

A PUBLICATION OF THE JOHNSON COUNTY RADIO AMATEURS CLUB, INC.

President's Corner

Public Service events have been popping up on the calendar. Look these events over and pick a couple to support. These events are a great way to meet other hams and gain experience with your equipment. These events are the best way to be ready for assisting in a disaster.

We will be starting to ask for volunteers for Ensor this month. May is our club's time at bat to provide guides for the museum on Saturday & Sunday from 1pm to 4pm. Tagging along with on the "experienced" guides a couple of times helps you realize that it is not hard to be a guide. So, please think about doing at least one Saturday or Sunday.

2023 Field Day planning is underway. ARRL has released a few changes to the Field Day rules for 2023. At first read, these changes will be to our benefit.

Speaking of Public Service events, Herb, NZØF, will present at our April 14 meeting what it takes to organize one of these events and what to expect. I will add some of my experiences.

Continued on Page 2.



Upcoming Club Events

- Tue. Apr 4 @ 1900 - Club VE Testing - JoCo Library 9875 W 87th St, OPKS
- Fri. Apr 14 @ 1900 - Club Meeting - Biz meeting and presentation - Topic: Public Service Events by Herb, NZØF
- Fri. Apr 28 @ 1300 - Special Event - NFL Draft / WW1USA - OP Christian Church 7600 W. 75th St, OPKS
- Fri. Apr 28 @ 1900 - Club Meeting - Extended presentation with Q&A - Topic: Elmer Night
- Tue. May 3 @ 1900 - Club VE Testing - JoCo Library 9875 W 87th St, OPKS

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Pres. Corner cont'd

The extended program for April 28 will lead off with a special event station for the NFL draft and WW1USA. Starting Friday afternoon around 1 PM, John, NØIZ, will set up access to his remote station from the church. This is a good time to see how to operate a special event station. You can also try your hand at operating or logging the contact.

In conjunction with the special event station, we will have an "Elmer" night starting at 7 PM. An Elmer is a ham that is willing to help answer your questions. There will be Elmer tables for you to visit. Some of the topics to start with will be Repeaters, using a Nano, FT8, Winlink messaging, Fldigi and Flmsg. As we hear on more topics, we will located an "Elmer" and add it to the list.

Bill
KA2FNK



Hambone

"Hambone Gets POTA Power"

A Hambone story by Jaimie Charlton ADØAB

"The best parts of these hamfests are the flea markets," commented Hambone to his brother, Dude, as they strolled among the vendors selling all sorts of ham-radio stuff from their cars and make-shift tents. It's the third cloudy week in March, but the light rain doesn't dampen Hambone's quest to find that "really great" deal on ham radio equipment.

"Yeah, you never know what what sort of cool stuff you're gonna find," said Hambone as he examined a well-used D104 microphone. "These mics sure look cool, but they don't sound that good."



"Be careful of deals that are too good, bro. As you know, not everything at a hamfest is a good deal."

"Yeah, yeah, Dude. I got burned on that super receiver last year. So what? It won't happen again."

"You said that last year."

"I'd kinda like to find a good deal on some sort of small transceiver," continued Hambone. "I've tried to do POTA - you know, Parks On The Air - using my QRP rig in Loose Park, but nobody seems to hear me. Its five watts and wire dipole just don't get out. I need more power and a better antenna."

"Did I hear you say you need more power for POTA?" came a voice from behind a folding table stacked high with waveguide, dishes and other not so easily identifiable microwave components. Not waiting for a reply, a tall, lanky body wearing a green T-shirt and faded Levi's rose from behind the pile of paraphernalia. Closer examination would reveal that this guy's look was 'studied casual,' not the usual hamfest flea market attire. This fact went totally unnoticed by Hammy and Dude.

Hambone cont'd

"What?" replied Hambone turning so suddenly he stepped on Dude's toes.

"Watch it!" shouted Dude extracting his sandaled foot from below Hambone's boot.

"I thought I heard you say you wanted more power to work from parks," replied the voice.

"Well, er, yeah," said Hambone.

"In that case, I think I can help. Hi, my name is Dr. Matrix Nabla and I run the DelVector Corporation. We specialize in the development of highly effective compact transmitters and antennas. You can see some of our products here and more on our website www.delvector.com on this laptop."

"This looks very nice, Dr. Nabla. What are these things?" asked Hambone.

"First off, please, just call me Matt. My degrees are in experimental physics, not medicine. But the title helps me sell these devices.

"These are active solid-state transmitter/antenna devices for generating microwave signals in the ten to one hundred gigahertz bands. Although they are small, they are very powerful and can aim a signal with great accuracy," explained Matt.

"Interesting," said Dude. "But POTA operators generally operate in the seven-to-thirty megahertz frequency range."

"Oh, I know. None of these antennas will do what you want, but I have one that will.

"As you might guess, a number of our employees are hams and they saw the need for high performance portable gear. They determined that there are two basic problems with existing gear, low power and inefficient antenna. So, they developed this, an active antenna system for the ham bands. This is only an early prototype, but you can see how it works."

From behind the table Matt pulled out what looked like a short knobby wire dipole with two boxes attached. "Please excuse this unit's appearance, the slick production models will be introduced at the Dayton hamfest."

"So," began Hambone, "How does this work?"

"This is basically a multiply loaded dipole and integrated amplifier with an auxiliary power supply. The power supply is this small box with several connectors on it. The amp is this other box that is directly connected to the two arms of the wire dipole. It puts out a bit more than 100 watts PEP from 7 to 30 MHz. You just connect your transceiver to the coax connector on the power supply and connect the power supply to the amplifier with whatever length of coax you need and string up the dipole. That's easy because it's only two meters long.

