



Mailing Address: P. O. Box 976, Nokomis, FL 34274

W4AC Repeaters: 444.100 MHz (DMR) & 146.805 MHz (-) (PL100Analog)

Incorporated 1984

<http://www.tamiamiarc.org>

March, 2020

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President's message...KJ4NDO

March always comes in like a lion and ends like a lamb in April. We'll be busy in March and will enjoy April at a festival. We have an exciting series of events from March to June, beginning with the Shark's Tooth 10K and Shark Fin 5K road races on March 7th and 8th. We provide safety monitoring for the runners. As the runners pass they frequently say thanks to the hams at their watch positions. They appreciate what we do, and we're glad to do it. The free food and drink at the end of the race is a good way to end a job well done.



The next exciting event is the Shark's Tooth Festival on April 3rd, 4th, and 5th. This is the big kahuna of airport festivals. We set up on Friday and will run full-out Saturday and Sunday with antennas arrayed in all directions. This will be a special HF event station with a K4S call. CW and FT8 will also be up and running. This is a good time to get some HF operating experience and have some fun. Do note that we have a general start time of 10 AM for the ladies and gentlemen who want to participate, but need a touch more sleep. When you are off your station duties, the festival is a great relaxing place to wander through. We will need an all-hands effort for this event as we will be working for the benefit of the Special Olympics.

The Florida QSO Party is scheduled for April 25 and 26. It is a pleasure to participate in this laid-back event. Sign up while spaces are still available. Finally, the summer Field Day is June 26, 27 and 28. There will be no icicles on the tents, I promise. This exercise is the last chance we have before summer, as a club, to demonstrate to ourselves and our community, that come what may, we have the ability to communicate. Plan now to sign up and practice the comms skills we need to do the job.

The first and fundamental purpose of our Amateur Radio Service is service to the public and the nation by providing emergency communications. All of these events mentioned above require and refresh the elements that make for mastery of our craft. Don't let your skills get rusty. Sign up sheets are available at every meeting. Participate. The challenge is invigorating. You'll enjoy it.

During the March meeting we will introduce the Club's new IC-7300 radios. I hope everyone has an enjoyable Florida March.

73 to all, Jim - KJ4NDO

***Next Month
And you
thought you
had the most
unique
antenna!***



Next meeting March 11, 2020

Our meeting will start at **7:00 PM** on Wednesday, **11 March, 2020** at the Coast Guard Auxiliary Training Center, 1200 South Harbor Drive.

TAMIAMI AMATEUR RADIO CLUB

Minutes of the 02/12/20 Meeting

The meeting was called to order at 7:01 p.m. by president Shortill, KJ4NDO. The pledge to the flag followed. Introductions were made by name and call sign.

MINUTES: The minutes of the January 8, 2020 meeting as published in The Communicator were accepted by motion made, seconded, and approved.

CORRESPONDENCE: TARC received three QSL cards for Winter Field Day, three renewals for club membership, along with a thank you acknowledgement letter for the club's \$200 donation to Special Olympics. In addition, TARC received two Icom ID-880H radios from Tim Mazza, KC5RYY, in Colorado Springs. He was looking for a club to donate to and came across TARC.

TREASURER'S REPORT: Treasurer Frank Wroblewski, W2XYZ, reported a beginning balance of \$4,719.95, receipts of \$559.00, expenses of \$266.75, and an ending balance for the month of January of \$5,062.20. The Treasurer's report was approved by the membership.

SUNSHINE: Dick Engel's (AA4PE) YL, Mary, has recently experienced some additional critical eye issues. Burney Bellows, KN4TIG, was in a car crash on February 11. We wish Mary and Burney speedy recoveries.

VE TESTING: Steve Phillips, NS4P reported the TARC January VE testing session was held at our new location in the Venice Public Library on Saturday, January 11. A total of six candidates were present. Four candidates took and passed the Technician exam and two candidates upgraded from General to Extra.

LIAISON TO QCWA: Al Culbert, K0AL, stated that the program "Big Brother is Keeping a Diary on You" given by Tom McDermott was very well received.

REPEATER / TECHNICAL: Frank Wroblewski, W2XYZ, reported that both the digital and analog repeaters were working well. The frequency for the digital operations is talk group TAC 311. The club 2-meter analog repeater frequency is 146.805 MHz (-) PL 100. The digital net opens Tuesday at 7:30 PM. The 2 meter net opens Thursday at 7:30 PM. Hams can participate on this net via EchoLink using a computer, an iPhone or an Android system based phone. Click on W2XYZ-R (Node 571146) on the EchoLink directory screen to establish EchoLink contact. The 10 meter

net is on frequency 28.450 MHz, Upper Side Band, and begins immediately after the conclusion of the 2 meter net. The 10 meter frequency was chosen so Novice/Technician licensees could participate. About 12 to 14 members on average participate in these nets every week.

