



INDIAN RIVER ARC

P.O. BOX 237285, COCOA FLORIDA 32923-7285

OCTOBER, 2018

SPURIOUS EMISSIONS

CLUB MINUTES

OFFICERS

PRESIDENT

DAVID LERRET
KU0R

VICE-PRESIDENT

VIRON PAYNE
N4VEP

SECRETARY

STEVE LUCHUCK
N4UTQ

TREASURER

LARRY HENDERSIN
KK4WDD

DIRECTOR

DAVID SLAWSON
K4UZM

NEWSLETTER EDITOR

ARMANDO DELGADO
KN4JN

President Dave KU0R was out of town so Vice President Viron N4VEP led the meeting. The meeting began at 7:30 PM with the Pledge of Allegiance. Following the Pledge, visitor Linda and new member, August N6TYE were recognized.

The September meeting minutes were published in the newsletter and a motion was heard to approve the September meeting minutes. A second was heard and the meeting minutes were approved by acclamation.

The Treasurer's report showed \$1735.82 in checking and \$1777.69 in the Equipment Fund. A motion to approve the

Treasurer's report was heard; a second was heard and the treasurer's report was approved by acclamation.

Following the Treasurer's report, Viron asked about the go-kits.. At this time it appears that we only have two ready to go.

Les W9BCH, our Emergency Coordinator, reported that we are not tracking any serious weather threats and that operations at this time are conducting normal procedure.

Steve N4UTQ reported for the Red Cross and they still have not made keys for us to access the south building where our club radio shack is located. Most of the paid staff are supporting recovery form

hurricane Florence in the Carolinas.

New Business: None

Following the business meeting we viewed a presentation on the progress of SpaceX activities which was concluded with a video of their Falcon 9 launching and landing.

The 50-50 winning ticket was found to be in the hands of Celina KN4MHO.

A motion to adjourn occurred at 8:24 PM and was moved and approved.

Respectfully Submitted

Steve N4UTQ

Secretary

HAPPENINGS

There were a number of telegraph alternatives to the dots and dashes of Morse code at the beginning of the communications age. This [IEEE Spectrum article](#) describes differing signaling schemes, codes, and equipment, developed in the 1830s and 1840s including one where letters could be read out right from a dial.

Club Log's [DXCC Most Wanted](#) entities list has been updated as of August 28. The list includes 340 entities, and the Democratic People's Republic of Korea (DPRK), or North Korea, is the #1 most-wanted DXCC entity, as it has been for quite a few years. The other top ten most-wanted entities, listed in descending order, are: 3Y/B Bouvet Island; FT5/W Crozet Island; BS7H

Scarborough Reef; CEOX San Felix Islands; BV9P Pratas Island; KH7K Kure Island; KH3 Johnston Island; VKOM Macquarie Island, and FT5/X Kerguelen Island.

"Antennas and Wind" is the topic of the August 30 episode of the [ARRL The Doctor is In](#) podcast, and "Tools for the

Amateur Station" is the topic of the September 13 episode

The VP6D Ducie Island DXpedition is set to get under way October 20 and continue until November 3. Ducie Island is number 19 in the Club Log most wanted locations.

HAPPENINGS

Joe, W1JT, has [announced the release of WSJT-X 2.0 rc1](#). This is a new major version number for the WSJT-X program, with many new FT8 and MSK144 features of particular interest (and impact) to contesters. While a previous ARRL website article covered the prospective changes, Joe has published a more recent [point-by-point summary of the features on his website](#).

Interesting summary of best propagation, by bands, from Frank, W3LPL, as part of his presentation "[How to Adapt your DX Contest Strategies for Low Solar Activity](#)" at the 2018 Contest University.

Scouting organizations are still registering to participate in the 2018 Jamboree on the Air ([JOTA](#)) over the October 19 – 21 weekend. [Recommended JOTA frequencies](#) and other information are listed on the K2BSA website.