"Then apply power, 10 to 15 volts to the DC connectors or 110 to 250 VAC to the special power socket, and you're good to go. The power goes right up the coax along with your RF. Be sure your transmitter output is five watts or less. That will give the 100 watts PEP."

Hambone cont'd

"How do you tune it? Don't you need a tuner?" asked Hambone.

"No tuner is needed," replied Matt. "The amplifier is connected directly to the dipole so there is no coax to have standing waves and the amp's input impedance is always exactly fifty ohms, so it matched the coax to your rig."

"But the dipole is so short, especially for 40 meters," said Dude. "How can it work?"

"That's what those bulges on the dipole arms are for. They are actually conjugate matching devices that slow down the propagation of current through the wires by nonlinearly adjusting the impedance at that specific point. Their amount of effect depends on frequency. The result is the antenna seems to be a half-wavelength long at whatever frequency you are operating at. To the outside world, it looks just like a resonant dipole driven by a 100 watt transceiver.

"Further, the amp is a very efficient class D with current source output that keeps the current maximum right in the center of the dipole for maximum efficiency."

"Wow! I get it!" exclaimed Hambone. "That's the perfect POTA antenna. How much is one?"

"I'm sorry," said Matt. "They won't go on sale until the Dayton fest. Then they will probably be about \$200."

"But I need one now," argued Hambone. "How about selling me this one?"

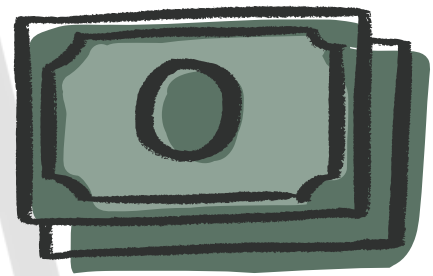
"Oh, I can't do that. This is just an ugly prototype."

"But it works, right?" said Dude.

"Well, yeah."

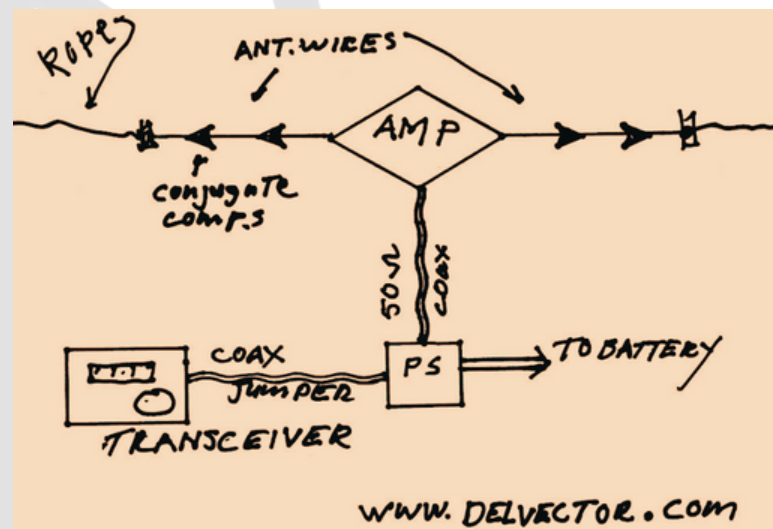
"Then please sell it to me," begged Hambone

"Well, okay, it's against my better judgement. But give me a hundred bucks and it's yours," said Matt. "there's no instruction book except our website and I can only give you our ninety-day replacement warranty if neither the power supply nor the amp has been opened."



"Oh, thank you, thank you, Matt," gushed Hambone as he handed over some sweaty bills from his back pocket.

"Here's a sketch of how to hook it up," said Matt. "You can reach me through the website if you need to."



Hambone cont'd

*** *A few days later, we find Hambone and Dude with a couple of their fraternity brothers in their Uncle Elmer's ham shack examining the new POTA antenna. Uncle Elmer speaking...* ***

"Where did you get this contraption, Hammy, and what's it supposed to do?"

"I bought it from Dr. Matrix Nabla at the hamfest flea market. He's a smart guy. He runs a company called the DelVector Corporation. They design small antennas and RF equipment for up to 100 gigahertz! Can you imagine!?! That's almost light, isn't it?"

"That's a pretty high frequency, but it's not light. Go on..." added Elmer.

"Matt - he said we could call him that - told us that his company is going into the ham radio business by offering a small, powerful antenna for POTA operators. They will announce it at the Dayton fest, but he had this prototype to show us. It looks homemade, but it works exactly like the production models, he said."



Author Jamie "Unck" Charleton AD0AB

"They will cost \$200 at Dayton," blurted Dude.

"Okay guys, all that said, what's the problem?" asked Elmer.

"It doesn't work!" exclaimed one of the boys.

"It doesn't *seem* to work," countered Hambone. "We were at the park with my QRP rig set to put out five watts, hooked everything up like Matt said and were all ready to activate the park and make a ton of POTA contacts. But we didn't make any contacts. The light on the power supply lit when we keyed the transmitter, but, apparently, nobody could hear us. We tried to go to Matt's website to see if there were further instructions, but I guess his Internet was down because we couldn't find his site. That's when we decided to ask you to look at it."

"Let's have a look," said Elmer as he reached for a screwdriver.



"No! No, don't open the boxes!" shouted Hambone. "That'll void the warranty!"