MEMBERSHIP: Chet Fennell, KG4IYS has passed the responsibilities of the club roster to Paul Nienaber, KN4BAR. Paul recently created an online database of the club roster, which can be viewed on the TARC website Members Only page. Paul reported that there are 102 regular members, 36 first year free members, 0 student members, and 7 life members for a total of 146.

OLD BUSINESS: 1. Winter Field Day was a lot of fun this year even though it was a chilly 46°F. At night the group moved inside the USCGA building to get out of the cold. Ninety-six CW and over 300 phone contacts were made.

2. An email went out on February 2 for a vote on selling old club equipment in order to purchase new Icom 7300 radios. There were 54 "Yes" votes and no "Nay" votes. A special thank you goes out to Chet Fennell, KG4IYS for donating one of his Icom 7300 radios.

3. Steve, NS4P, and Al, K0AL, along with consultation via phone from Frank, W2XYZ, sold some of the old club equipment for \$2,055 at the HamCation flea market. Great job to all.

4. The Sarasota Emergency Radio Club (SERC) Hamfest is scheduled for March 28, 2020 from 7:00 a.m. to noon at the American Red Cross on Cantu Ct. Please note the hours may be different based upon which website you visit.

5. Paul, KN4BAR stated the Technician Class License Training class on March 21 and 28 has been postponed due to the SERC Hamfest and level of interest.

6. If anyone is interested in being a Net Control Operator for TARC's digital or analog nets please contact San Yoder, K3SY, Frank, W2XYZ, or Steve, NS4P. They will be happy to train you and may be reaching out to new technicians.

7. The next fox hunting event is scheduled for February 24 at 9:00 a.m. Contact Paul, KN4BAR if interested.

8. The Club Station committee is still collecting information for a club station. Tom

Continued >>>>

Minutes, con't

Shrilla, W8QJF, and Frank, W2XYZ, think there is a possibility for a 100 ft. antenna for a remote station as there is a dipole antenna at the repeater site currently.

9. The club is hoping to get 100% membership signed up for Groups.io. This is a great tool to communicate easily to all club members. We will reach out to the people who are not registered to see if they need any assistance.

NEW BUSINESS: 1. Steve, NS4P, proposed for membership approval to purchase a third Icom 7300 radio for about \$1,000. Steve NS4P so moved, seconded by Rick Cox, K9SPI, and passed.

Additional accessories such as handles, power poles, audio distribution amplifiers, miscellaneous cables, CO₂ fire extinguisher, and Nifty manuals for a total of about \$500 was also proposed for membership approval. The expenditure was accepted by motion made, seconded, and approved.

Steve, NS4P, mentioned he will donate a power supply and Roger Schmitt, KY4RS, will donate an Icom headset.

2. Megalodon Weekend (Shark Tooth 10K and Shark Fin 5K) is March 7 and 8 respectively. A sign-up sheet was passed around and more information is available on Groups.io. If you have not signed up yet, please contact Steve, NS4P.

3. Shark Tooth Festival is the first weekend in April. A sign-up sheet was passed around.

4. The FL QSO Party is a 20-hour event spread over two days (April 25 & 26). Andy Durette, KB1HIP, will provide additional information next month.

5. Paul, KN4BAR, reported that the club has been requested to help out again at The Battle of Bridges in September. There will be a test on March 4 and Stevie Barker, W4INK is reserving a boat from Freedom Boat Club. If you want to participate, you will need a dual band radio.

6. There is an interesting article on teaching U.S Marine ham radio in The ARRL Letter for February 13, 2020 (<http://www.arrl.org/arrlletter?issue=2020-02-13>).

7. Andy, KB1HIP, made a motion to give \$100 for January and an additional \$100 for February to the USCGA. It was approved by the membership.

8. Kudos go out to San Yoder, K3SY, for the fantastic job he does on The Communicator. Other hams at HamCation commented on what a nice job our monthly newsletter is.

ADJOURNMENT: The meeting adjourned at 8:14 PM. There were 41 members and 5 visitors present. The 50-50 winner was Dexter Atkinson, KB1FY, who won \$30.00 and graciously donated his winnings back to the club.

Program: San Yoder, K3SY, and his YL Alice shared their Switzerland trip with the club.

Emergency Communication Exercise Set in Northern Florida

On Sunday, March 1, dozens of amateur radio volunteers from several states will take part in a 3-hour **exercise** in the northern Florida city of Gainesville. The exercise is designed to test and evaluate skills, assets, and strategies for emergency communication, such as those that might be needed in the aftermath of a hurricane. The exercise is being organized by the North Florida Amateur Radio Club (**NFARC**) and the Gainesville Amateur Radio Society (**GARS**), as part of the third annual Amateur Radio Emergency Communications Conference, held on Saturday and Sunday, February 29 – March 1. See the URL below for details

<http://www.arrl.org/news/emergency-communication-exercise-set-in-northern-florida>

SERC HAMFEST
March 28, 2020
7:00AM - 12:00PM
 American Red Cross Campus
 2001 Cantu Court
 Sarasota, Florida

