

# The HIARC Bulletin

June 2023 Edition

## Newsletter of the Harris-Intersil Amateur Radio Club

**Club Meetings:** Second Thursday of each month at Meemaw's Barbecue on Babcock Street between Palm Bay Road and Port Malabar Road. Supper is at 5:30 PM, business is at 6:30 PM. Prizes at 7:45 PM. Our programs start around 7:00 PM. Meeting ends by 8:00 PM. As some members have allergies, we kindly ask that you refrain from wearing fragrances. Thanks.

**Repeaters:** K4HRS, 145.47 Mc, tone 107.2 cycles. Down at the moment.

### **Nets:**

Open to everyone:

- South Brevard Emergency Net: Thursdays at 7:00 PM. 146.61 Mc. In event of repeater failure 146.85 Mc and or 146.58 Mc simplex.
- Skywarn Net: Thursdays, after the SBEN net / 7:30 PM or so, 146.61 Mc
- Palm Bay Informal Net: 8 PM Thursdays on 147.255 Mc.
- Medical Complaint Nets: evenings 3.6 to 4.0 Mc.

**HIARC Web Site:** [www.qsl.net/hiarc](http://www.qsl.net/hiarc). Website administrator; Jim Tonti, KC7SSW

**Officers:** President: Francis Parsche ("Butch"), WA4AQV

Treasurer: Pat Reilly KA4ZEC

Secretary: Open

Repeater Chairman: Clyde KD8AN

Program Chairman: Open

Field Day Chairman: Open

Sunshine Chairman: Open

Club Jester: Ken N8KH

**Annual Membership:**

Annual dues are \$12.00. You can join at the meeting or send a check to:

HIARC Treasurer  
Pat Reilly, KA4ZEC  
1985 Howell Lane  
Malabar, FL 32950

We are on a calendar year dues system with annual dues due in June. Dues are prorated by a dollar a month. If you join in April dues are \$2.00 to get to June.

Send me your email address to receive the newsletter: francis.parsche@13harris.com

## Select Hamfests

- Melbourne Hamfest. October 13 and 14, 2023. [Melbourne Hamfest 2023 – PCARS – W4MLB](#)
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## Ham Radio Lunches:

- Every Friday, 11:00 AM till 1:00 PM or so, Golden Corral on Palm Bay Road in Palm Bay. Talk in on 146.61 Mc repeater.
- Every Friday, 11:00 AM till 1:00 PM or so, Crystal Buffet on 192. Talk in on 146.61 Mc repeater.
- Once a month, the Saturday after the PCARS meeting, Sarno Restaurant and Pizzeria, 11:00 AM. Talk in 146.61 repeater. This restaurant is at the corner of Sarno Road and Croton Road.

## June 2023 HIARC Meeting And Program

When: The next HIARC meeting is Thursday June 8, 2023.

Where: Meemaws Barbecue on Babcock Street.

Time agenda genda:

5:30 PM dinner  
6:30 PM business  
6:45 PM prizes  
7:00 PM program

The program will be “How Fox Hunting Works” by Tim AK4ZZ. Tim will bring in his Fox 2m transmitters, antennas and receivers to demonstrate how direction finding works: there will be show and tell in addition to theory. Tim would like to generate interest in Fox Hunting, perhaps as subgroup of HIARC and get help with organizing Fox Hunts for the Boy/Girl scouts as part of their Radio Merit Badge requirements.

Annual HIARC dues are due this month. Still \$12.00. You can pay at the meeting or mail them to our treasurer listed earlier in the newsletter.

Office nominations are this month. Let us know at the meeting.

## 2023 HIARC Field Day

There will not be a HIARC Field Day this year due to lack of interest. PCARS and South Brevard will be glad to have you though.

## The K4HRS club license is now renewed.

We are good until 2033.

The screenshot shows the FCC Universal Licensing System (ULS) search results for call sign K4HRS. The page header includes the FCC logo and navigation links. The search results table shows one match for K4HRS, held by HARRIS / INTERSIL AMATEUR RADIO CLUB, with FRN 0004722815, Radio Service HV, Status Active, and Expiration Date 04/15/2033. The page also includes a search bar and various utility links.

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
1 K4HRS	HARRIS / INTERSIL AMATEUR RADIO CLUB	0004722815	HV	Active	04/15/2033

K4HRS is renewed till 2033

To renew an amateur license these days you have to wade through two FCC software systems ULS and CORES. You put your license information into ULS and then in a day or two check back and ULS and it will say awaiting payment or similar. Then you go over to CORES to pay. If you can't find your license application needing payment at CORES you may have forgotten to make yourself the license administrator. So, it's now \$35.00 every ten years and harder to do as well.

## Amateur Radio Technician License Class Starting

There will be a 2 Day Technician Class held by PCARS Education Director AF4Z, on July 8th & 9th, 2023. The class will be held at the Melbourne Fire Training Center, 1980 Hughes Rd. Melbourne, FL 32935. Times are 8AM-4 :30PM both days. If you are interested in attending, please send an E-Mail to [classes@pcars.org](mailto:classes@pcars.org) ASAP.

The following Saturday, July 15th, there will be a Laurel VE Exam Session at the Suntime Library at 9:30AM. This is a great opportunity to attend Don's class & then test the next weekend.

Sign up today, to ensure your spot in the class.

## **146.85 MHz Repeater**

This repeater antenna is at 350 feet and has a physical optics horizon of 21 miles. Actual range varies with transmit power, terrain, antennas etc.

The squelch is tight and fast however so if you are driving in the fringes the rapid fades may sound like a pop or crackle. This is not a repeater defect.

This repeater does not require a PL tone to access it a tighter squelch is necessary.

