



EPARA

BEACON

CLUB OFFICERS

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Ed Hugel - kc3olb

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Craig Sansig - w3wwp

SECRETARY

Kevin Forrest - w3kcf

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John Victor - k3wh

MEMBERSHIP

Al Brizzi - kb3ovb

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Ruth Ann - w9fbo

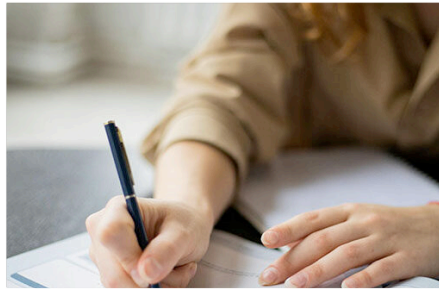


Welcome to the EPARA Beacon, the official newsletter of the Eastern Pennsylvania Amateur Radio Association.

EPARA has served the amateur radio community in the Pocono Mountains for over 35 years. We provide opportunities for learning and the advancement of skills in amateur radio for Ham's and Non-Hams alike. We take pride in supporting our communities and surrounding areas by providing radio communications when needs arise.

We have been affiliated with the 'American Radio Relay League' (ARRL) since 1995 and continue to participate and support them in all they do for the world of Amateur Radio. From study material, testing, club events, contesting and much more. There is always something to do and learn. Come, join us and be part of this exciting hobby.

Feel free to join us for our monthly club meeting, starting at 1930 (7:30 pm) at the Monroe County Emergency Center (911Ctr).



Monthly VE Testing

To schedule you test, contact
Chris: aj3c.ve@gmail.com

Testing starts at 1800 prior to our
monthly club meeting.

WEEKLY NETS

EPARA Tech Net - Monday 2030
146.865 Mhz, PL - 100 Hz

EPARA Info /Swap Net 2030
146.865 Mhz, PL - 100Hz

EPARA DMR RAG CHEW 2030
Talk Group - 3149822

Webmaster/Newsletter
Kevin Forrest - w3kcf

Website:
www.epara-n3is.org

Email
eparahamradio@outlook.com

* Newsletter Submissions *

Kevin Forrest - w3kcf
eparabeacon@gmail.com

EPARA
P.O. Box 521
Sciota, Pa 18354

President's Comments



Dear Members and Volunteers,

I would like to express my sincere gratitude to our officers and volunteers for their dedication to improving our ham radio club. From our presentations and hands-on workshops to the evolving Beacon newsletter, expanded social media presence, and the implementation of digital VE exams, your hard work is evident. Our partnership with LVARC and our commitment to educating potential new operators are vital to increasing our membership and promoting the hobby and radio service. Thank you also to the hams who consistently host our weekly nets.

To all EPARA club members: thank you for your participation. You are the heart of this club, and every member is valued. While we always encourage healthy debate and questions, please remember to remain respectful of our volunteers who are doing their best for the interest of the club.

I would like to extend special thanks to several individuals:

- Walt (W3FNZ): Thank you for your presentation on the coax analyzer. For those interested, Walt has units available for purchase.
- Antenna Build and Fox Hunt Participants: You were all troopers for hunting in the rain! Congratulations to Mike (WR8TH) for winning the hunt.
- Rich (N3CRT) and Ralph (KC3VII): Thank you LVARC for leading the workshop and demonstrating the digital VE test exam in partnership with EPARA. We appreciate you sharing your time and expertise.

Looking ahead to our May meeting, we will be experimenting with an attenuator. Additionally, Ron (N3GGT) and I will provide a presentation and testing demonstration regarding crystals.

We have many exciting things planned for the future. If you are interested in giving a presentation, please contact me at kc3olb@gmail.com.

In closing, I wish all our members and their families a Happy Mother's Day and a safe Memorial Day weekend.