Breakfast FREE Coffee! ARRL Door Prizes
 Admission \$2.00 Donation
 Tailgate Reservations Appreciated & Accepted \$5.00 serchamfest@gmail.com
 In-door Table Reservation Appreciated & Accepted \$15.00 serchamfest@gmail.com
 Talk-In 146.730 -600 CTCSS 100hz
 Where?
 American Red Cross Campus
 2001 Cantu Court
 Sarasota, Florida
 NO RV'S OR LARGE TRAILERS SPACE IS LIMITED.
 From the North on I-75 take exit 210 head west, keep to the left to Cattlemen, turn left.
 From the South on I-75 take exit 207, head west, keep to the right to Cattlemen, turn right.
 Look for the signal!
 Keep Updated at www.n4ser.org
 Radio Spots Available serchamfest@gmail.com

Peace River Radio Assoc.
 ***** W4DUX *****
 Presents the
 Charlotte County
HAMFEST
 Saturday March 7th
2020
 Doors open at 8:00 AM Coffee, Soft Drinks, Donuts available
 Location:
 Punta Gorda Boat Club 802 West Retta Esplanade

DX Jack's page....

..... By Jack Sproat, W4JS



MAJOR CURRENT/UPCOMING DX ACTIVITY & PROPAGATION HIGHLIGHTS

CURRENT and/or SCHEDULED DX ACTIVITY

COUNTRY – CALL SIGN	ACTIVITY PERIOD	BEARING	HF BANDS and BEST OPENING TIMES (UTC)							
			80	40	30	20	17	15	12	10
Marshall Is – V73AX (back on after 5 years)	Now Active	282	0900	06-13	05-14	13-14	19-22	19-24	20-23	NO
Norfolk Is – VK9NK by SP9FIH, FT8/RTTY	Now to 12 Apr	250	0900	07-12	06-12	13-14	1800	2400	20-24	21-24
Thailand – HS0ZME by SM6NT, **	Now to April	<u>355/175</u>	NO	NO	NO	1300	NO	NO	<u>1400</u>	NO
DR Congo – 9Q1C by IK7UXW, **	Now to April	88	NO	23-05	23-06	20-01	18-24	13-23	16-20	NO
Senegal – 6W7/ON4AVT, FT8/FT4/SSB	Now to 27 Mar	87	--	22-10	--	16-23	--	--	--	NO
Tanzania – 5H3DX & 5H3AX, CW/Digi/SB	Now to 21 Mar	83	NIL	00-03	23-04	21-01	19-23	15-22	17-21	NO
So. Orkney Is – VP8PJ by 13 op team	Now to 06 Mar	163	03-05	00-09	00-08	22-02	21-24	20-23	18-21	18-19
Ogasawara – JD1BON & JD1BOH, all modes	Now to 05 Mar	317	NIL	08-12	12-14	22-24	22-24	NO	NO	NO
Papua New Guinea – P29NC & VK, all mods	28 Feb - 01 Mar	283	NO	09-12	08-13	14-15	14-15	21-24	21-23	NO
Solomon Is – H44NC, all modes, holiday styl	01 to 03 Mar	275	NO	07-12	06-13	14-15	14-15	21-24	2200	NO
Vanuatu – YJ0NC, all modes, holiday style	03 to 06 Mar	262	NO	07-12	05-13	13-15	NIL	19-21	20-24	NO
E. Kiribati – T32AZ by KH6QJ, mostly SSB	04 to 11 Mar	267	05-11	03-13	--	1600	--	17-01	--	--
Zambia – 9J2LA by 10-op team, all modes	04 to 15 Mar	95	NIL	23-04	23-05	20-23	19-22	16-21	16-20	NO
Kyrgyzstan – EX0QR by 3-op team, all mode	06 to 17 Mar	18	NO	23-02	01-03	1300	NO	NO	NO	NO
Rodrigues Is – 3B9AN by F8AAN	09 to 18 Mar	84	NO	00-01	23-01	20-22	18-19	--	--	--
Vietnam – XV9DXB by HB9DXB	10 Mar to ???	<u>348/168</u>	NO	NO	NO	1300	NO	NO	<u>1400</u>	NO
Kuwait – 9K2F by 9K2HQ and team	11 to 15 Mar	44	01-02	23-04	22-04	1300	14-16	NO	NO	NO
Maldives – 8Q7NC by F6BGC, holiday style	12 to 21 Mar	<u>41/221</u>	NO	00-01	23-02	19-22	14-18	1400	NO	NO
St Peter & Paul Is – PQ0S, team operation	14 to 16 Mar	108	00-08	21-10	21-06	18-01	13-24	15-22	15-22	18-19
W. Kiribati – T30ET by 5B2ALX, all modes	18 Mar to 06 Apr	277	09-10	06-12	06-13	13-15	21-22	19-24	19-23	NO
Cote d' Ivoire – TU2R by 4-op team, all mod	23 Mar to 03 Apr	90	00-06	22-08	21-08	18-01	12-23	13-23	17-20	NO
Andaman Is – VU4R by 9-op team, all modes	20 to 31 Mar	<u>8/188</u>	NO	NO	NO	1300	<u>1300</u>	<u>1400</u>	NO	NO

Prepared 26 February 2020 based on the 24 February 2020 *The Weekly DX*, <https://dx-world.net/> and <http://www.ng3k.com>

Notes: Times shown are for S-5 or better signals and 60% or better opening probability. ??? = Call Sign not yet known; ++ = Mostly SSB; ** = Mostly CW; NO = No Opening forecast, NIL = band is open but signals below S-5 threshold. Long Path bearings and opening times are underlined. All forecasts are calculated using VOACAP <http://www.voacap.com/hf/>.