Also, this repeater has a rather narrow filter so if your deviation is high that will sound like pops, crackles or fast drop outs.

## **HF Trading and HF Spectrum**

For a number of years there have been concepts for high speed financial trading over HF radio links. Being able to buy in one marketplace and sell in another in fewer microseconds or milliseconds later allows traders to take advantage of price differences between markets to make profits. Buy low there sell higher here. The engineers have been busy figuring out the fastest communications medium be it fiber, microwave links, satellite, etc. HF returns may take 50 microseconds and that is faster than some other long distance modes.

There is a FCC petition for [rulemaking](https://www.fcc.gov/ecfs/document/1042840187330/1) by the High-Frequency Trading firms "Shortwave Modernization Coalition" to open up spectrum in the HF-Fixed band for this purpose link: [ahttps://www.fcc.gov/ecfs/document/1042840187330/1](https://www.fcc.gov/ecfs/document/1042840187330/1)

Historically the FCC has not allowed much land based commercial message operations. Terion was an exception, but that system radiated 70 milliwatts intermittently over 3 kHz bandwidths on shared government HF frequencies, after listening to make sure the frequency was clear. Typically, it was difficult to tell the Terion emissions were there. Aircraft using HF for air traffic control and position reporting are not allowed HF use over land save for a radio checkout prior to takeoff.

## **Solar Indices Page**

I have made several additions and improvements to my solar indices page, <http://jimlill.com:8088/indices/idx.png>

The friendly Sun parameters tracked:

- NOAA real-time Sunspot Number (SSN) and Flux
- SILSO estimated international SSN, real-time
- The seemingly stale NOAA Predicted SSN which was decided more than a year ago (large delta to actual)

The Sun's downside and related effects, any of which when elevated are bad, tracked:

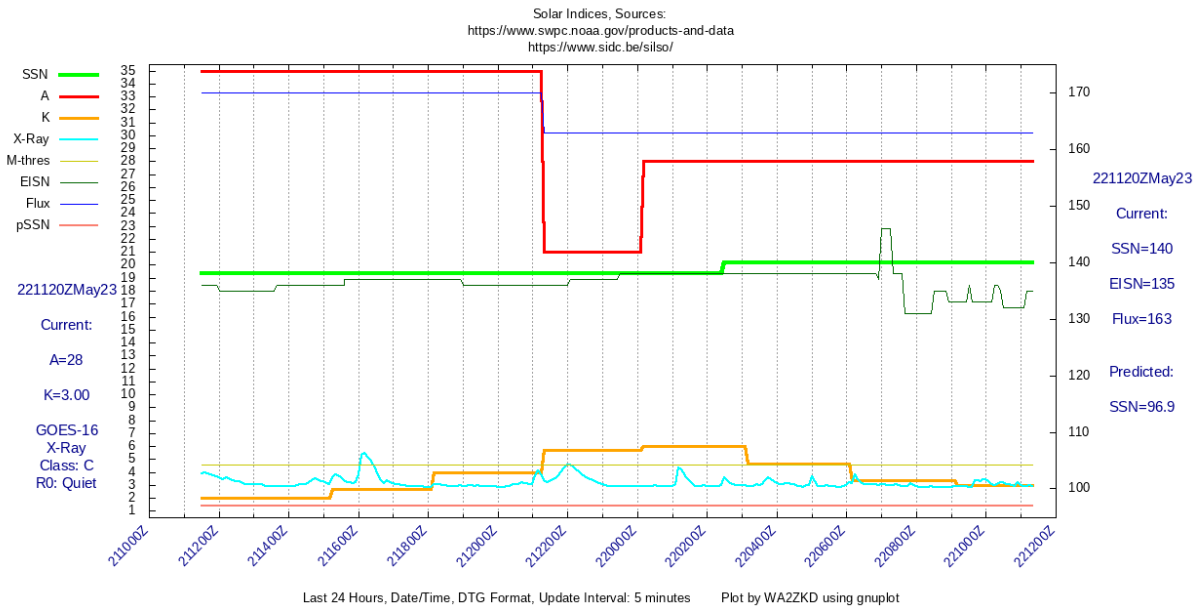
- A-index
- K-index
- GOES X-Ray level and Radio Blackout R index

While all of this data appears on NOAA pages and several Ham generated websites. I tried to pull it all together in one easy to read spot.

Sincerely,

Jim Lill

Lill, Jim (US) - TCOM <[Jim.Lill@L3Harris.com](mailto:Jim.Lill@L3Harris.com)>



**Youth Hidden Transmitter Hunting**

Is anyone is interested in participating or helping with local fox hunts?

Before Covid, we did a fox hunting event at FIT for Scout University for the Boy Scouts. Several 2m transmitters that I built were hidden on the FIT campus (after clearing it with FIT security). Then we let the scouts sniff them out with scanners and tape measure yagi-uda antennas. The kids loved it and it was a lot of fun, helping them to get their Radio Merit badge. Covid killed Scout University and activities like the fox hunts. The Scouter that used to teach the class was Jan Heise K4QD but he has retired from Scouting and is traveling the country.

I am resurrecting Scout fox hunt activities and will eventually teach the Radio Merit Badge course for local troops. Fox Hunting is a good way to introduce youth into Ham Radio. We also could set up some vehicle based hunts for local hams as well. Also, if you are aware of any local fox hunting groups I would like to get in touch with them.

Anyone with an interest in fox hunting may I ask that you contact me.

Thanks and 73  
Tim Shoemaker AK4ZZ  
[tgs901@gmail.com](mailto:tgs901@gmail.com)  
321-543-3526

## **FCC Fines**

The FCC is alive and well: <http://www.ARRL.org/news/view/licensee-hit-with-24-000-fine-for-jamming-net-failure-to-id-fcc>