Kindly,

Ed (KC3OLB)
EPARA President

EPARA MINUTES APRIL 2026



Eastern Pennsylvania Amateur Radio Association

April 9th, 2026

General Membership Meeting 7:30PM

Open meeting:

Meeting called to order at 7:30 pm on April 9th, 2026 by Ed - KC3OLB

Quorum: Yes

Total attending: 23 Present at 911 Center: 19 Present on Zoom: 4 Visitors present: 1

Pledge of Allegiance / Moment of silence:

Membership Meeting – Minutes April 9 2026

Secretary – Kevin - W3KCF:

Meeting minutes for April 9^h, 2026 were posted in the EPARA Newsletter. Ed – KC3OLB asked members if they had seen and read the minutes from our previous meeting. He then asked if there were any questions or objections to the minutes as they were presented. With no objections, Ed asked for a motion to accept the minutes as presented:

Motion to accept Minutes as Read: Al -KB3OVB and 2nd by Ron – N3GGT (Passed)

Treasurer's report:

For the April 9th, 2026 EPARA Club Meeting

By Mike – WR8TH

Treasurers Report - Month of March 2026

A detailed report was read to the membership itemizing all transactions. Mike mentioned that if anyone was interested in seeing the detailed report, please contact him.

All transactions during this period are accounted for with accompanying documentation.

Motion to accept Treasures Report: Pete – KB3YKJ and 2nd Bill – AB3ME Motion Passed

Comments from the President: Ed – KB3OLB

Changes to Our Bylaws:

*Ed explained that an email had been sent out to the membership explaining how a vote would be held at the April 9th meeting to remove **Article 4**", titled **"ARES/RACES,"** from our bylaws. He asked if there were any questions or comments. He then asked for a motion and a second to proceed with the vote. A motion was made by Ron – N3GGT and 2nd by Bill – AB3ME. A vote by ballot was then conducted and counted by Bruce – WB2EQM (Visitor). The membership voted by a count of 13 to 7, to remove all reference to ARES in Article 4 from our Bylaws.*

Directional Antenna Build? Fox Hunt

Ed mentioned we would be having an antenna build followed by a fox hunt in Stroudsburg. We plan to meet at the 911ctr on April 25th at 1100 for the build and head into town afterwards for the hunt. He asked for a show of hands to see who was interested. We had approximately 10 members wanting to participate. Ed said the club would provide the materials for the build.

St. Patrick's Day Parade:

This year's the parade was held on Sunday March 22nd. Ed said we had 3 participants. Many thanks to Al -KB3OVB, Bob and Ed -KC3OLB.

Digital VE Presentation:

We are trying to solidify the date for April 30th with Rich from Lehigh Valley Amateur Radio club. He is their Lead VE and has volunteered to walk us through the new digital process and set up, to get us started with the electronic testing process. All current VE's and those wishing to participate are welcome. Current VE's need to go to examtools.org and examtools.dev and register. The two sites look identical, but you must register on both. Examtool.org is for live testing and examtools.dev is for offline practice. The offline (sandbox) is what we'll be using for the presentation.

Field Day:

This year's Field Day is the last weekend in June (27th – 28th) Setup will begin around 1500 on Friday the 26th. Kevin – W3KCF has permission to use the church's property in Pen Argyl. It's 12 acres on a hill with no obstructions or RF interference. It's the same site we have used for our EME outings. (Moon Bounce)

Ed passed out a signup sheet for those interest. We had 14 members sign up. Since the location has changed, we will provide a detailed map and directions to the property. At this location, there are numerous facilities close by. Food, Gas, stores etc. In addition, there is a fire pit on the property, so we'll have a nice time around the fire.

The reason for the location change has to do with the state. They have changed the rules and fees to use the park. It used to be \$50 for five years, now they will be charging \$100 a year to use the facilities.

West End fair:

The fair will be here before we know it. This year it is August 23rd through the August 29th. At our May meeting, we will have a signup sheet available to select which days and time slots you may prefer.

Hamfest:

This year's Hamfest will once again be held at the Moose Lodge on September 20th. Next month we will have a signup sheet for those wishing to participate. I shout out to Allen, Joe, Rose and John who said they will be there.

Club Hats:

For those interested in purchasing a club hat, send us an email to: eparahamradio@outlook.com. The price is \$22 for our club hat with logo on the front and call sign on the back..

Christmas party:

This year's Christmas part will be on the 10th of December. We still have plenty of time to pick a location, so let us know if this works for you. If you have another location you'd like to try, please let us know.

Each month, there will be something new. I'll continue to send out the newsletter via the groups io, but it will always be up on the website.

