

The HIARC Bulletin

October 2017 Edition

The Official Bulletin of the Harris-Intersil Amateur Radio Club

Club Meetings: Second Thursday of Every Month at Meemaw's Barbecue on Babcock Street between Palm Bay Road and Port Malabar Road. Supper is at 6:00 PM, and a short business meeting is at 7:00 PM. Our programs start around 8:00 PM.

Club Station: The club station is K4HRS in Building 15, Room 321. E-mail Butch to sign up.

Nets: The South Brevard Emergency Net meets every Thursday at 7:00 PM local on the 146.85 Mc repeater.

HIARC Website: <http://qsl.net/hiarc>

Repeaters: 145.47 Mc, tone 107.2 cycles, elevation 170 feet, Melbourne

HIARC Web Site: www.qsl.net/hiarc. Website administrator; Jim Tonti, KC7SSW

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

Treasurer: Bill WA4EMU

Secretary: Jim, KC7SSW

Repeater Chairmen: Bud W4HXP

Program Chairman: Eric Johson N4SCS

Field Day Chairman: TBD

Sunshine Officer: Open

Club Jester: Ken N8KH

Membership:

Dues are \$12.00 per year to:

Bill WA4EMU

Annual Events: Annual swap-fest at the September meeting. Field Day (always the fourth full weekend in June) at Grant Community Center Fairgrounds, Field Day web site link

<https://sites.google.com/site/hiarcfieldday2013/>

Selected Hamfests:

October 13, 14 Melbourne, <http://pcars.org/>

November 4, 2017 Lake County FL. <http://www.k4fc.org/tailgate.htm>.

Ham Radio Lunches:

Every Friday, 10:30 AM till 12:30 PM or so, Golden Corral on Palm Bay Road in Palm Bay

Every Friday, 9:00 AM till 11:00AM or so, Umpa's Diner, 1115 N Courtenay Pkwy, Merritt Island, FL 3295, (321) 454-3422

President's Message

HIARC volunteers were able to assist Puerto Rico by relaying messages here at Harris article: https://edge.harris.com/Pages/SIS_AmateurRadioHurricaneMaria_10092017.aspx . Thanks to all that participated.

The PCARS Melbourne Hamfest is this Friday and Saturday at the Melbourne Auditorium. Please offer to help a little while you are there thanks. Hamfests are put on by volunteers.

The next HIARC meeting is this Thursday October 12 at Meemaw's Barbecue on Babcock Street. The program will be on one of the of the greatest of the vacuum tube receivers, the R390 and the similar too ARR-41 receiver for aircraft. 6:00 PM starts dinner and 7:00 PM is the club meeting. Lots of food, friends, fun and door prizes too.

Butch WA4AQV

For Sale Items

Rich K2YRZ has a number of for sale items of test equipment list attached. If you are interested please contact Bill WA4EMU who is handling this

John W2TX has two HP608 signal generators offered for pickup.

Ham Radio And Puerto Rico and Hurricane Maria

There has been an active disaster assistance. Here are the ARRL stories:

<http://www.arrl.org/news/view/amateur-radio-s-force-of-fifty-answers-the-red-cross-call-in-puerto-rico>

<http://www.arrl.org/news/amateur-radio-volunteers-aiding-storm-ravaged-puerto-rico-us-virgin-islands>

<http://www.npr.org/2017/09/29/554600989/amateur-radio-operators-stepped-in-to-help-communications-with-puerto-rico>

<http://www.arrl.org/news/force-of-50-amateur-radio-volunteers-deploying-throughout-puerto-rico>

The Turkey Creek Tornado

Here is the NWS report on the Turkey Creek tornado attachment. Seems it passed south of Harris building 5 and dissipated before reaching building 27.