An excellent historical review of the superheterodyne receiver is found in the following web site:

www.electronics-notes.com/articles/history/radio-receivers/superheterodyne-radio-receiver.php

What is hoped will be the first annual "Get Your Park ON" operating event will take place Octo-

ber 14 – 20, in celebration of Earth Science Week. The event is open to Amateur Radio operators around the world and is sponsored by the national affiliates of World Wide Flora and Fauna ([WWFF](#)), which encourages radio amateurs to operate outdoors in protected nature parks. During this on-the-air celebration, hams can participate in one of two ways. North American hams can opt to be Activators, setting up and operating in geological and nature centers such as national and state parks and forests, national monuments, and protected nature habitats. They also may decide to be Hunters, operating from home and searching out and making contact with the Activators. "Get Your Park ON" gets underway at 0000 UTC on October 14 and continues through 2359 UTC

on October 20. [Visit](#) the "Get Your Park ON" Facebook page for more.

The ARRL Foundation is now accepting scholarship [applications](#) from eligible radio amateurs planning to pursue post-secondary education in the 2019-2020 academic year. Completed applications must be received by January 31, 2019.

"Black Swan 18" Exercise to Test US Government/Amateur Radio Interoperability on 60 Meters October 4 – 10

More info: <http://www.arrl.org/news/black-swan-18-exercise-to-test-us-government-amateur-radio-interoperability-on-60-meters>

ON THE AIR

5W0GC Apia Samoa

Stan, LZ1GC will be active as 5W0GC, from Apia, Samoa, 28 September - 14 October 2018. He will operate on 160 - 6m CW, SSB, RTTY, with focus on 160 and 80m, from 5W1SA QTH. QSL via home call, ClubLog OQRS.

FH/DJ7RJ Mt

Willi, DJ7RJ will be active as FH/DJ7RJ from Mayotte, IOTA AF - 027, October 2018. He will operate on 160 - 10m. Recent DX Spots FH/DJ7RJ QSL via home call.

Mallows Bay Ghost Fleet Oct 13, 1400Z-2000Z, K3SMD,

La Plata, MD. Charles County Amateur Radio Club. 14.240 7.270. QSL. Bob Curran, 120 Sherman Road, Waldorf, MD 20602. Mallows Bay is the ship graveyard of over 200 ships scuttled and burned. Nearly 90 were steamships constructed for use in WWI but were never

pressed into service. www.k3smd.net

USS Midway Museum Ship Special Event: Establishment of the United States Navy on 13 OCT 1775

Oct 13, 1600Z-2300Z, NI6IW, San Diego, CA. USS Midway (CV-41) Museum Ship. 14.320 7.250 14.070; D-STAR on REF001C. QSL. USS Midway (CV-41) COMEDTRA, 901 N Harbor Drive, San Diego, CA 92101.

Commemorating 79th. Anniversary of the United States Coast Guard Auxiliary

Oct 19-Oct 21, 1402Z-1402Z, W8E, Loveland, OH. United States Coast Guard Auxiliary District 8ER. 21.336 7.234. QSL. David Stroup, 6138 Misty Creek Dr., Loveland, OH 45140. cgaux8@yahoo.com

Surrender Day Special Event Oct 20, 1400Z-2030Z, K4RC, Yorktown, VA. Williamsburg Area Amateur Radio Club. 14.265

7.265. QSL. K4RC, P.O. Box 1470, Williamsburg, VA 23187. 237th Anniversary of the British surrender at the Battle of Yorktown, ending the American Revolution k4rc.net

Shootout at the OK Corral

Oct 27, 1700Z-2300Z, K7T, Tombstone, AZ. Oro Valley Amateur Radio Club. CW: 7.040, 14.040 PSK: 7.070, 14.070 FT-8: 7.074, 14.074 SSB: 7.200, 14.250. Certificate. Email, to, qsl@tucsonhamradio.org. Email requests only. No paper QSLs, please. www.tucsonhamradio.org

2nd Annual 25 Lighthouses in the SouthWestern Desert

Nov 1-Nov 11, 0000Z-2359Z, N7A-N7Z, Lake Havasu City, AZ. London Bridge Amateur Radio Association. 18.145 14.255 10.115 7.195. Certificate. Garry Fisher, K9WZB, 1850 Rainbow Ave. S., Lake Havasu City, AZ 86403. 2nd Annual 25 Light-

house Special Event in the Desert. Each lighthouse is a working replica of the original lighthouses along the west and east coast and the Great Lakes. A special Full color certificate for working 1 or all 25 Lighthouses. Special Endorsement for working all 25. More information on QRZ.com N7A-N7Z or lbara.org