Contact information: eparabeacon@gmail.com

AL, KB3OVB: Membership

AL said the list he currently has show's 35 paid members, plus 4 lifetime members.

Old Business:

Ed mentioned that we are still looking for a suitable trailer for the club. We are looking for a 16' to 18' trailer with a dropdown rear entry and RV style side door. Price range \$2500-\$4000

Craig – W3WWP has been working on having HamCrazy create our new id cards. He said there will be a choice on style, card material and information on the id.

At our March meeting, craig had an update on the id cards. He showed us 4 variations which were quite nice. I think the majority consensus was the portrait view. With a few tweaks, it's going to be a fantastic choice.

Cost for the club id's will be \$9.25 if we have a minimum of 30 members interested. If not, the cost is still under \$10.00.

Those interest please send Craig – W3WWP a photo to his email. In the subject line, put club id photo.

csansig@yahoo.com

New Business:

New Members

Tonight we had two new members: Erica – KD3CQM and John – KD3CXP.

Congratulations and welcome to the club.

Announcements:

50/50 Raffle: Tonight's 50/50 Raffle was won by Ed -KC3OLB. He received a total of \$31.00 in cash.

Adjournment... Meeting was adjourned at 2056

Motion to close Pete – KB3YKJ and 2nd by Ron – N3GGT Motion Passed

Secretary

Kevin Forrest

W3KCF

Technical Projects and Support

EPARA Fox Hunt - April 25, 2026

Well folks, the fox hunt was a lot of fun. We realize it would have been a lot more fun if the sun was out and it wasn't raining. We had planned to go over to my neighbors and hide the transmitter somewhere on his 12 acres, but mud and ham's wasn't a good recipe. So, we did the next best thing. We hid the transmitter (of course) outside and let them loose. I felt sorry for the hunters, so I cut the playing field in half. They still got soaked, but they were smiling..Sorta.. I hid the transmitter in my car, parked in back behind the trailer. I forgot to turn off the car, so the wipers were running and the headlights were on. Good thing it wasn't a car jacking with a victim inside. Mike WR8TH finally located it. He won the prize, a club patch.

We learned a lot about a strong signals. Even though the transmitter was on rw with a rubber ducky, our radios were overwhelmed. Guys tried running off frequency, third harmonics and removing their antenna. Maybe our next project, we'll build an attenuator and try it again.

Maybe some of these suggestions will work.....

When a fox hunt transmitter signal is too strong and appears in all directions, it means you are close (usually within 100 feet) and the receiver is saturating. You must drastically attenuate (reduce) the signal to regain directionality.

EPARA Fox Hunt - April 25, 2026 (cont)

1. Close-Range Attenuation Techniques

Remove the Antenna: Take the "rubber duck" antenna off the handheld radio (HT). If you still hear the fox with no antenna, you are within 50-100 feet.

Use an Offset Attenuator: This is the most effective tool, creating a 4 MHz shift that creates a controllable, weak signal rather than the strong, saturated signal.

Body Blocking: Hold the HT close to your body and turn slowly. Your body is a 20-30 dB attenuator. When the signal is lowest, the transmitter is behind you.

Use a "Dummy Load" or Paperclip: Replace your antenna with a 50-ohm dummy load or a small wire/paperclip inserted into the antenna center contact.

The "Metal Can" Method: Put the HT inside a metal box (e.g., biscuit tin) or a tube wrapped in aluminum foil, leaving one end open. This acts as a directional shield.

2. Receiver Adjustment

Tune Off-Frequency: Move 5-10 kHz above or below the operating frequency to catch the signal on the "skirt" of the IF filter.

Switch to Harmonics: If the fox is on 146.550 (2m), tune your radio to the 3rd harmonic in the 70cm band (approx 439.650 MHz). It will be much weaker and easier to direction-find.