"But Hammy, if we don't look inside, how can we see what's wrong?"

"Yeah, Hammy, be brave, take a chance," cajoled Dude.

Hambone cont'd

"Well, okay, but if you can't fix it, the warranty will be void and I'll be out my hundred bucks."

"I think that ship has already sailed," muttered Elmer as he pried open the power supply.

"Holy smoke! (author: this story uses family-friendly language.) There's nothing in there but a resistor and a little LED," exclaimed Hambone. "Matt must have given me the wrong antenna."

Hambone grabbed his phone and was so busy trying to access Matt through the DelVector website that he didn't notice Elmer had succeeded in opening the amplifier. To no one's surprise, except Hambone's, the box was empty, or almost empty. Stuck in the bottom was a \$100 bill upon which was written, "Hambone, Happy April 1, 2023."

This is Only a Test

Are you new to the hobby? Maybe you recently received your Technician class ticket and what you have learned is still fresh. Or maybe you have held your Extra class ticket for a while and have forgotten some of what you have learned. Regardless, let's keep those mental pencils sharp by reviewing some of the questions from each of the question pools. Only a Tech? Push yourself and try the higher class questions. You might surprise yourself and be encouraged to try your hand at upgrading!

1. T7C06 – What does an SWR reading of 4:1 indicate?
 - A. Loss of -4 dB
 - B. Good impedance match
 - C. Gain of +4 dB
 - D. Impedance Mismatch
2. T6C12 – Which of the following is accurately represented in electrical schematics?
 - A. Wire lengths
 - B. Physical appearance of components
 - C. Component connections
 - D. All these choices are correct
3. G8A11 – What is the modulation envelope of an AM signal?
 - A. The waveform created by connecting the peak values of the modulated signal
 - B. The carrier frequency the contains the signal
 - C. Spurious signals that envelop nearby frequencies
 - D. The bandwidth of the modulated signal
4. G4C12 – Which of the following is an advantage of a receiver DSP IF filter as compared to an analog filter?
 - A. A wide range of filter bandwidths and shapes can be created
 - B. Fewer digital components are required
 - C. Mixing products are greatly reduced
 - D. The DSP filter is much more effective at VHF frequencies

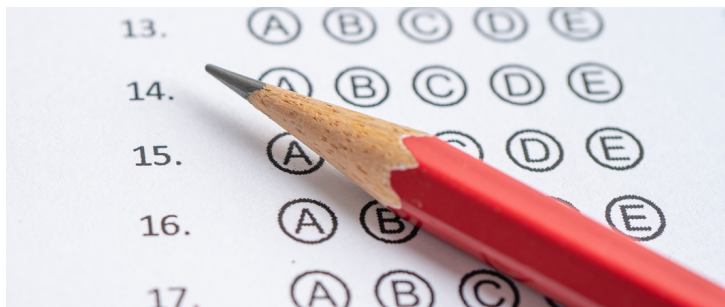
Test cont'd

5. E8B07 – Orthogonal Frequency Division Multiplexing is a technique used for which type of amateur communication?
A. High-speed digital modes
B. Extremely low-power contacts
C. EME
D. OFDM signals are not allowed on amateur bands
6. E8D04 – What is the primary effect of extremely short rise or fall time on a CW signal?
A. More difficult to copy
B. The generation of RF harmonics
C. The generation of key clicks
D. Limits data speed

Answers: 1d, 2c, 3a, 4a, 5a, 6c

How did you do?

If you got them all correct, *Congrats!* If you hold a Tech or General class license, this may be the sign you need to work on that upgrade. Plenty of resources are available for study. Remember, JCRAC VE Team holds testing sessions on the first Tuesday of every month at 7 PM at the JoCo Library at 87th & Farley in OP.



Intentional QRM

April Fool's Day is here, so let's go from using the phonetic alphabet to using a phony-tic alphabet. To do so, simply change the following 14 letters:

A - Aisle	M - Mnemonic
B - Bdelium	O - Ouija
C - Czar	P - Physics
E - Eileen	Q - Qatar
G - Gnarly	T - Tsar
H - Herbal	W - Wrangler
K - Knuckle	X - Xylophone

Good luck not tripping up on any of those!

Upcoming Public Service Events

Warmer weather is here and there are lots of opportunities for us, the Amateur Radio community, to serve our community, test our equipment, and meet other Hams. Here is a list of upcoming events requesting our services with contact information should you choose to volunteer and participate:

April 22 - Garmin Marathon, Olathe - Herb F. NZØF - hfiddick@gmail.com

April 29 - Walk MS, Leawood - Gary S. N2FSH - gary.schlotzhauer@gmail.com

May 20 - FISH Armed Forces Event, KCK - Herb F. NZØF - hfiddick@gmail.com

June 11 - Wild West Bike Ride, KCK - Ray E. KØRSE - rerlichman@kc.rr.com

July 9 - Shawnee Mission Park Marathon - Mike R. KØKCK - wmrralls@comcast.net

Tech Talk

This month's segment is brought to us by Tom Wheeler, NØGSG, tom.n0gsg@gmail.com

Repairing Broken Potentiometers in Vintage Electronics

Introduction

Potentiometers are a key component in much electronic equipment, especially vintage consumer electronics. The lifetime of current consumer electronic devices is currently considered to be just a few years -- "disposable" is a commonly used adjective. However, it hasn't always been this way. There was a time (ending somewhere in the late 1970s to early 1980s) when consumer electronics gear was made to last. Many of these vintage electronics devices have aged well, and are beginning to be valued by collectors.

