

# ***The SPARC NEWSLETTER***

## **June 2025**

A publication of the Southern PA Amateur Radio Club

Harry Bauder, N3FMO President

David Keener K3IWU Vice President

Mark Walton, K3MRK Past President

Ryan Estock K3RDE Secretary

Dennis Buckler, W3DEN Treasurer

Dave Payne, N3LOM, Repeater Trustee

Larry Laughman, K3LWL – Member at Large

Jason Bachman N8WXZ – Member at Large

Jim Dunbar, W3JGD – Membership Chairman

### **Does anybody know what time it is?**

Have you noticed the time announcements on the 145.23 MHz repeater? OK, so what's up with that? Well, they are not anything local but come from the Allstar network. When we have our repeaters on the network with the swell fun magic of VOIP (Voice Over Internet Protocol), up comes some problems. One problem is an old-old problem that railroads had to deal with 200 years ago, like "what time is it?" ...or... Is that a train a-coming?



Here's an example. Suppose I have my repeater on the east coast, and you have your repeater on the west coast. Let's say our repeaters are to hook up automatically at 3:00. We both enter "3:00" into our software right? Well, not quite. "3:00" on the east coast is 1:00 on the west coast. Also, what about AM/PM?

OK, so let's expand this a bit. Suppose you have a swell VOIP server or multiple servers that handle thousands of connections and disconnects from all across the globe, including stations that connect across the international date line. In order for your server to even be able to record the time each node connects, there is going to be some problems with date, and time of connections. Things get real messy very fast.

So lighten up and look at your cellphone for the time until this gets ironed out. And more so, honor the fearless volunteer club folks who are slaving away to remedy this problem. It's a fun challenge for them, but it takes some effort. Be patient. Do YOU want to help?

## **Firecracker Hamfest Help**

Speaking of help, did anybody see Harry's plea for helpers at the Firecracker Hamfest this July 5? I did, so I will pitch it here. Usually, the venerables, Harry, N3FMO, and Jim, W3JGD, handle the workload of hauling up the booty the club wants to sell up to Harrisburg, peddling it, and setting up and tearing down. It just isn't right to burden Jim alone with all this work, because this time, Harry will be gone away.



SO: Harry is looking for a few dedicated helpers who are willing to help with hauling items for sale to the Firecracker hamfest, and manning the table. If nobody steps forward this year, then we just won't go, and loose out on liquidating some of the stuff the club has to sell.

SO? Well? That cash goes to pay power bills, lighting bills, porta-potty pump out, etc. that keep your friendly club-on-the-hill, with the big radio tower, alive and not evicted. So please help out. I also would like to think that when I become an SK, my ton of electronic junk will get sold by this club, instead of dumped in a wife-envisioned, double-wide, roll-on-roll-off dumpster. That money will provide some fertile capital to keep the club fiscally viable. Thus, RF signals will be emitted from the old microwave site for years to come. Don't make me haunt you.

Send Harry or Jim a message, fire a flare, send CW with two clip leads on 40 M, honk your car horn in CW, or just maybe even call either fella on the repeater, and step up to the plate. It's only a Saturday, and you will be hung over from the 4<sup>th</sup> anyway. What better thing, than to sit behind a table and haggle with someone? Eh? You probably will be able to extract the absolute maximum dollar with that massive headache. For heaven's sake, use it for good. Help.

## **Meeting Night**

The SPARC monthly general membership meeting is the fourth Tuesday of the month, June the 24<sup>th</sup> at 7:00 PM. The meeting is being held at the Clubhouse. Bring your snacks and hike out your trash.

# ARRL FIELD DAY



[www.arrl.org](http://www.arrl.org)

The program will be on preparing for the up and coming Field Day activities. What? Field Day already? Sure. It's Saturday June 28 and Sunday 29. Yes, Virginia, it's around the corner, so if you want to take on some cool, fun, portion of something or other, y'all better come to the meeting and get yourself all volunteered up, before someone else gets to do the fun thing you wanted to do. Giddyap!

PLAN A: Another thing about Field Day. Remember that there is typically a lot of operating going on at these operating events, hence the nature of an operating event, where people tend to operate. People are scheduled for different bands and different times, and different rigs. These people then operate these rigs in operable fashion.

Well, when I usually get there (...way late), there are often already a bunch of people sitting around with headphones on, typing into computers, tickling keys, and mumbling into microphones. What do I do now? (...see plan B)

PLAN B: Dangit, shewhee! Over the years, I have had to accept that when I come and go to a Field Day, I may not even operate. So, seeing as this is my Tempus Modus Operandi, jest come say hi to me or whoever is not on the air.