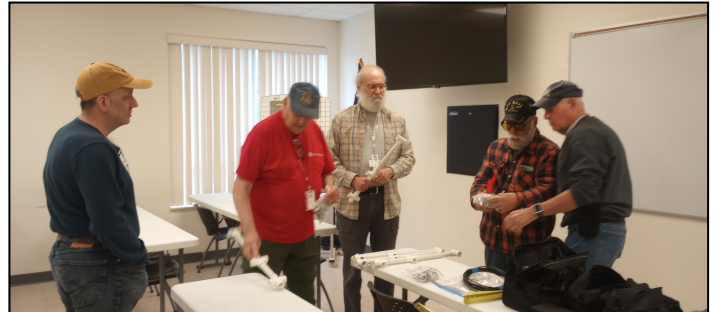
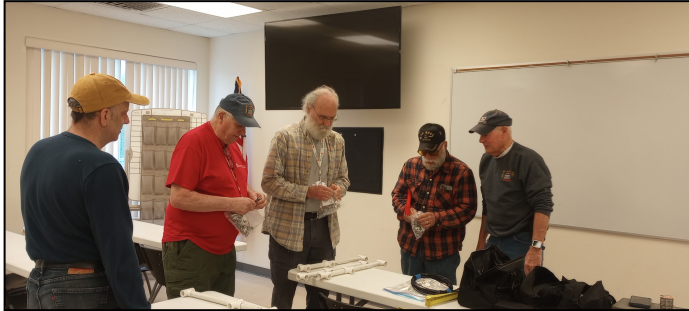
Change Polarization: If the antenna is vertical, rotate it to horizontal. This can provide ~20 dB of attenuation.

3. Alternative Techniques

Loop Antenna: A simple shielded loop antenna (often called a "quad loop") has sharp, precise nulls on the sides that are superior to Yagi peaks at very close range.

Sniffer/Field Strength Meter: Use a simple RF sniffer device that turns signal strength into audio frequency (the higher the tone, the closer you are).

EPARA Fox Hunt - April 25, 2026 (cont)



Crystals in Electronics Today

Join our club meeting May 14th 2026 for a presentation on how crystals function and are used in today's electronics.

Crystals, specifically quartz, are used in electronics as resonators to create highly stable, precise frequency signals for timing and frequency control. Utilizing the piezoelectric effect, they generate electrical signals when mechanically stressed, acting as precise frequency references (clocks) for microprocessors, radios, and communication systems.

Key Applications and Functions

- **Quartz Crystal Oscillators (XOs):** Generate stable clock signals (“heartbeats”) for computers, microcontrollers, and digital circuits.
- **Frequency Control/Filtering:** Used in radio transmitters, receivers, and communications to select specific frequencies and filter out unwanted signals.
- **Timekeeping:** Used in watches, clocks, and real-time clocks (RTC) in electronics to keep accurate time.
- **Key Industries:** Found in consumer electronics (smartphones, PCs), industrial equipment, automotive systems, and telecommunications for data synchronization.

Key Properties and Characteristics

- **Piezoelectricity:** A quartz crystal distorts under an electric field (inverse piezoelectricity) and generates a voltage when mechanically stressed, acting as an extremely stable RLC circuit.
- **Stability:** High-quality (Q) factors (often >100,000) allow for precise and stable frequency control with low temperature-related variation.
- **Frequency Adjustment:** The physical dimensions and cut of the quartz slice define its operating resonant frequency.