However, these older devices have a common weak link. They use extensive arrays of analog potentiometers to control various functions such as volume, tone, and fine tuning. These controls are vulnerable because they're connected to the knobs on the front panels of sets, which are often subjected to the not-so-gentle handling of owners.

To make matters worse, the support cycle for most vintage electronic products is long past, so original OEM parts are usually unavailable, rendering a unit with a simple broken control unusable. But don't give up -- often you can recover a "basket-case" with a little patience and some special repair techniques.

Understanding the Construction of Control Potentiometers

Figure 1 illustrates the typical construction of a conventional control "pot" or potentiometer used in countless electronic applications.

As you can see, there's nothing highly complex inside a pot. It consists mainly of a carbon resistance element and a slider that makes contact with the element. The slider is connected to the control shaft and thus moves when the end user manipulates the control.

Tech Talk cont'd

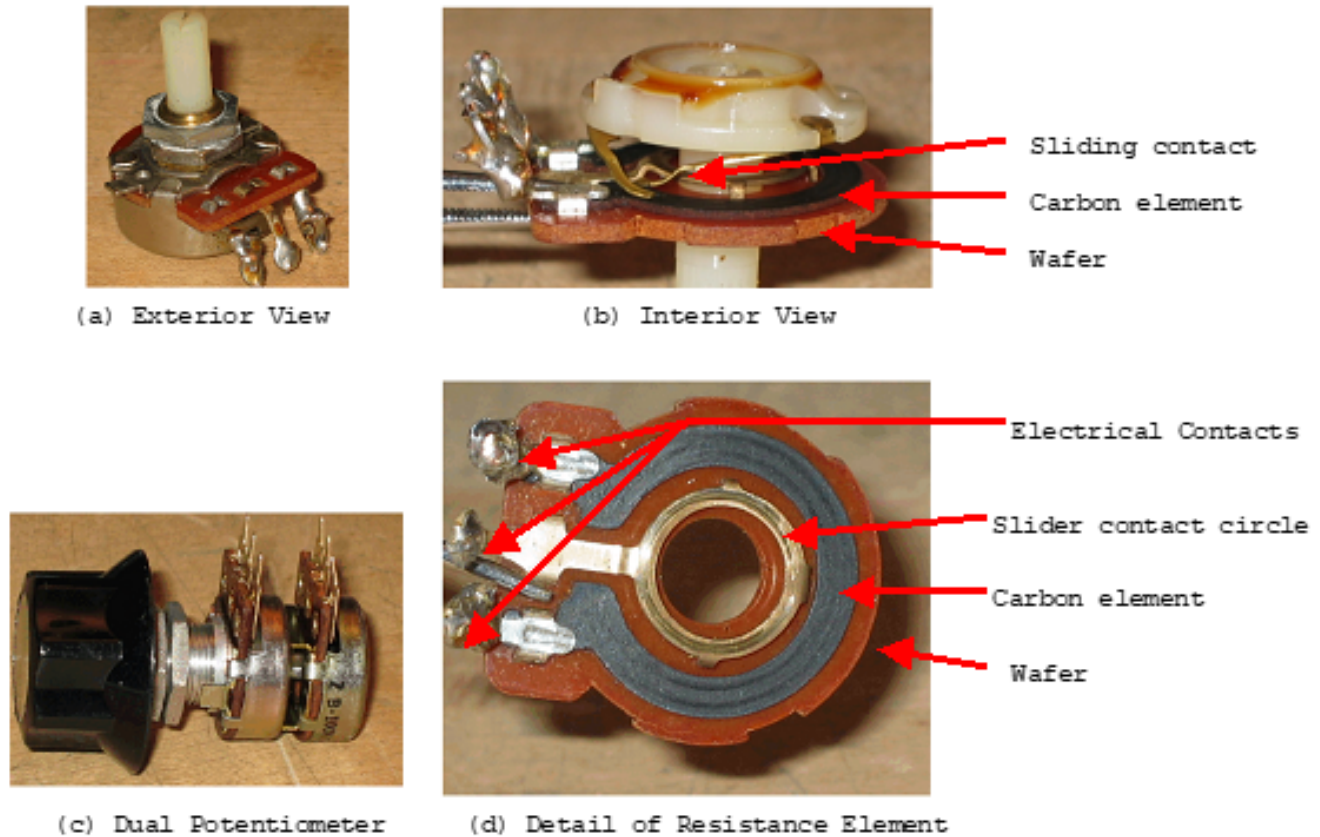


Figure 1: Typical Potentiometer Construction

The carbon resistance element is often printed directly onto a phenolic plastic wafer. Riveted terminals allow connections to the element. There are usually three connections - two for the ends of the resistance element, and one for the movable slider. Sometimes there are more than three riveted connections: specialized controls may have an additional "tap" somewhere along the carbon resistance element.

The carbon resistance element is screen-printed onto the wafer at the factory in a simple process: A screen containing tiny holes is placed over the blank wafer, and a mixture of carbon paste solution is forced through the screen under pressure onto the wafer, where it dries in place. Subsequent cleaning and polishing produce a nice smooth surface upon which the slider will glide.

Pots appear in many forms in electronic equipment; a common variation is the linear slider control used in studio mixing consoles (and some vintage hi-fi gear).