N5VET for Veterans Day 2018

Nov 4-Nov 15, 0000Z-0000Z, N5VET, Cleburne, TX. Club KC5NX. 18.135 14.247 14.225 14.045. QSL. Club KC5NX, 9200 Summit Court West, Cleburne, TX 76033. Club KC5NX will be operating as N5VET this year again to thank all our Veterans for their service.... Thank you for your time, labor and dedication to make this world, this America a better, safer place to live. kc5nx.radio.club@gmail.com or www.grz.com/db/KC5NX

VHF FM Antennas by Armando Delgado, KN4JN

The most popular mode of amateur radio operations in the USA is VHF FM, due primarily to the fact that over 50% of all licensed hams in the US are Technician Class whose primary privileges are in phone above 30 MHz. Also, the primary mode of communications in VHF FM is through repeaters. Thus, repeaters determine the main types of antennas used for FM VHF activity.

The main function of repeaters is to permit connections to the largest number of operators. To achieve this end, repeaters require omnidirectional antennas, both in receiving and transmitting, and the most practical omnidirectional antenna is the vertical antenna. Repeaters are also intended for mobile communications, and radios that operate through repeaters perform best by maintaining the polarization of the repeater antenna. The most common mobile radios are handie-talkies. For these radios, the favored antenna is the ground plane vertical which in these radios uses the radio chassis as the ground plane, instead of radials. This fact, of course, makes these antennas very inefficient, but for the line of sight and short distance operations of repeater work, not much emitted power is required. One other benefit of the vertical antenna for the handie-talkies is their simple, unobtrusive size.

Besides their trusty handheld radios, most hams also have a base station in their homes with radios capable of VHF FM transmission. As a rule these radios are more powerful than handie-talkies and their antennas can be bigger. Vertical polarization is still preferred, but bigger, higher gain antennas can be used in this setting, since most are fixed antennas with ample space in their setup.. Of these, the most common is the 1/4 wave ground plane vertical using radials to increase its efficiency. Other

common verticals for this purpose are the 5/8 wave vertical and the ever-popular J-pole, both of which dispense with the need for those pesky radials. Yagis vertically oriented, providing increased gain, also play a significant role for this purpose, but are not as common as the verticals.

Recently, some new antenna designs for VHF work appeared in QST. The quadrifilar antenna, which originally saw its primary use in satellite transmissions as a circularly polarized antenna, can be used for repeater contacts. These small antennas, with significant gain and no radials, offer an interesting option to the more popular vertical antennas. 1 (Figure 1) Another interesting one is a slot antenna that consists of spaced metal plates arranged horizontally but providing vertical polarization. This antenna design is very unobtrusive and can function as a stealth antenna, since it has no radials, has a very low profile, and doesn't look like the stereotypical antenna. 2 (Figure 2)

References

1. David P. Finell, N7LRY, "A 2-Meter Quadrifilar Helix Antenna."

QST May 2018 · Volume 102 · Number 5

2. John Portune, W6NBC, "A Low Profile 2-Meter Mobile Antenna."

<http://www.w6nbc.com/articles/2018-Q3QSTdesigncompetition.pdf>

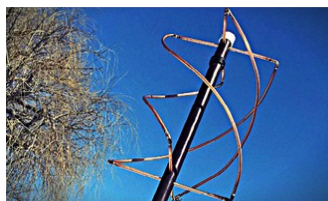


Figure 1. A quadrifilar antenna.

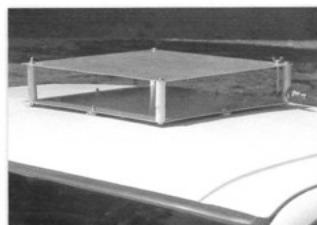


Figure 2. A slot antenna.



W1AW CW PRACTICE TRANSMISSIONS

7 PM EST Slow CW : 5-15 WPM
Mon, Wed, Fri

7 PM EST Fast CW: 35-10 WPM
Tue, Thu

FREQUENCIES:

1.8025, 3.5815, 7.0475,
14.0475, 18.0975, 21.0675,
28.0675, 50.350, 147.555.

