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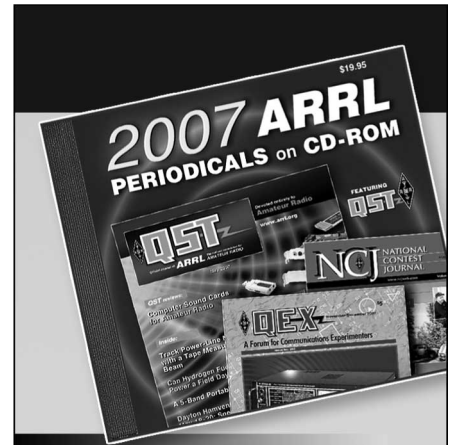
QST Issue: Jan 1977

Title: Improving VOX Relay Response During CW Operation of the Heath HW-101 Transceiver

Author: Ed Solov, WA2DIW

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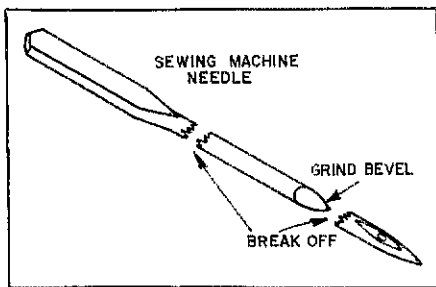
Hints and Kinks

REPLACEMENT SOLDERING-IRON TIP

Unable to locate a tip for my Ungar No. 4035 soldering iron, I used a copper boat nail that is threaded with a No. 5-32 die. — *J. Edward Goervey, WA2VTC*

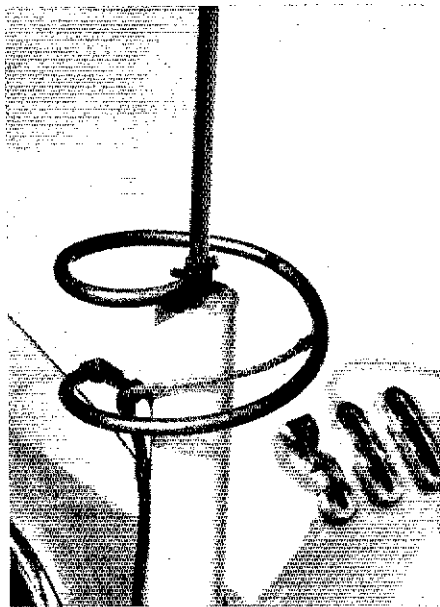
NEEDLE A SMALL DRILL-BIT?

A sewing-machine needle of the proper diameter may be made into a bit suitable for drilling small holes in printed-circuit boards. Carefully break off the eye and the point of the needle, and grind a beveled edge on the tip, using a sharpening stone, as shown in the drawing. — *Glenn Jacobs, W17CMZ*

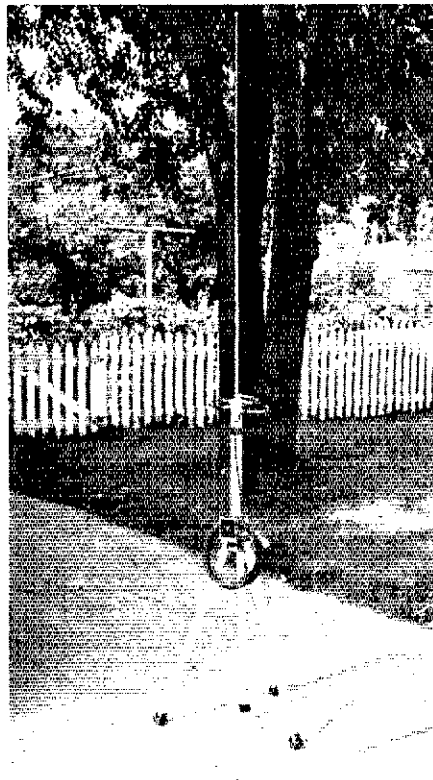


A 5/8-WAVELENGTH ANTENNA FOR BASE, PORTABLE AND MOBILE USE

I have made versions of this antenna for my car, for permanent installation at home, and another mounted on a camera tripod for use when operating from a portable location. As shown in the photos, the base is a convenient length of a 1-1/4-inch diameter aluminum



tubing, with PVC pipe fittings press fitted into the pipe and acting as insulators. The matching coil is 1-1/4 turns of 5/16-inch copper tubing, 5 inches in diameter. The radiating element is a telescoping automobile whip, whose length is adjusted to approximately 39 inches, and a sliding tap on the coil is used to obtain a minimum SWR. Adjustment is fairly critical, but once the proper length of the whip and correct position of the tap are found, they may be marked by scratching the appropriate metal surface. — *Ralph Nezzley, W9WZO*

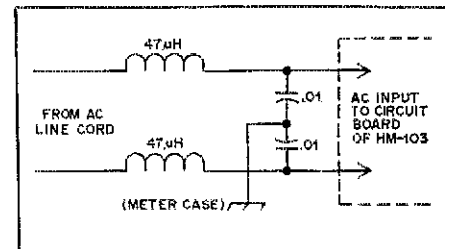


ALLERGIC TO HAM RADIO?

The day after I buried a length of coaxial cable leading to my tower, I developed a severe rash, similar to hives. The day of installation was very hot, and the cable had lain in the sun for several hours. A consultation with a doctor confirmed that contact with the cable had transferred some of the plasticizer used in the cable jacket to my skin, and I was allergic to the chemical. I had been sweating, and when I dried myself off, the chemical on my hands got all over the upper part of my body. The doctor told me that polyvinylchloride, or PVC, is a very toxic substance and has even caused a rare type of liver cancer. It is wise to wear gloves when handling this material. — *Jim Beedle, W9NIN*

KEEPING RF OUT OF THE HEATH IM-103 LINE-VOLTAGE MONITOR

I noticed an apparent line-voltage increase whenever I keyed my transmitter and determined that rf was being rectified by D1 in the Heath monitor. A power-line filter was constructed and installed in the unit. As shown in the schematic, the inductors were Nytronic No. RFC-S-47, but any value of rf choke greater than 45 μ H may be used, as long as the dc resistance of the coil is less than 5 ohms. My thanks to Tom Raustert, W2HEO who assisted me in correcting the problem. — *Alan W. McCormick, WA2GTT*



PUTTING YOUR BUG OR PADDLE IN ITS PLACE — AND KEEPING IT THERE

I keep my bug in place by applying a small amount of rubber cement on the feet and pressing the key down on the desired spot of the table. When I wish to move the key, I just pry it loose from the table. The old cement rubs off easily, leaving no marks on the table. — *M. Crosby Barlett, K4EU*

USING A HOCKEY PUCK TO INSTALL WIRE ANTENNAS

A hole is drilled in the center of a hockey puck, and a string is tied through the hole. By tying the end of a wire antenna to the string and throwing the puck over a tree branch, an antenna may be installed without climbing the tree. The aerodynamic qualities of hockey puck make it better suited for this application than the commonly used rock or baseball. — *WA4FIB*

IMPROVING VOX RELAY RESPONSE DURING CW OPERATION OF THE HEATH HW-101 TRANSCEIVER

When attempting to key the HW-101 at speeds over 20 wpm, the VOX relay will not actuate quickly enough, causing the loss of the first dit sent. Replacing R328, a 470 resistor, with a 330k resistor increases the drive to the VOX amplifier tube, V17A. V17A is turned on sooner, and the VOX relay is actuated more rapidly. — *Ed Soto, WA2DIW*