Fracture: A Common Failure Mode

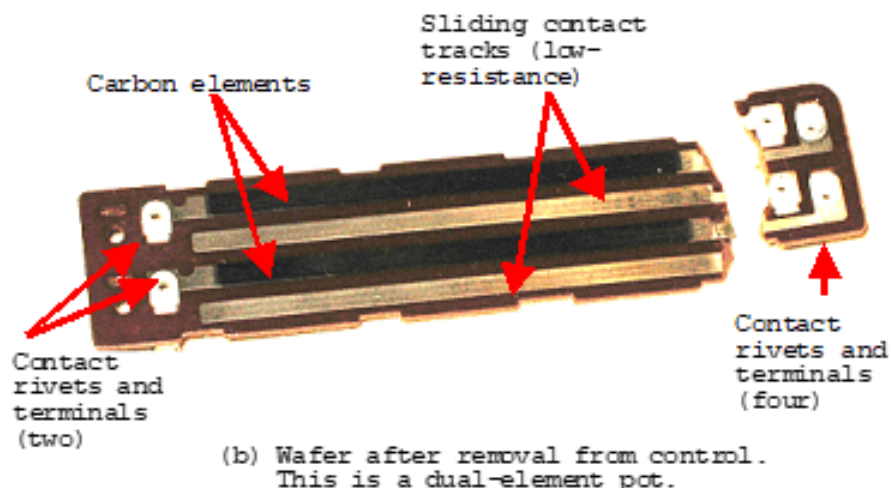
There's little to protect a control pot from damage from the end user. Dropping a unit is a common accident: if the force from the blow lands on a control knob, that force will be transmitted up the control shaft into the innards of the pot. If the force is strong enough, the wafer fractures, leaving us with yet another broken set.

Tech Talk cont'd

Figure 2 shows the wafer from just such an accident. It is the volume control from a Realistic STA-235 receiver (from about 1978) purchased for \$4.99 as a parts unit from an eBay seller. Someone (not your author!) either dropped this unit or slammed something into the volume control on the front panel, neatly breaking it.



(a) Ouch!



(b) Wafer after removal from control. This is a dual-element pot.

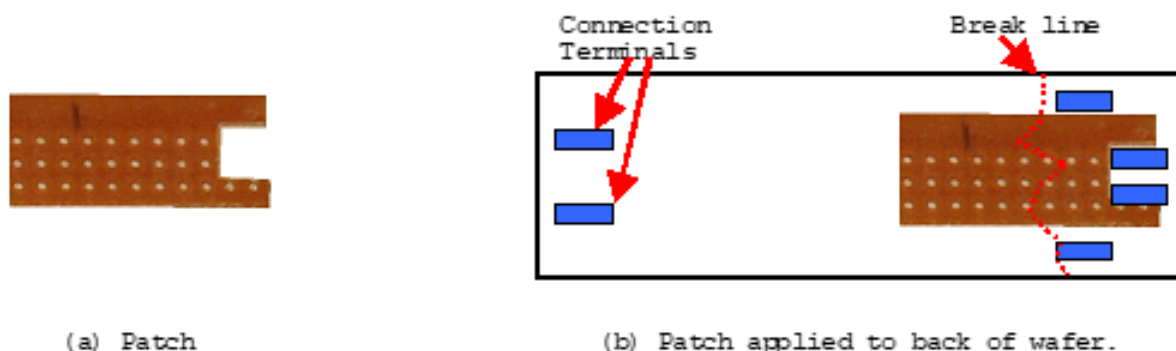
Figure 2: Broken Linear Slider Wafer

Repair Technique - Mechanical

Of course, it should go without saying that this sort of repair should not be utilized if new (or used, good) parts are available. If you're really desperate, then proceed!

Two things must be accomplished to successfully repair a broken control. The mechanical stability of the control must be restored, and the electrical connections must be repaired. The first is vitally important: making an electrical repair is pointless if the item isn't mechanically strong enough to stay together in use.

For this particular unit, no new part was available, so repair was attempted. A reinforcing patch of perforated phenolic breadboard was cut to size to fit on the back of the broken wafer, as shown in Figure 3.



(a) Patch

(b) Patch applied to back of wafer.

Figure 3: Reinforcing Patch

Tech Talk cont'd

The patch was bonded to the wafer with JB-Weld two-part epoxy resin. The use of perforated breadboard for the patch allows the bonding resin to seep into its holes, which greatly increases the bond strength (at least to the patch side), and stiffens the patch slightly, improving mechanical stability.

Great care was taken to ensure accurate alignment of the parts. All parts were test fitted together before applying epoxy.

Extreme care must be employed to keep the epoxy off the electrically active side of the wafer; stray glue can easily ruin a part and truly render it unsalvageable! Excess glue does not equate to greater strength. A full 24 hour period was allowed for the epoxy to cure.

Repairing the Electrical Connections

Several products can do a great job of repairing the electrical connections. Soldering, the normal method of electronics, is useless inside a pot. Solder won't bond with the carbon resistance element, and the heat involved will instantly destroy the delicate printed pattern.

Conductive paint is the best option for repairing the broken circuit traces. Two specialty products work great here, either the Caig CW100P "Circuitwriter" pen, or Permatex item # 15067 "Quick Grid" rear window defogger repair kit. Both products are silver-bearing paint in an acetone (Circuitwriter) or alcohol (Quick Grid) solvent. The Permatex kit is available from most automotive parts stores.

Before applying any repair material, the wafer must be cleaned of any grease or dirt using alcohol or Windex on a clean, lint-free cloth. (I prefer Windex because it cuts grease well, leaves no residue and is unlikely to dissolve the binder in the carbon resistance element).