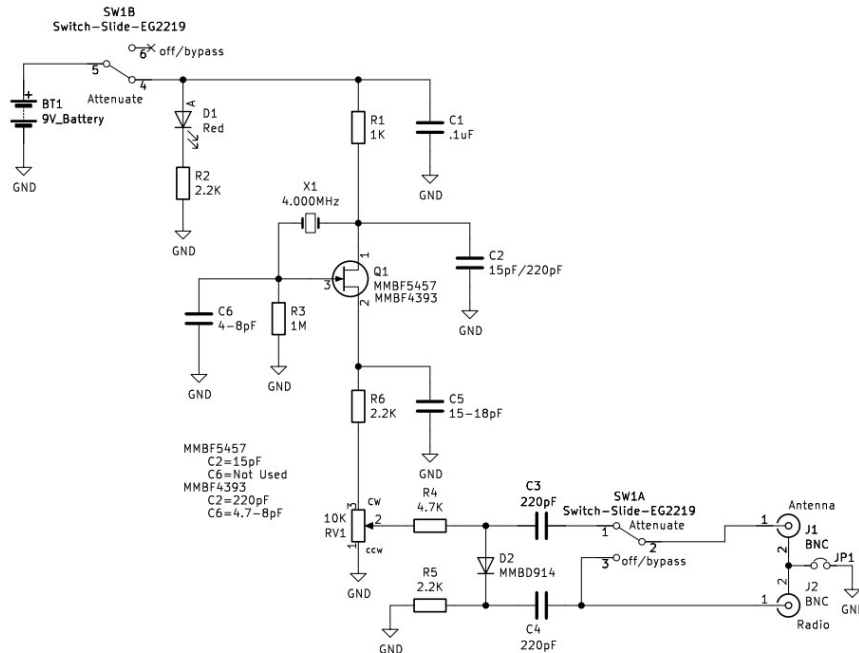
Main Types of Crystal Components

- **Quartz Crystal Resonators:** A synthetic quartz slice between electrodes.
- **Crystal Oscillators:** The crystal combined with an amplifier to produce a continuous signal.
- **Overtone Crystals:** Used for higher frequencies (above 30 MHz).

Crystals are essential for any application requiring high precision in timing, such as in GPS systems, where they enable nanosecond-level synchronization.

Ron-n3ggt said he will be bringing his crystal checker to the club meeting 14 MAY 26. If anyone has any crystals they want checked, bring them to the meeting. It is a simple oscillator that will light a LED if the crystal oscillates.

FOX HUNT OFFSET ATTENUATOR V7

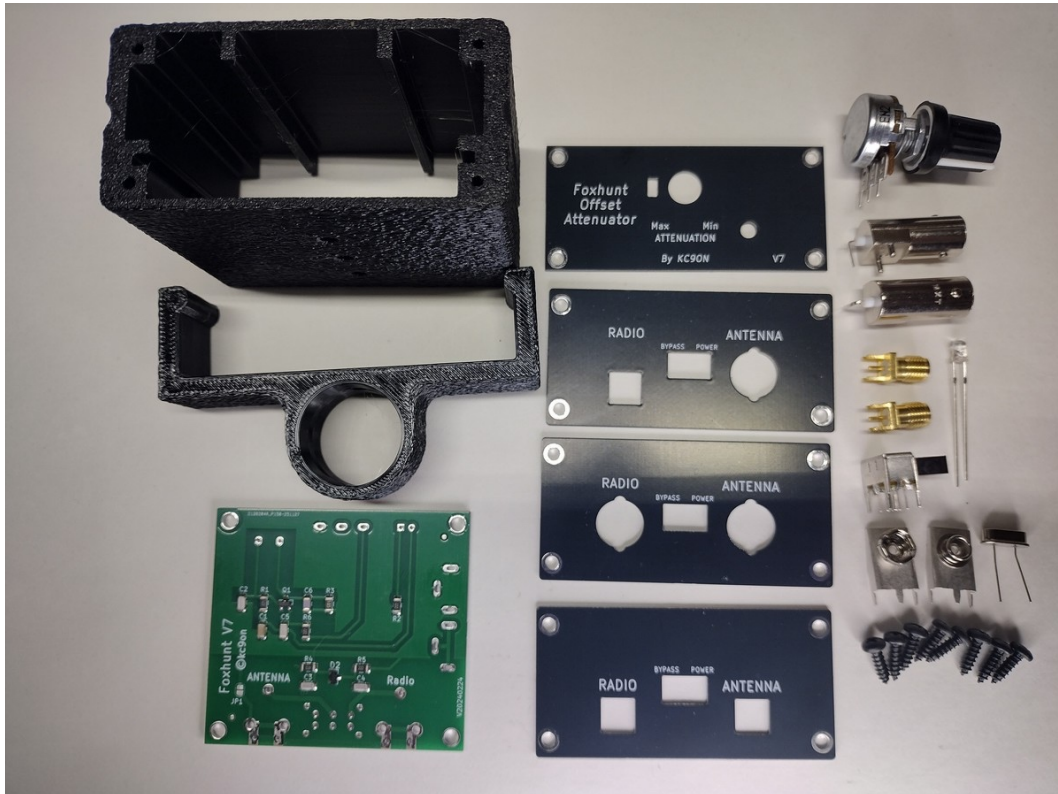


Ron - n3ggt said he will also bring his 4 MHz offset attenuator for fox hunting. This circuit connects between the antenna and your HT (or receiver) and will cure the massive RF overload when you get close to the transmitter. It will provide up to 80 dB attenuation and works nicely. You will get to play with it and see its benefits. Mine was purchased thru eBay and costs a mere 38 dollars and includes free shipping from Michigan. The surface mount components are already soldered to the board, and final assembly is very easy. Both SMA and BNC connectors are provided giving you the option of either or one of each. The provided enclosure will mount on a 1-inch diameter boom or handle. Frank Boots W3OKW a former member of EPARA had one for out fox hunt in 2018 (if I remember correctly) and it made a believer out of me.