-- FEBRUARY SOLAR ACTIVITY --

Through to 26 February, the 10.7 cm Solar Flux ranged from 70 to 73, with a mean value of 71.1. The A_p index was ≥ 7 on nine days.

There was one solitary sunspot on 01 February.

-- MARCH FORECAST --

Solar activity is expected to be very low throughout the month.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels on 01 Mar, 05-09 Mar, and 19-21 Mar. Normal or normal to moderate levels are expected to prevail throughout the remainder of the outlook period.

Geomagnetic field activity is expected to reach active levels on 04-05, 19, 24-25 and 31 Mar due to multiple recurrent CH HSSs. Generally quiet or quiet to unsettled conditions are expected to prevail throughout the rest of the month under a nominal solar wind regime.

The 10.7 cm Solar Flux should be a steady 71 during March.

(From NOAA *Weekly Highlights and Forecasts*, 24 February 2020, NOAA *27-day Space Weather Outlook Table*, 24 February 2020, and *45 Day AP Forecast*, USAF, 24 February 2020.)

-- PJ4/K5KG FROM BONAIRE --



George Wagner-K5KG from Siesta Key will be operating from Bonaire from 02 - 09 March, 99% of the time on CW.

-- THE E44CC-PALESTINE TEAM --



(Both from <https://dx-world.net>)

Orlando HamCation musings



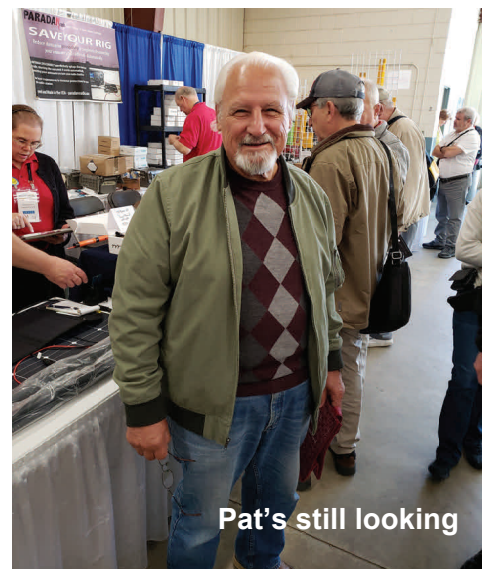
Off we go on the bus



Jesse & Jim buyin' stuff



Good stuff—cheap!



Pat's still looking

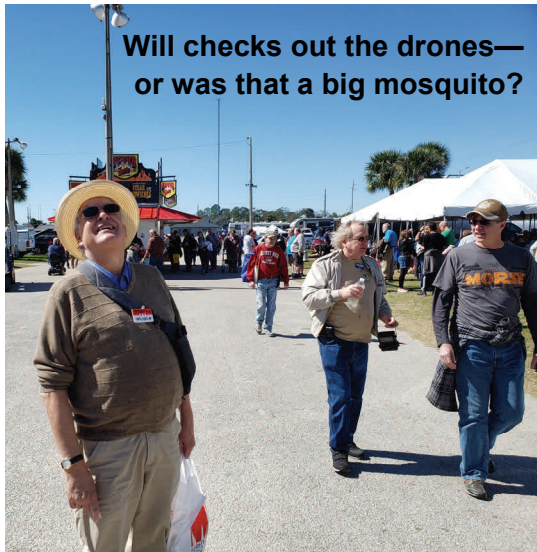


Where did all the radios go?



The ARRL "Wheel of Semi-Fortune"

HamCation.....



Will checks out the drones—
or was that a big mosquito?



Time to head
for the bus!

Attention Radio Buffs! Radio pioneer Powel Crosley estate open-house set for March 10-11.

BRADENTON – For only the fifth time, the Crosley Estate Foundation will host a historical open house event at the Crosley Estate from March 10-11. Guests are invited to tour the historic estate built in 1929 as the winter home of Powel Crosley, the American innovator who is best known for bringing radio to the masses through the manufacturing of inexpensive radios during radio's first defining decade. A variety of Crosley radios and memorabilia will be on display throughout the house, New this year – and on loan from the Historical Records Library in Manatee County – will be the Crosley Collection, including Crosley Chattaboxes, Temperators, Xervac Helmets, Musicone speakers, headphones and more.