The Permatex material was used for this repair. Since this paint spreads quite quickly, the areas between the conductor tracks were masked off prior to repair. Three successive coats of the paint were applied to the broken tracks (probably more than was really needed for this application). After drying for 30 minutes, the masking tape slices were removed. The repaired wafer is shown in Figure 4. Yes, the Permatex material really is orange, but it conducts just fine.

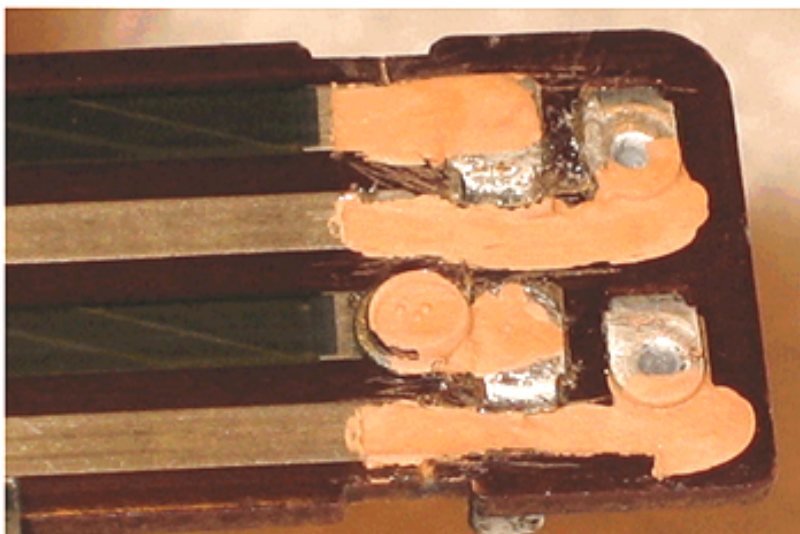


Figure 4: Repaired Wafer

Tech Talk cont'd

Note that it is extremely important to keep the conductive paint away from the tracks made by the slider contacts. An ohmmeter was used to verify that no shorts between contacts were introduced.

Final Assembly

Before reassembling the control, the contacts of the slider assembly should be inspected. In this case they were bent, so they were carefully realigned (using a magnifying glass to help verify positioning). Figure 5 shows the slider with correctly-aligned contacts.

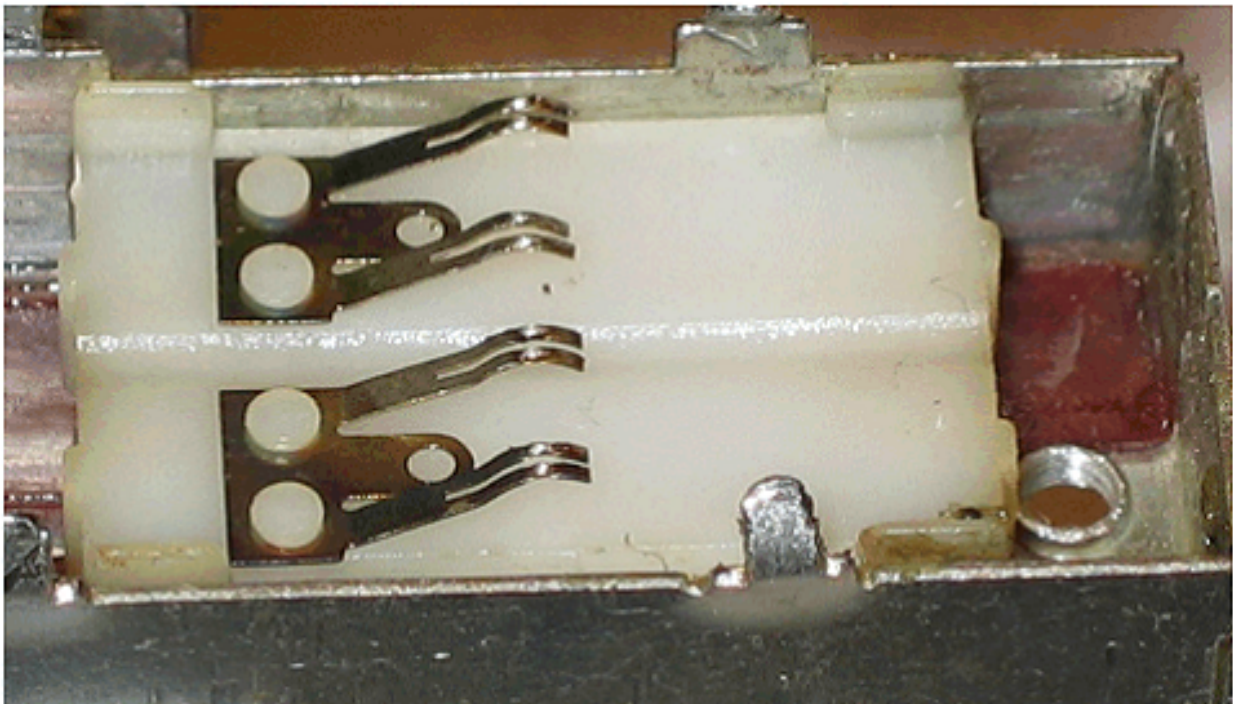


Figure 5: Slider and Contacts

You can see where the bottom and topmost contacts were bent back into shape. Be careful; it's easy to break off contacts by bending them excessively.