Kevin - w3kcf said he'd bring his transmitter and Ron will bring the antenna we built and the attenuator. We will do a quick demonstration on how it works inside the classroom.

FOX HUNT OFFSET ATTENUATOR V7

<https://kc9on.com/product-category/fox-hunting/>



For more information on the attenuator, see Ron - n3ggt at the meeting. We are also discussing possibly having a hands on gathering at the 911 CTR to assemble our own.

VE Training Session

We held a training session for VE's on Thursday the 30th at 1800. With the technician exam going digital the 1st of June, we needed to change the way we test our applicants. We went over how to conduct these sessions. How to register and what hardware is required.

For current VE's, you need to go to examtools.org (live sessions) and examtools.dev (Off line sessions) and register with you call sign. On both sites, the process is identical. Only difference is the backgrounds. The non live site registration shows a pile of sand and a shovel. The live site has a student at a computer. This will get our VE's qualified in their system.

Next, the club will register through HamStudy.org and get approval for our club and Lead VE. Once we are registered and approved, we can begin listing our exam sessions.

We then purchased three Lenovo Tab One Tablets with cases and lockout software to be used during exam sessions. This will make the process so much easier for all involved.

If you are not currently a VE and would like to participate, go to ARRL and take the open book exam to become a VE. The process is easy and straight forward. You need to be at least a general to participate. This will allow you to grade technician exams. To grade general and extra applicant exams, you must be an extra.

Many thanks to Rich - N3CRT (lead VE - LVARC) and Ralph - KC3VII who came up and graciously gave their time to explain the process.



Points of Interest in Amateur Radio

FCC Approves AST Space Mobile's License for Emergency TT&C Operations in the 430–440 MHz Amateur Radio Band Outside the US

Apr 29, 2026 · Spectrum · Joel Harrison

On April 21st, 2026, the FCC granted AST Space Mobile permission to conduct emergency Telemetry, Tracking & Control (TT&C) operations outside the United States in the 430–440 MHz amateur radio band for all their planned 248 satellites.

More than 2,500 comments were submitted by ARRL, AMSAT, other IARU societies and individual radio operators during the FCC review period. The license allows emergency operations when no other bands are available for up to 24 hours on the center frequencies of 430.5 MHz, 432.3 MHz, 434.1 MHz, 435.9 MHz, and 439.5 MHz (each with 50 kHz bandwidth), and was granted by the FCC pursuant to Article 4.4 of the ITU Radio Regulations.

The IARU is of the view Article 4.4 was not appropriate to use in this case in order to assign frequencies in derogation of the ITU Table of Frequency Allocations. We note UHF allocations exist specifically for satellite TT&C purposes and should have been selected instead of frequencies allocated to the amateur services.

The 430–440 MHz band is primarily reserved for the amateur and amateur satellite services in ITU Region 1 and several Region 2 countries. The IARU and its member societies will keep working towards a clearer understanding of how Article 4.4 should be applied to space operations. We also encourage members to report any interference caused by AST Space Mobile satellites to their national regulators.

EPARA SWAP AND SHOP

If you have anything you'd like to buy, sell, swap or trade, this is the place to post your gear. Share your information here and then again on Al's Swap Net. Tuesday Night at 2030 WX3OES 146.865 PL 100

Send information you'd like posted to Kevin - W3KCF
eparabeacon@gmail.com

Coax Cable Tester: Walt - w3fnz

Walt has two cable testers for \$30 each. The tan one has already been sold. These are the same testers he brought to the meeting and talked about how they worked and how he made them. To operate he says, just attach both ends of the coax in question to each SO 239 on the box and the lamps will indicate the condition. Wiggle the coax from the PL 259's down. Any blinking or lamp outage indicates an intermittent open. If a short exists the Red lamp will light.