The Manatee Village Historical Park has also donated a Crosley model 66TC radio for the event. "We are excited to once again open the estate doors to the public and celebrate the rich history found within the Bradenton Area and the contributions Powel Crosley made to the radio industry while living here," said Elliott Falcione, executive director for the Bradenton Area Convention and Visitors Bureau, which operates and maintains the Powel Crosley Estate on

behalf of the ownership of Manatee County government. The Crosley Estate is at 8374 North Tamiami Trail, just north of the Sarasota/ Bradenton border and west of the Sarasota International Airport. The open house events will take place from 10 a.m. to 2 p.m. on both days. Guided tours will take place every half hour. Reservations are not required and admission is free, though donations are appreciated. For more information call (941) 722-3244.

Crosley is one of 183 members in the National Radio Hall of Fame. He was inducted in 2013. By the time of his death in 1961, he had played a pivotal role in inventing, introducing and manufacturing a myriad of items, including: · WLVW Radio/Cincinnati – "The Nation's Station" – which fed network programming to NBC and Mutual in the 1930's, and used an unprecedented experimental 750,000-watt transmitter · The first compact economy car · The first auto radio · The facsimile machine · The 35mm camera · Four airplanes. For more information, visit PowelCrosleyEstate.com or call 941-722-3244 to make an appointment to view the facility.

Megan Brewster | Director, PR

TARC is growing! Changes are happening!

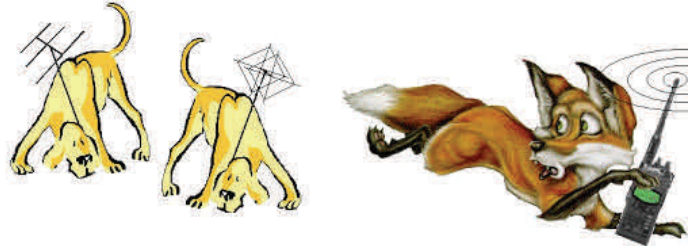
To eliminate duplicate email lists for issuing The Communicator vs. other general membership communications, we will begin using the official club membership roster email information to send out the monthly newsletters. To this end, a TEST EMAIL was sent to ALL club members recently using the email ad-

dress on file in the club's membership roster. If you DID NOT receive that email please contact Paul Nienaber at paul9aber@gmail.com so that we may resolve whatever issue is preventing you from receiving these emails. Please check your email spam folder to see if the test message was delivered there.

You can check you membership roster email address, and other profile information online at our website at this address: <http://tamiamiarc.org/membership-application/members/> The March "Communicator" newsletter is being distributed using this new mail list.

What is fox hunting?

With several TARC members interested in fox hunting, and doing trial runs to "get their feet wet", it seems appropriate to take a look at what the "sport" entails. Upon Googling to find information, I came upon a good write-up explaining what's involved. Thanks to Michael Urich, KA5CVH (ka5cvh.com) for this document. Reprinted with permission.



Actually ARDF (Amateur Radio Direction Finding) is a more "technically correct" term for what we also call fox-hunting, hidden transmitter hunting, t-hunting, rabbit hunting and I'm sure that list could go on depending on whatever part of the country you are in. Fox hunting can be broken down into three general categories with many local variations.

The most basic would be the typical on foot fox hunt in a small to medium sized park usually consisting of a single transmitter. The fox is usually an automatically controlled transmitter sending out a variety of possible signals. The hunters (hounds) goal is to locate the transmitter using any combination of direction finding skills.

Mobile hunting sends the "fox into the woods" in a vehicle while the "hounds" look for it in their vehicles. Classic US single transmitter mobile foxhunting is a map and compass exercise as well as a test of RDF skills. Successful hunters, (usually a team of two), pay careful attention to their own location and the bearing to the fox at all times, plotting them on street maps provided by the hound. They know that if they miss a fox bearing, they must wait a few minutes to hear the fox again. They also must obey traffic laws, since exceeding the

speed limit or other violations means potential fines, money that could be used on radios. In addition the hounds must keep an eye on time and distance. Many fox hunts are timed and start/finish mileage logged, excessive time and mileage can be used as a "penalty" against your final score.

Taking it to the next level is ARDF. This is a multi-transmitter hunt usually in a large park of several thousand acres and is completely on foot. ARDF/Radio "O" is a combination of land navigation, map and compass reading as well as a test of RDF skills. Unlike in traditional orienteering where you search for a control point based upon a general location marked on a map, Radio "O" causes you to use your direction finding skills in addition to land navigation skills.

Unlike in classic fox hunting where a single mobile transmitter is used, in Radio "O" you may be searching for as many as 5 transmitters, on foot, in a park or forest setting. Successful hunters pay careful attention to their own location and the bearings to all foxes at all times, plotting them on detailed orienteering maps provided by the organizers. They know that if they miss a fox bearing, they must wait four minutes to hear that fox again.

They also must monitor the time, since exceeding the time limit (typically two hours) means disqualification. In other words, it is better to return under the limit with only one fox found than to find all five but take one minute over the limit. Each target transmitter has a distinctive identification, sent continuously in CW or MCW. Even without knowing Morse code, it is still very easy to identify the individual foxes.