TURKEY CREEK TORNADO
28.03 -80.58

BREVARD

10/1500

EF-1

BASED ON A NWS STORM SURVEY, A WATERSPOUT THAT DEVELOPED ON THE INDIAN RIVER MOVED ONSHORE AND DAMAGED SEVERAL RESIDENCES ON WORTH COURT, INCLUDING A WATERFRONT HOME WHOSE SECOND FLOOR WAS REMOVED AND CARRIED DOWNWIND. THE EF-1 TORNADO (ESTIMATED 100 TO 110 MPH) CONTINUED ACROSS US-1, CAUSING MINOR ROOF DAMAGE TO A UNIVERSITY BUILDING. THE TORNADO THEN IMPACTED OVER A DOZEN MOBILE HOMES WITHIN PALM BAY ESTATES, SEVERAL OF WHICH WERE HEAVILY DAMAGED OR DESTROYED. THE TORNADO CONTINUED WEST, JUST TO THE NORTH OF TURKEY CREEK, DAMAGING MANY TREES AND SEVERAL ADDITIONAL HOMES BEFORE MOVING THROUGH A SCHOOL CAMPUS BEFORE DISSIPATING NEAR THE HARRIS CORPORATION.

FCC Opens 630m and 2200m Bands

It's true. We hams now have bands below AM broadcast. Links:

<http://www.ARRL.org/news/fcc-opens-630-and-2200-meter-bands-stations-must-notify-utc-before-operating>

<https://utc.org/plc-database-amateur-notification-process/>

10 GHz Moonbounce Record

A new 10-GHz Earth-Moon-Earth (EME or moon bounce) world record has been set. On September 9, Rex Moncur, VK7MO, and Jim Malone, WA3LBI, completed a 18,949.4-kilometer contact using *QRA64D*. This extends by approximately 600 kilometers the previous world record of 18,337 kilometers held by DL7FJ and ZL1GSG, who used CW. Click for full story ...<http://www.ARRL.org/news/new-10-ghz-earth-moon-earth-world-record-set>

Online Amateur Radio License Class

I am trying to get word out about an online ham radio licensing course that I have put together. It is aimed primarily at young hams, such as high school students (although adults may take the course as well), with the aim of helping them earn their Technician class license! Taught by a high school senior who holds an Extra Class license, this course is based off the Gordon West licensing manual and consists of 35 video lectures, as well as quizzes and simulated practice exams.

The course is also self-paced, meaning that students can take as long as they want to complete it. You can work the course around your own schedule. (You just need to finish before July next year, when the question pool expires).

Please share this email with all of your non-ham friends (especially YOUNG non-ham friends, as this course is aimed towards youth) and encourage them to get licensed!

More information: <https://sites.google.com/view/kd2eom/licensing-course-on-lumalearn>

73,

KD2EOM, Tobias

76 GHz Amateur Band Power Reductions

On September 20, the FCC's decision on 2017-18463, which impacts our 76 GHz band, was published in the Federal Register and will become effective thirty days from that date unless a petition for reconsideration is filed. The most negative result comes from the following provision:

"As an added protection against potential interference from amateur operations to vehicular radar operations in the 76-81 GHz band, the Commission amended the part 97 Amateur Radio Service rules to specify a maximum EIRP of 55 dBm (316 Watts) that Amateur Service and Amateur Satellite Service stations in the 76-81 GHz band may transmit, the same as the allowable vehicular radar peak EIRP limit."

When I alerted this group to the issue back in June, I received several replies expressing concern over the new EIRP limit. One pointed out that the effective power limit using a 1-meter dish was about 20 dB below the current Amateur state of the art. Another commented that this would effectively shut down much of the existing Amateur operation on the band. I passed this information to ARRL Southwestern Division Director Dick Norton N6AA, who promptly conveyed it to Chris Imlay, ARRL's legal counsel. The response he received from Imlay was effectively that we should be happy about winning back 1 GHz of spectrum, gaining long-term security in that band, avoiding the addition of fixed facilities outside airports and moving automotive radars out of 24 GHz.

So, should we ask ARRL to file a petition for reconsideration on the EIRP issue? If so, would it make sense to recommend a fixed power limit of (pick your number) dBm instead, arguing that antenna gain reduces rather than increases the chance for interference between services and, as such, should not be limited?

There's not much time to come to a consensus and get the ball rolling, and I will be unavailable due to travel for a chunk of that time (unless someone else wants to take point on the matter, which is fine with me). Please feel free to re-post this to other relevant sites. If it is agreed that

we should ask for reconsideration, that request would be most effective if it comes from several ARRL Divisions through their respective Directors. That means getting microwave operators outside Southern California / Arizona involved in contacting their respective ARRL Directors is important.