Before final assembly, the parts of the repaired control were test-fitted. An extra splash of conductive paint near one edge of the wafer caused some binding of the slider, so this was carefully removed using a small knife.

Moving parts in controls must be lubricated. Without lubrication, the sliding contacts will eventually dig a trench into the carbon resistance element.

This control was lubricated prior to final assembly using Radio Shack Teflon Lube Gel, catalog number 64-2326. This is a stable lubricant that is moisture and mildew resistant, and it is quite unlikely to "creep" over time. Only a very, very thin film ($< 0.001"$) of the lubricant was applied over the tracks on the wafer's active surface. No lubricant was applied near the repair site, since it could potentially dissolve the conductive paint.

Tech Talk cont'd

Don't rush final assembly. Make sure everything fits correctly and that the control's operation is smooth and free of binds. If something isn't right, fix it before reseating the metal tabs!

Before reinstalling the repaired control, check it with an ohmmeter. There should be smooth, gradual resistance changes when the control is operated. Gently flex the control shaft or lever while watching the ohmmeter display; there should be no jumps in reading due to the mechanical stress. (If jumps occur during flexing, the unit will act intermittent when the user pushes on it. The most common cause of this problem is misadjusted contacts.)

The control pictured here passed the stress test with no problems, and was reassembled and reinstalled into the receiver. It operated perfectly, just like new -- success!

Summary

In a pinch, control potentiometers in electronic equipment *can* be repaired by anyone using fairly ordinary materials. Try this technique the next time you encounter a "basket case!"

Meeting Minutes 02-10-2023

Johnson County Radio Amateurs Club

These minutes were approved by the membership in attendance at the 03-10-2023 meeting.

Meeting Date: Friday February 10, 2023. The meeting starts at 7:00 PM.

Attendance: Self introduction with name and call sign. 39 signed the check in sheet. This was followed by the Pledge of Allegiance.

As per the new By-Laws, the Minutes of the previous meeting from January 27, 2023, were posted on the club website instead of being read. The posted minutes were approved with 1 opposed vote.

The Treasurer's report was not available.

Old Business:

- We welcomed all 1st time visitors to the meeting.
- Repeater Update – Bill Brinker, WAØCBW reported all Repeaters were up and repeating.
- The Club's VE team held a testing session on Tuesday February 7. There were 2 present to take their test. One Technician and One General. Both passed.

Tim Wiegman Jr., KBØYQN is the New FEEDBACK Editor!

Meeting Minutes 02-10-2023 cont'd

- With the passage of the new Club's Constitution and By-Laws. Starting this month we are changing the format of the meetings. The 1st meeting of the month will be like all past meetings. The 1st part will be the Business meeting and the 2nd part will be the Program. The 2nd meeting of the month will be all Program. This will allow us to have a longer, more in depth Program or the possibility of build kits.

New Business:

- Field Day 2023 will be June 24 – 25. We are currently working to secure the spot we've had over the last few years at Shawnee Mission Park.
- Treasurer Cal Lewandowski, KCØCL reported that the net proceeds after expenses from the Ensor Auction and Raffle was \$5,600.07 which will be split 50/50 with the Ensor Museum.
- WW1USA will have a special event in October. The event will be outside on the South lawn. There is also talk of doing a WW1USA special event remotely during the weekend of the NFL Draft. More details to follow.

Reports:

- 6 m – NR.
- 10 m SSB Roundtable – 5 participated on February 9 and 4 participated on February 2.
- 40m SSB Roundtable – 5 participated on February 8 and 5 participated on February 3.
- Fusion Digital 440 net – 10 Check-ins on February 8 and 16 Check-ins on February 1.
- 2m Wheat Shocker net – 23 check-ins on February 9 and 18 check-ins on February 2.
- HF Activity – Easter Island, Saint Vincent Island, Madagascar, and Slovenia.
- Pota Activation – 1.

Announcements:

- See Larry's List for any upcoming Public Service Events.

Business meeting adjourned at 7:27 PM.

Program:

The program was "Three knots every amateur should know" by Bill Gery, KA2FNK.

Submitted by Ted Knapp, NØTEK Secretary.

Meeting Minutes 03-10-2023

Johnson County Radio Amateurs Club

The draft of the Meeting Minutes for the meeting on March 10, 2023 is published and available on the club webpage at www.w0erh.org. As per the club by-laws, please review these minutes for a vote of approval prior to the club meeting on April 14, 2023 as they will not be read aloud prior to voting. Once approved by the membership in attendance, the Meeting Minutes for March 10, 2023 will be published in the May 2023 issue of Feedback.

Meeting Presentation 02-24-2023

Given the new club meeting format and this being the second meeting of the month, this meeting consisted of an extended program. The topic for this program was "Ham Radio: Back to Basics" as led by Kevin van der Does, ADØIM.

Supported by several club members bringing gear, we were presented with all sorts of different setups that we can use to set up a station. We were presented a variety of options including some battery powered options as well as commercially powered options, portable options with antennas such as Hamsticks, antenna tuners (some built-in to the radio, some external), and a selection of transceivers from multiple manufacturers and of multiple sizes. For those that are new licensees or just curious about how fellow club members spec out their stations, this was a chance to experience different setups and discuss what has and maybe has not worked.

This presentation concluded with us either skating out to our vehicles or walking slowly like penguins as we were hit with a pretty hefty dose of freezing rain during our meeting.