Since this is all done on the Amateur (ham) radio bands, is a license required? No ... a license is not required, since you are receiving and not transmitting when you participate in any hidden transmitter event. Numerous ham radio clubs have frequent fox-hunting meets that you can participate in. However, having a license will add to your enjoyment and understanding of the radio direction finding aspects of the sport.

The FCC provides an entry level license that includes a written test over basic radio principles, operating practices, rules & regulations. This "Technician class" license, which covers the 2-meter band, does not have a Morse Code requirement.



And the foxes ran away to live another day!

No need to call the ASPCA or PETA, but there was a fox hunt in Venice on Monday, February 24. The foxes were low-level 2m transmitters owned by Paul KN4BAR and Steve NS4P. The idea was to hide the foxes somewhere on Venice Island and have the hounds try to locate them. There were five hounds, John (no-call), Dennis KN4YNF, Ken NS1C, Tom W1ICU, and yours truly, Frank W2XYZ. Skill levels ranged from non-ham to extra class ham with over 50 years of experience. Equipment ranged from a handheld radio with a thumb for an antenna, to homemade yagi antennas made from tape measures, to a high tech unit employing Doppler technology with electronically switched antennas using phase shift modulation techniques. Personally, I felt sorry for the inexperienced, poorly equipped hounds with their lack of techniques and primitive equipment—but hey, all's fair in love and fox hunting.

After an informative explanation of fox hunting and a demonstration of what the transmitters looked like and what they sounded like, the hunt was on. We broke into three groups; John and Dennis, Ken and Tom, and me. We were given a clue that the first transmitter was less than a half mile south of us. We dashed to our vehicles and the chase was on. Within 15 minutes Tom and Ken, using just the handheld and yagi found the first one. A couple of minutes later John and Dennis with similar equipment discovered the same location.

I was having technical difficulties. Namely, technically, it was difficult. Time and tide and foxes wait for no man. Transmitter one was turned off and we began to look for transmitter two. All we knew is that it is somewhere on the Island north of the Coast Guard station. I knew my skill and superior equipment would zoom right in on it. I just hoped I didn't find it too soon, as that would embarrass the other four guys and discourage them from future fox hunts. Heck, who knows, they might even become so downhearted that they give up amateur radio and start playing checkers or golf or whatever.

Things are going very well, I'm definitely not going to embarrass them by finding it too soon. In fact, I've been driving for quite a while and still haven't come in range of the transmitter. I'm thinking, did Steve say it was hidden on the Island or did he say Sarasota County? While contemplating Steve's instructions, I got my first clue. One of the teams mentioned they were at a certain location. I thought I'd go there to help them out. Give them some friendly pointers and stuff, after I found the fox, of course. I parked and saw the two teams scurrying about the area. I turned on my Doppler Direction Finder and slightly (ever so slightly) chuckled to myself, poor guys are going in the wrong direction. I'll find it and then let them know what they did wrong.

Very strange. I'd follow the signal for a while and

By Frank, W2XYZ

then the direction changed. Hmm, I thought, let me follow the new direction. I'd follow that awhile and then the direction changed...again. I followed that awhile and then the direction changed, yet again. What's going on, do they have the transmitter in a moving car? Around that time I was called on the radio and told I might want to turn around, since I'm heading away from the transmitter. I turned and saw everyone about two blocks away. By the time I got near them, they were standing around waiting for me. Everyone found the transmitter (except me). As it turned out the best technique was to use the yagi to find the general direction and then a thumb for an antenna on the handheld when you got close enough. So much for high tech equipment!

The problem I had with the Doppler unit was the signal was bouncing off buildings giving multi-path signals. The Doppler unit did not measure signal strength, only direction and therefore I kept following a different signal path. The low tech method was better. Now I understand the meaning of, "Even an old (hound) dog can learn new tricks".

73, Frank Wroblewski, W2XYZ



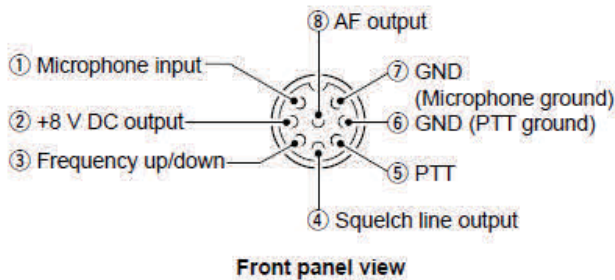
Can you hear me now?

By Tom Babcock, K1NAONE



After fat fingering the channel up button on my iCom 7300 hand mike a few times, I started looking for a desk mike. Price sticker shock brought out the frugal HAM in me and I decided to build my own. Most modern radios and devices use an electret microphone element. You can easily find more technical information than you ever wanted on Wikipedia, so I'll present the basics and what I came up with.