OCTOBER CONTESTS

[Oceania DX Contest, Phone](#),

Oct 6, 0800z to Oct 7, 0800z;
Phone

[California QSO Party](#), Oct 6,
1600z to Oct 7, 2200z; CW,
Phone

[RSGB DX Contest](#), Oct 7, 0500z
to Oct 7, 2300z; CW, SSB

[RSGB 80m Autumn Series, CW](#),
Oct 8, 1900z to Oct 8, 2030z;
CW

[Nevada QSO Party](#), Oct 13,
0300z to Oct 14, 2100z; CW,
SSB, Digital .

[Oceania DX Contest, CW](#), Oct
13, 0800z to Oct 14, 0800z;
CW

[Arizona QSO Party](#), Oct 13,
1600z to Oct 14, 0600z, Oct
14, 1400 (local) to Oct 15,
0000 (local); CW, Phone, Digital

[Pennsylvania QSO Party](#), Oct
13, 1600z to Oct 14, 0500z,
Oct 14, 1300z to Oct 14,
2200z; CW, Phone, PSK, RTTY

[South Dakota QSO Party](#), Oct
13, 1800z to Oct 14, 1800z;
CW, Phone, Digital

[ARRL School Club Roundup](#),
Oct 15, 1300z to Oct 19,
2359z; CW, Phone, RTTY/
Digital



Editor's Note:

Send comments about the Newsletter or to contribute information or articles to the Editor's email address:

olardelga@aol.com.

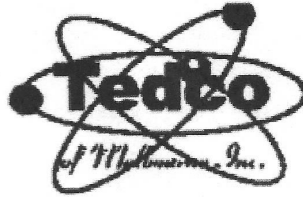
ACTIVE REPEATERS AND SIMPLEX FREQUENCIES (FM ANALOG)

REV 5/25/2018

OUTPUT FREQ.	OFFSET	ZONE	CALL	LOCATION	OWNER
145.130	-600	107.2	AB4AZ	VERO BEACH, INDIAN RIVER	AB4AZ
145.350	-600	103.5	K4OSC	St. CLOUD, OSCEOLA	K1XC
145.370	-600	156.7	W2SDC	COCOA	IRARC
145.470	-600	107.2	K4HRS	MELBOURNE	HIRAC
145.490	-600	100	WN3DHI	TITUSVILLE	NORTH NET
146.610	-600	None	W4MLB	MELBOURNE	PCARS
146.775	-600	100	K4KSC	MIMS	TARC
146.850	-600	107.2	W4MLB	PALM BAY	PCARS
146.880	-600	107.2	W4NLX	ROCKLEDGE	IRARC
146.895	-600	107.2/107.2	K4EOC	PALM BAY	EOC
146.910	-600	107.2	K4KSC	TITUSVILLE	TARC
146.940	-600	None	K4GCC	ROCKLEDGE	LISATS
146.970	-600	107.2	K4KSC	TITUSVILLE	TARC
147.075	+600	107.2/107.2	K4EOC	TITUSVILLE	EOC
147.135	+600	107.2/107.2	K4EOC	ROCKLEDGE	EOC
147.240	+600	123	KV4EOC	VOLUSIA	VARES
147.255	+600	107.2	K4DCS	PALM BAY	DCS
147.330	+600	107.2	K4NBR	TITUSVILLE	NBARC
147.360	+600	107.2	N4TDX	TITUSVILLE	NBARC
444.325	+5000	107.2	K4DCS	PALM BAY	DCS
444.375	+5000	107.2		SEBASTIAN	SARNET
444.425	+5000	107.2	W4MLB	Melbourne	PCARS
444.525	+5000	103.5/103.5	K4EOC	ROCKLEDGE	EOC
444.650	+5000	107.2	W4NLX	COCOA	IRARC
444.925	+5000	131.8	N1KSC	KENNEDY SP. CTR.	KSCARC
442.850	+5000	107.2/107.2	N4TDX	TITUSVILLE	NBARC
444.750	+5000	107.2/107.2	N4TDX	TITUSVILLE	NBARC
224.520	-1.600	107.2	N4TDX	Titusville	NBARC
PACKET STATIONS:					
145.010	WINLINK		W2PH-10	PALM BAY	DCS
145.090	PCARS		W4MLB-2	MELBOURNE	PCARS
145.770	SEDAN		K4EOC-7	PALM BAY	N2DB
145.770	SEDAN		KD4MWO-4	TITUSVILLE	N2DB
146.550	SIMPLEX		K4DCS	SOUTH REGION	DCS
147.540	SIMPLEX		K4EOC	RACES Bay	EOC
146.520	SIMPLEX			GENERAL CALL	
146.580	SIMPLEX		W4MLB	MELBOURNE	PCARS
146.480	SIMPLEX		W4NLX	CENTRAL REG	IRARC
146.595	SIMPLEX		K4KSC	NORTH REGION	TARC
146.560	SIMPLEX		NBARC	NBARC General Simplex	NBARC