I also usually vie for any remaining Field Day open slot, thus usually placing me on the 160M daytime CW operating position. I also imagine things will be slow on those 160M CW daytime slots. (...pesky D-layer) SO... I will have plenty of time to shoot the bull, and drink a sarsaparilla. Not everyone will be operating. It can be a fun bull session.

In other words, don't show up at the last minute to Field Day and wonder why there are no operating slots available for you to do a few pile-ups on 20 M SSB. Someone else will already have those times filled. You want that 20 M pileup experience? Giddyap!

## **Maintenance**

by Harry N3FMO

Jim Harden, W3BYO, has offered to take over maintenance of the club website. Changes to the old “HTTPS:” hyper-text markup language will be happening soon. Drop Jim a message of encouragement. This club, like many other things in life, is only as good as its members are. Pass along to Jim a compliment. And don’t forget a “good job”. And if you find something on the web site that you think needs fixing, then you may comment, but remember, that also may become your new area of contribution to the website.

Like grandpappy used to say, God rest his soul: “Squabbling old hens who peck each other bald, don’t lay many eggs.” I can show a picture of my flock right now, but it ain’t pretty. This is a nicer picture.



## **More Plate Tectonics**

by Sam W3IHM

I am going to have to go pick up a lottery ticket, because last month, I said this:

“Also gone are the 455 kHz ceramic and 9 MHz crystal filters. Gone are Collins mechanical filters also. Prices on old filters pulled from radios are also skyrocketing, often exceeding the value of the radio they go in. Legitimate replacements are also becoming hard to find, and fakes are flooding the market.”

Well, I got bit by this already. I went to Dayton, or I guess Xenia now, and picked up a swell Icom IC-275A for a shockingly cheap \$50! Wow! Such a deal! It is an all-mode

rig with internal switching power supply. The seller said: "...power supply don't work" and tossed me a DC power cable. He also said: "...needs some more work. ...tried to fix it but didn't have the time."

Just LOOK at this baby! How could any one walk by this one for a mere \$50! OK, it was covered in mysterious brown "grunge" type ooze of questionable biologic origins, and had a bottle of "Fireball" booze and plastic "DiXiE" cups poised on top, but still, I was game. (...not for the Fireball. My Leukemia chemotherapy forbids that now.)



I got the baby home, and all the panel lights were out. Dark. The meter also had that "burnt french fry" brown color on the scale, indicating this was a "high hour" set. What an absolute pain in the giblets to replace them than panel lights. They all were "silver" with tungsten evaporation, showing again, that this was a high hour set.

OK, sure, on to the power supply. After I had some time cleaning up someone else's mistakes, I had the pleasure of adding heat sink insulators in the built-in power supply to get that working. The previous owner neglected to install heat-sink insulators on all the devices they replaced, so of course, the highly efficient switch mode power supply was all one big short circuit. Fortunately, the fuse blew. This protected the newly replaced devices from having another bout of loosing their magic smoke.

...but those were the easy fix parts.

On the radio side of things, the FM section worked fine, except it was aligned, well, maybe with the magic screwdriver. All the alignment parts described in the free, on-line service manual were done, but none of the OTHER stuff that was NOT discussed in the alignment procedure was touched, and was a tad off. Somebody went through and "tightened all those loose screw thingies."

Doing a factory alignment is not the “full” alignment. You kinda have to learn how ALL the radio is supposed to work, to truly get the thing right on. But that’s usually not the problem.

Ok, so what’s the rub? Well, in this case, the SSB/CW receiver part was just kinda “sleepy”. I could hear a 0.1 uV signal on 144.2 MHz, but there just seemed to be little IF gain. There was no great rush of “noise” when I poked an antenna into the thing. On TX, the SSB signal sounded crappy, and was also “missing” some bandwidth.

I know that when I was a kid, back in the dark ages, it was not common that any AM/SSB/CW 144 MHz receiver would show any noise level change at all, when attaching a 2 meter antenna, but that was the early ‘70s. By the ‘80s and the dual-gate MOSFET, it became common. Now, with GaAs and SiC devices, combined with all the switching noise that we are immersed in, TOM can hear the noise come up when hooking an antenna onto a 144 MHz AM/SSB/CW rig.

So, I fed in a signal and found that it disappeared at ....wait for it.... The IF crystal filter! Swell. I bypassed the filter with a magic special service approved “hunk-o-wire”, and lo and behold, the RX woke up like gangbusters! Bad filter.