An electret microphone element is a type of condenser mike that usually has a built in pre-amp consisting of a J-FET transistor. This requires it to be powered. The 7300's microphone jack pin-out is shown below. You will notice that two pins apply directly to the microphone. Pin 1 – Microphone input, and Pin 7 – Microphone ground. Notice Pin 2 supplies +8V. What iCom does not readily publish is that there is a +8V supply (sometimes called a phantom voltage) on Pin 1.



PIN No.	DESCRIPTION
①	Microphone input (Impedance: 600 Ω)
②	+8 V DC output (Maximum 10 mA)
③	Up: Ground Down: Ground through 470 Ω
④	Grounded when the squelch opens.
⑤	PTT
⑥	PTT ground
⑦	Microphone ground
⑧	AF output (varies with the [AF] control.)

Most common electret microphones have two pins. One is ground, and the other is for both the positive power to the mike and the analog signal from the mike to the radio/device. So all that is required for a microphone is a two wire electret element. Note, all that is required for a push to talk button is a switch between pins 5 and 6.

Some electret elements are shown below (Fig. 1) to give an idea of the size. The upper right one was removed from an old flip type cell phone. The upper left one is in a cheap HT extension mike. The bottom ones are two of 10 that I broke down and purchased. Yes, I spent \$1.18 including shipping direct from China for 10 of them. Yes, that's 11.8 cents each. In reality, you do need a connector (about \$2), wire (old 4 conductor USB cable), a switch for PTT (scrap), and something to hold it all to assemble a complete unit.

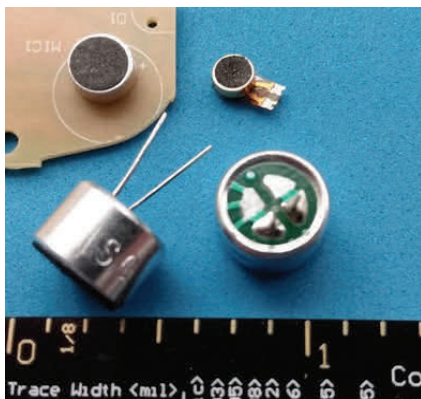


Fig. 1



Fig. 2



Fig. 3

Some of my creations are shown here. If you have heard me on the 10 meter net, you've heard the desk mike (Fig. 2). It started life as a \$4.58 desk mike off eBay. A switch was added along with a 2 ounce fishing weight to give it some mass. The Altoid mikes speak for themselves. (Sorry for the pun). All get great signal reports. The next desk mike I build will use the chrome goose neck that came from a broken grill >>>

mi·cro·phone /'mīkrəˌfōn/ *noun* [continued]

lighter. The headset (Fig. 3) is a \$6 PC gaming headset. The headphone plug goes into the radio's front headphone jack, and rather than cut the microphone plug off, an adapter was made to mate to the radio pins 1 and 7. It has no PTT switch. (The USB plug only powers lights in the headset - not used)

What is the future of microphones? In 2015 it was estimated that over

one billion microphones were produced per year. Now, with them being embedded in all the devices spying on us, that number is no doubt higher. There is a trend toward MEMS (micro-electromechanical) microphones all etched onto silicon. A transducer with all the electronics to output a digitized audio signal directly to a processor/radio will be less than a square millimeter in size, and you'll probably get 100 for \$1.18. This is

not to disparage a quality name brand microphone. I enjoy the feel and look of a quality product. Just not the price. So my creation will do until I find a next-to-nothing deal. Even the rep at the HamCation Heil booth remarked that my little Altoid mike is how HAM radio should be! As always, when you connect anything to your radio you are assuming some risk of damage. Do your research, triple check, test, inspect, and party on.

73, Tom, KN4ONE

Speaking of microphones (rather than speaking into them), has anyone else noticed the horrendous quality of mike cables attached to recent rigs? Shown here are photos of the failure of insulation on my newer rigs. Figure A shows my Yaesu 7900 installed in my primary vehicle, which seldom sits in the Florida sun for any extended period. The insulation has failed at several places. Figure B shows my Kenwood TM-271 2-meter rig in my shack. Admittedly this is not the OEM mike cable. The first one was in worse shape than this one and was replaced. Can't blame the sun on this one! Figure C shows my ancient "rock-bound" Icom IC-22A from the seventies. The cable

looks almost as good as new. This rig saw duty in three or four vehicles for quite a few years until synthesized rigs became readily available. Obviously the insulation on newer rigs is nowhere as good as on the older rigs. Just venting!

de San, K3SY.