Meeting Presentation 03-10-2023

For this club meeting, there was a business session conducted prior to our meeting presentation. The Meeting Minutes from this business session have not been approved by the membership at the time of this publication, but they are available for review on that club website at www.w0erh.org and will be voted on for approval by the membership at the April 14, 2023 meeting. Once approved, they will be published in the following issue of Feedback.

Upon conclusion of the business meeting, Brian Short, KCØBS, presented about the upcoming Johnson County ARES Search and Rescue Drill scheduled for March 13, 2023. Brian discussed the supporting role that ARES plays in the local community, teaming up with other organizations when they are activated. He covered how ARES members are activated, went through how the drill would be conducted including briefing, the search and rescue, followed by the debrief and hot wash components of the drill's activities. He also included some photos and examples of past SAR Drill events including the evolution of the facilities utilized by ARES for these events going from a small used trailer to now a van upfitted quite nicely capable of easily handling multiple people in a climate-controlled environment. One fascinating takeaway from this primer of the SAR Drill event was that while Brian is very heavily involved with ARES and its events, he wasn't privy to any info about the upcoming drill so he too was being tested on his abilities.

For the actual SAR Drill event that took place on March 13, 2023, several JCARC members did participate including multiple club officers. The exercise itself was a simulated aircraft crash in a park with widely variable terrain with rather brisk temperatures that evening. As with past ARES SAR Drill events, it was concluded with crackers, cheese, homemade venison sausage, warm cider, coffee, and, of course, a class photo.

If interested in future ARES events, contact Brian Short, KCØBS.

Meeting Presentation 03-24-2023

Given the new club meeting format and this being the second meeting of the month, this meeting consisted of an extended program. The topic for this program was "Build Your First Antenna" led by Kevin van der Does, ADØIM.

Kevin assisted by Bill Brinker, WAØCBW, put together a limited number of kits available for purchase at a nominal cost covering the cost of the components used in the project. Complete with coax feed line, wire, insulators, and more, attendees were able to build solder-free dipole antennas for the 10 meter band. Given the attendance, this was a very popular event and the coolest part was that a few lucky attendees who purchased kits were able to walk away with a built, ready-to-use antenna.

Below are some photos from the build project supplied by Jeff Darby, KSØJD. More photos can be found on the club Facebook page. If you were not in attendance, Kevin uploaded a video to YouTube accessible through the club Facebook page showing the entire process.



From the Editor

Well, it's April and the weather is finally starting to get warmer, though it seems like Mother Nature is pulling an extended April Fool's Day on us. Tornadoes in the Los Angeles area, heavy snow late in the season in some of the mountains of Arizona, and who can forget the radical temperature changes we have been experiencing here in the Central Plains with a side of gusty winds.

April is the time that we start doing some Spring cleaning. For us hams, we should spend some days with the warmer weather checking our stations and all our gear. Unknowingly, some mice may have decided to snack on some coax or a grounding wire, or maybe those excessive winds loosened fasteners or guy wires we have holding up our antennas. We don't want to find out at a less than opportune time that chewed up coax is throwing off some bad RF or giving us bad SWR readings, or that the next gust front that moves through brings down our antennas. So, take a warm day to make sure everything is up to snuff and working as it should. And if climbing up a tower or a roof, have an assistant handy for safety.



Tim Wiegman, KBØYQN, checking the roof mounted antennas. Photo courtesy of his father, Tim Wiegman, KBØYQM.

We have reached the part of the year where the weather is warm, but not hot, and a lot of bike runs and runs take place. The organizers and participants take full advantage of these comfortable temperatures to conduct these events. It also gives us multiple opportunities to provide public service for those events. As Bill Gery, KA2FNK, mentioned in the "President's Corner," these events allow us to test our gear, especially the more portable gear, getting more experience with it while providing a public service to the community and meeting other hams. And if you are a new licensee, don't stress. Even if you don't have gear, we would love the assistance at any events. Often times, extra gear is available for those that don't have any.



So, check your gear inside and out, both base and portable, making sure it is ready to go. Then, look at the Public Service Events calendar and find an event that sounds interesting and volunteer. Not only will you meet new people, your mood will likely be happier afterwards.

See you soon at an event!

And 73!

Tim Wiegman, Jr.
KBØYQN



What's Your Traffic?

Have something you'd like to announce to the club? What about a useful Tech Tip? Is there club member that should be spotlighted? Photos from a presentation?

Your input including ideas, photos, news bits, etc. will help me curate the monthly "Feedback" newsletters. Together, we can create an awesome publication to advance and further the Amateur Radio hobby.

Submit a contribution by emailing me at twiegman+feedback@gmail.com

Club Nets

The club has weekly next on Wednesday and Thursday. It is a great way to test your equipment. Many public service events conduct their communications in a similar way, so this is also a great way to gain experience applicable to assisting in public service events.

Wednesday @ 1900 - Yaesu System Fusion net via Kansas City Room, also accessible from select local KC repeaters (visit www.kansascityroom.com for list)

Wednesday @ Conclusion of YSF net - 40M Roundtable *near* 7.273 MHz LSB

Thursday @ 1900 - Wheatshocker analog net on 145.29 MHz club analog repeater (negative offset, PL Tone of 151.4 Hz)

Thursday @ Conclusion of analog net - 10M Afterglow net on 28.475 MHz USB (within Technician Class portion of band)

Need Club Swag?

If want to show off your JCRAC pride and need some club swag, you may order some by visiting the "Store" tab on the club website where you can purchase hats, patches, name badges and shirts. Also, so items along with other goodies may be available for purchase at club meetings.

Club website: <https://www.w0erh.org>



FEEDBACK

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