OK, so I need a new filter, a 10.75 MHz 2.1 kHz BW crystal filter, if this rig is ever going to run SSB. No problem. Yeah. What are we talking? \$20 including shipping? Right? I’ll get one easy.

The hunt begins. The prey:



Let’s check fleabay. Ooh! Icom FL-34! Here’s an AM one! WAIT.....\$70. “Untested” – translated: It doesn’t work.

Others. They run from \$80 to \$110. They are also “...removed from working equipment”, “May work”, “My brother said it was ok”, “I swear it was good when I last used it...”, “...my blood hound hollers when I hold it up.” etc. Translated: It doesn’t work. You get the drift.

Well, there's a heap of 10.7 MHz ones. WHY did Icom go and have to use a screwball IF of 10.75 MHz? Hey wait! Does Icom maybe have them? Ha, Ha, ha, ha, ha-ha-ha, and ha-ha.

So I am desperate. Let's see. Maybe I can find a bunch of cheap 10.75 MHz crystals on fleabay, hand measure about a hundred, run some old computer code, and then roll my own 8 pole Cohn style type crystal filter. I've done this before for a 13.5 MHz IF filter once, but that was for a Gov't contract which I got \$200/hr. That was back in the 80's, too, so cost of living....

Nothing doing. There is no bunch of cheap 10.75 MHz crystals on fleabay. So even that labor intensive, labor-of-love type torture-task, that I would never even contemplate doing for anyone else, except for maybe saving the world from the brink of nuclear war, is a no-go.

Well, at least the FM part of the radio works. Yeah. That's something. Another FM rig for 2 meters. I was just thinking of how I really could use another FM 2 meter rig here. Yep. Another FM rig for two meters. Cool.

So here I am with a radio that has no IF filter, that I can drop about \$100 on to get it to work. Sure, but it still has some other problems, like someone dropped it on the channel selector shaft encoder, cracking the shaft casting, so now the knob wobbles and goes wacky. Eh, even with a filter, not a "...mint in box, N.O.S" radio.

I know what. It will go the way of all orphan gear in my confines. I will stack it somewhere in my shack, along with all the other busted radio gear that I had fun diagnosing, and salute it.

But let this be a warning. Parts are disappearing. Fixing these older rigs is becoming mostly cost prohibitive, even if you can manage to find replacement parts, and are also perhaps smart enough to diagnose and fix them yourself....

Because, it also took me about 20 hours of labor to find out what was bad. Like farming, if someone says they are making money fixing radios, they are lying.

...again... More on this later.

### **License Test Sessions**

Testing is conducted at the SPARC site on the first Tuesday of every month. Fee to take the exam. It is \$14.00 payable on the K3IR website or in person, cash or check only.

You can pre-register to take the technician test, or upgrade, at Hamstudy.org. There is also a link on the K3IR web site. If you do not already have one, go to fcc.gov and register for a FRN (Federal Registration Number).

After brushing up on his old Auf Deutsch, TOM just learned this from his German nephew. Supposedly, some countries, like Germany, now have all the ham exams handled exclusively by their national club, DARC, and have them on line. There is no government administration involvement. I would expect that here, in the good old US of A, soon.

## **Upcoming Hamfests**

### **Sat June 21, 2025**

Rartin Valley Hamfest

W2QW

Piscataway High School, Piscataway, NJ

<https://www.w2qw.org/>

### **Sat. July 5,2025**

Harrisburg Radio Amateurs Club

W3UU Firecracker Hamfest

Harrisburg Postal Employees Picnic Grounds

1500 Roberts Valley Road, Hbg., PA

<https://www.w3uu.org/>

### **Saturday October 1**

Red Rose Hamfest

339 East Main Street

New Holland, PA

## **Looking For Volunteers**

SPARC currently has 131 “active” members on the roster. We have a lot to offer to our members. At this time we have a dedicated group of hardworking volunteers who keep the site running. Some say this is typical with most organizations. I don't think SPARC should be “typical” We need more real active members. Jobs range from the highly technical to the mundane but ALL are important. Please look at the list below and see if there is a place for you.

IT Team

Tower climbers and ground help

Operating building maintenance and cleaning

Operating building equipment maintenance and improvement

Porta Potty cleaning (not Pumping!)

Adopt a Highway crew

Elmers

Hamfest help

Meeting programs

Vic Jenks, W3VIC has offered to take on the Adopt a Highway program but I would like to see at least 2 helpers to step up.