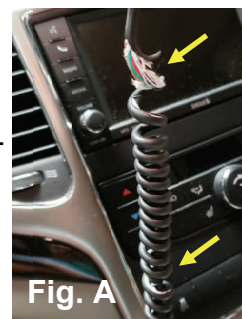


Fig. A

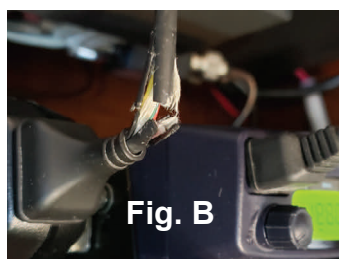


Fig. B



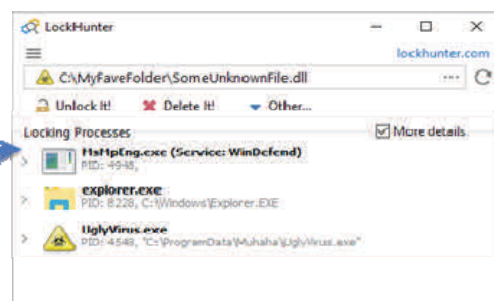
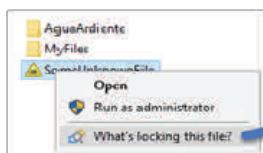
Fig. C

**TOM'S TECH TIPS: File Unlocker ..by Tom, W8QJF**

I'm always running program updates and trying some new half-baked software on my PC. If I decide to uninstall or remove it there's occasionally a snag where a file is locked – usually by some process already running. When a restart or reboot into 'safe mode' doesn't help I use **LockHunter**. It is a free tool to delete files blocked by something you do not know.





Key Features:

- Shows processes locking a file or folder
- Gives you detailed information on the process
- Allows to unlock, delete, copy or rename a locked file
- Can delete a file at next OS restart
- Allows to kill locking process
- Can unload DLLs from processes
- Integrates in to Explorer menu
- It deletes files into the recycle bin, so you may restore them if deleted by mistake
- Supports both 32 and 64 bit Windows



The no-nonsense and safe download: <https://lockhunter.com/>.

March 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 QCWA 11:30 AM Denny's Bee Ridge Road	3 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	4 Breakfast @ IHOP 8:30 Regatta test	5 TARC net @ 7:30 PM W4AC / RPT 146.805 ** +10M net	6 Breakfast @ Peaches *	7 DAV 9:30 Shark's Tooth 10K run 6 AM Peace River Hamfest
8  Shark Fin 5K Run 8:15 AM	9	10 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	11 IHOP 8:30 TARC meeting @ Coast Guard Training Center 7:00 PM.	12 TARC net @ 7:30 PM W4AC / RPT 146.805 ** +10M net	13 Breakfast @ Peaches *	14 DAV 9:30 TARC VE session @ Venice Public Library 10:00
15	16	17  Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	18 Breakfast @ IHOP 8:30	19  TARC net @ 7:30 PM W4AC / RPT 146.805 ** +10M net	20 Breakfast @ Peaches *	21 Breakfast @ DAV 9:30
22	23 Fox hunt practice 9A	24 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	25 Breakfast @ IHOP 8:30	26 TARC net @ 7:30 PM W4AC / RPT 146.805 ** +10M net	27 Breakfast @ Peaches *	28 Breakfast @ DAV 9:30 
29	30	31 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1			* Peaches opens at 6:00 AM. Orders taken at 7:00	

**The W4AC 146.805 Repeater is ANALOG, PL100. [If the 2-m repeater is down, please QSY to 146.58 simplex]

THE COMMUNICATOR is a publication of the Tamiami Amateur Radio Club (TARC). It is published monthly; except during the summer months, the July and August issues will be combined. The Communicator is forwarded to all members via e-mail, and is available for viewing on the club's web site - www.tamiamiarc.org - Webmaster - Paul Nienaber, KN4BAR.

Editor - San Yoder, K3SY, who acknowledges and thanks these contributing writers this month: Jim Shortill, KJ4NDO, Patti Phillips, N4IGI, Jack Sproat, W4JS, Tom Shrilla, W8QJF, Tom Babcock, KN4ONE, and Frank Wroblewski, W2XYZ.

Articles of general interest to club members are solicited and welcomed. Please submit photos and/or copy (preferably in Word) to : k3sy@arrl.net. 73, San

2020 TARC officers:

President

Jim Shortill KJ4NDO
jnmshortill@netscape.net

Vice president

Steve Phillips NS4P
sphillips3@gmail.com

Secretary

Patti Phillips N4IGI
pat.phillips3@gmail.com

Treasurer

Frank Wroblewski W2XYZ
w2xyz@arrl.net

Directors:

Peter Boers	KV4LR	peterboers@ieee.org
Andy Durette	KB1HIP	af_durette@hotmail.com
Chet Fennell	KG4IYS	chet_fennell@msn.com
Gary Hagens	K6OC	g.hagens@verizon.net
Guenther Hennig	AJ4QX	aj4qx@hotmail.com
Paul Nienaber	KN4BAR	paul9aber@gmail.com
Tom Shrilla	W8QJF	tshrilla@gmail.com
San Yoder	K3SY	k3sy.73@verizon.net

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 After 6/1 - \$10.00 to year end. After 10/31 \$20.00 thru next year.
 Family membership: \$25.00/year. Non-voting student: \$5.00/year.
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Please note: After two month grace period thru Feb., non-renewals will be dropped.

TARC web site: <http://www.tamiamiarc.org>

Contact: Secretary, Patti Phillips, N4IGI - pat.phillips3@gmail.com