Repeater in bold are owned by Brevard Emergency Management and are maintained by the county. Truste

437 S. BABCOCK ST.
MELBOURNE, FL 32901
Ph) 321-727-2311
Fax) 321-727-2312



DISCOUNT ELECTRONICS

HAM&CB EQUIPMENT
SECURITY SYSTEMS
BATTERIES(ALL TYPES)
REPAIRS(ALL TYPES)
ANTENNAS - TOWERS
2-WAY RADIO EQUIPMENT

"SALES AND SERVICE"
TELEPHONE SERVICE
COMPUTER REPAIR
STEREOEQUIPMENT
POWER SUPPLIES
TUBE EQUIPMENT

2013 LINE LISTINGS ** THE ONLY REAL PARTS STORE LEFT IN SOUTH BREVARD **

AIM
ALINCO
ANTENNACRAFT
ANTENNA SPECIALISTS
ARRL
ASTATIC
ASTI

BEARCAT
BECKMAN (WAVETEK)
BUSSMAN FUSES
BUD

C.B.RADIO
CALRAD
CORNELL DUBILIER
CELLPHONE AMPS
CHICAGO MINIATURE
CINCH JONES
CLOVER
COBRA
CUSHCRAFT

DALBANI
DECIBEL PRODUCTS
DENNISON
DURACELL
DANTONA IND.

ECG (SEE NTE)
ELECTRONIC RESOURCES
ELECTROVOICE
EVEREADY

FANON-INTERCOMS
FLUKE (WAVETEK)

GC ELECTRONIC
GALAXY
GOLDLINE

HAM RADIO
HARADA
HITACHI
HYGAIN

ICOM RADIO

JSC WIRE
JW DAVIS SOUND
JVC PARTS

KENWOOD RADIO
KOSS
KESTER

LITTELFUSE
LOWELL

M & G
MALLORY
MACOM
MAXON
MIDLAND
MOTOROLA

NTE TRANSISTORS
NELLO TOWERS
NTE ELECTRONICS
NORMAN LAMPS

PANASONIC
PANAVISE
PHILIPS ECG (SEE NTE)
PHILMORE
PIONEER
POMONA
POWERSONIC
PRB
PROAM ANTENNAS

QUAM
QUEST

RANGER RADIO
RAYOVAC BATTERIES

RUSSELL IND.

SR COMPONENTS
SANYO BATTERIES
SHURE BROTHERS
SONY PARTS

SPECO
SWITCHCRAFT

TEI
TNR BATTERIES
TELEX - HYGAIN
TRIPPLITE
TUBES - ALL TYPES
TV ANTENNA'S

UNIDEN
UNIDILLA
UNION CARBIDE

VARCO
VALOR
VECTOR
VIDEO EQUIPMENT

W2AU BALUNS
WALDOM - MOLEX
WAHL-CLIPPER
WAVETEK (BECKMAN)
WILSON ANTENNAS
WILSON ELECTRONICS

YAESU

WEB PAGE:
www.tedcoelectronics.com

EMAIL:
tedco@bellsouth.net

Hours:
MON - FRI 9 AM - 5 PM
SATURDAY 9AM-3PM

TED - W4LR - GENERAL MGR.

DOTTIE - OFFICE MANAGER