remote location — connected by a standard computer VGA cable. The transceiver's microphone, control cable and speaker jacks are connected to corresponding jacks in the co-located SMR and the SMR maps those to conductors in the VGA cable. At the remote location, an identical SMR maps the VGA conductors back to the transceiver's connections. The microphone, control, and speaker plug into the SMR's jacks as if they were connected directly to the radio. By changing the SMRs' jumpers, different radios can be



used in the same car, or one transceiver can be used at home and also in the car. Replacement radios are installed by merely changing SMR jumpers. Price: \$79.95 per pair; includes radio interface and VGA cables for any RJ-compatible radio (see website for supported radios). For more information or to order, visit www.swapmyrigs.com.



TAK-tenna Compact HF Antenna

The TAK-tenna from Steve Tetorka, WA2TAK, is a high frequency multiband antenna with small physical dimensions that is intended for limited space or portable applications. The 80 meter multibander has a 48 inch boom and covers 80 to 10 meters; the 40 meter multibander has a 30 inch boom and covers 40 to 10 meters. Each model is designed to resonate on the primary band and operate off-resonance using an antenna tuner. The antenna is said to provide low impedance values to the tuner when operated off-resonance, resulting in low RF power loss in the transmission line. Price: 40 meter multibander, \$148; single band models (30-10 meters), \$128. For more information, or to order, visit www.taktenna.com.

Compact Switching Power Supply with Meter from MFJ

The MFJ-4230MV switching power supply measures 2.5 x 5 x 6 inches (HWD) and weighs 3 pounds. It's rated at 25 A continuous or 30 A surge at 13.8 V dc. The voltage is adjustable from 4 to 16 V and a front panel meter displays voltage or current. A temperature controlled fan provides auxiliary cooling. The dc output is via five-way binding posts on the back of the supply. The unit operates from 120 or 240 V ac at 47-63 Hz. Price: \$89.95. For more information, to order, or for your nearest dealer, call 800-647-1800 or see www.mfjenterprises.com.