As many reflectors do not support attachments, try this link to read the release for yourself:

<https://www.gpo.gov/fdsys/pkg/FR-2017-09-20/pdf/2017-18463.pdf> If you have trouble with that, e-mail me and I'll send the document as a PDF in response.

73,

Marty N6VI

Air Force Turns Satellite Over To AMSAT

Link: <https://yro.slashdot.org/story/17/09/28/2016230/air-force-gives-10-year-old-orbiting-satellite-to-ham-radio-operators>

WRMI Damage

Hurricane Irma Extensively Damages International Broadcast Station in Florida

Radio Miami International (WRMI) reported on its Facebook page that Hurricane Irma did extensive damage to the station's studio/transmitter site in Okeechobee, Florida. The station is off the air entirely.

"Two antenna towers are down and many poles holding transmission lines are also down. Power went out at around 2030 UTC Sunday, and it may not be restored for days. Meanwhile, all transmitters are off the air," WRMI reported on its Facebook page, where the station has been posting updates.

"We are off the air since Sunday night," WRMI Manager Jeff White told ARRL. With Internet service also out, the station doesn't even have a live stream outlet via its website.

A commercial international shortwave radio station, Radio Miami International has studios in Miami and studios and transmitters in Okeechobee. According to WRMI, the Okeechobee site is "the largest privately-owned shortwave station in the Western Hemisphere, with 14

transmitters (most of them 100,000 Watts) and 23 antennas beamed in 11 different directions around the globe.”

Dennis

Card Skimmers

There is now an Android app which can detect credit card skimmers in the Google Play Store, called Skimmer Scanner (no apple version). How skimmers work and how the app detects them can be read here: <https://learn.sparkfun.com/tutorials/gas-pump-skimmers>

Orlando Maker Faire

The Orlando Maker Faire is in on Oct 22.

Dick KD4JP

RichA stuff.txt

ITEM	MANUF	MODEL	SPECS/condition	PRICE
1	TEKTRONIX		465 100 Mhz Dual Channel Scope w/manual& 3 probes (Good display, all functions seem to work)	\$250
2	WAVEFORMS		401B 1-100Khz Sinewave gen, 600 ohms (Smoke when turned on)	\$?
3	MARCONI	2022	10kHz-1GHz RFSig Gen (Had to clean key pad to get to work. Seems OK now)	\$150
4	BIRD	43	Wattmeter w/5 slugs & case 2 2-30 Mhz, 1 kW 2 400 Mhz-1 Ghz, 10 W 1 400 Mhz-1 Ghz, 50 W 1 200 - 500 Mhz, 25 W (All tested OK)	\$200
5	HEATHKIT		HM-102 RF Power/SWR meter, 1.6-30 Mhz (tested OK)	200/2000 W \$25
6	HEATHKIT		AM-2 RF SWR/REFL Power meter, 1-150 Mhz, 1000 W (tested OK)	\$10
7	MINICKTS		ZHL-1A 2-500 Mhz amp, G=16 dB, Pout=28 dBm, BNC, 24 VDC (tested OK)	\$25

8	DOWKEY	DK-137	SPDT BNC Coaxial relay, 28 VDC, DC-1 Ghz (tested OK)	\$10
9	HP	11581A	Precision Type N Attenuator Set, 3/6/10/20 dB, \$75 DC-12.4 Ghz, w/case (tested OK)	
10	BIRD	8321	Coaxial Attenuator, 30 dB, 50W, Type N conn dc-500 MHz (tested OK)	\$50
11	BIRD	8325	Coaxial Attenuator, 30 dB, 500W, Type N conn dc-500 MHz (tested OK)	\$150
12	BIRD	8341-200	Coaxial Attenuator, 20 dB, 40W, Type N conn \$50 dc-1 GHz (tested OK)	
13	THOMSON	CSF 109R	Regulated power supply, 13.6 V, 25 A OVR temp/volt/current protection (tested OK)	\$50
14	TRIGON	HR20-10B	Regulated power supply, 0-20 Vdc, 10A (tested OK) \$50	
15	KAY	30-0	30 dB switched attn, BNC, dc-1 GHz (Bent connector so can't test)	\$?