



**INDIAN  
RIVER ARC**

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

VOLUME XLIII, NUMBER 6

# SPURIOUS EMISSIONS

JUNE, 2022

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## CLUB MINUTES

President Steve Luchuk, N4UTQ called the meeting to order at 7:15 PM.

Following the Pledge of Allegiance, Steve mentioned he would give a presentation about the Dayton Hamvention.

Treasurer Report: The General Fund consists of \$1061.16, unchanged from last month. The Equipment Fund, also unchanged, has \$1883.65.

The minutes of the May meeting were approved.

Upcoming activities: The next Simplex exercise will be on July 30 since the last Saturday in June is Field Day. The next QRP outing will be on Saturday, July 16.

Field Day is next Saturday, June 25. The club plans to operate under the solar power rules and QRP. The plan is to use CW in 20 meters and 40 meters and phone in 10 meters, 15 meters and 80 meters.

For food, Steve plans to serve

burgers, potato salad and teriyaki meat balls.

Operations start at 1800 UTC, so participants need to be there earlier, 9:00 to 10:00 AM to set up antennas and radios. Talk-in will be the 145.37 MHz repeater.

Following the business meeting, Steve gave a slide presentation on the Dayton Hamvention. This hamvention is sponsored by the Dayton Amateur Radio Association, DARA, that uses the profits to fund scholarships and other amateur radio related activities.

The Hamvention, which normally lasts three days, was held at the Hara Arena in Dayton, Ohio from 1964 to 2017, when the arena was badly damaged by a tornado and had to be demolished. At that time the hamvention moved to nearby Green County in Xena, Ohio where it is presently held. Unfortunately, in 2020 and 2021 the hamvention was cancelled due to Covid-19. It re-

opened this year again.

Steve showed many slides of hamvention activities, participants, and type of amateur equipment sold.

After the presentation there was a brief discussion where members who had visited the Hamvention in the past related some of their experiences.

The meeting adjourned at 8:08 PM.

Respectfully submitted by  
Armando Delgado, KN4JN,  
Secretary

## HAPPENINGS

If you contact a GB70 station during June, a professionally-designed QSL card will be available on request from the appointed professional QSL Manager. Bureau QSL cards are free of charge, from [MOOXO](#) [OQRS](#) with the first batch of cards anticipated to be sent during July 2022. Cards requested by direct post will be subject to a postage and packing charge.

Please do not send us your QSL cards; they are not required, and all QSOs will be uploaded to LoTw.

The July, 2022 issue of QST, page 62, has an article by Dan Fisher, AI4GK titled *A New Approach to ARES* that relates the history and efforts of the Brevard County ARES Team (BCAT) to implement training for emergency operators in the county.

At the Dayton Hamvention last May, ICOM announced the SHF-P1 concept project model, part of the development project called the [ICOM SHF Project](#) (Super High-Frequency Band Challenge) aimed at developing a new amateur radio for use in the 2.4 GHz and 5.6 GHz bands. Details on the radio [here](#).

Spaceweather.com had an article on June 16, 2022 relating a study that showed the potential effects of a solar magnetic superstorm on different parts of the USA based on conductivity of the terrain in different parts of the country.

<https://spaceweather.com/>

## HAPPENINGS

Interesting YouTube video of DL1DN, David using an aluminum foil vertical antenna for 10 meters attached to a 20 meter loading coil and no radials. Watch [here](#).

Dxpeditions continue to activate. Next month a group will operate from an island off Alaska.

KL7RRC/P Team will be active from **Kiska Island**, IOTA NA-070, 23-30 July 2022. Team - N3QQ, N7QT, N8LF, W8HC, N6XG. They will operate on HF Bands, CW, SSB, FT8. QSL via N7RO. RICHARD MOEN, 2935 PLYMOUTH DR, BELLINGHAM, WA, 98225, USA.

SABLE ISLAND DXPEDITION LAUNCHES WEBSITE-- This dxpedition is scheduled for a

week of operation at the Sable Island National Park Reserve next October and November of this year. This island is a rare DX since it has restricted access from the Canadian government. The days of the dxpedition are not yet solid, so all interested may check the CYOS website for news., <https://t-rexsoftware.com/cy0s/>

**Barry, KD6XU**, is currently sailing around the French Polynesia Islands, and is active as FO/KD6XU from Nuka Hiva, Fatu Hiva, and Marquesas Islands. Reports indicate that he will soon be heading to Tuamotu and the Society Islands. Activity will be on 40-12 meters using CW, mainly. There is an interesting 21 min. video on YouTube.com of Barry from his yacht "Ma Kai":[https://www.youtube.com/watch?v=ejOdLVgR3Dg&feature=emb\\_imp\\_woyt](https://www.youtube.com/watch?v=ejOdLVgR3Dg&feature=emb_imp_woyt)

[v=ejOdLVgR3Dg&feature=emb\\_imp\\_woyt](https://www.youtube.com/watch?v=ejOdLVgR3Dg&feature=emb_imp_woyt)

Parks on The Air (POTA) is an increasingly popular amateur radio activity around the world. Almost every weekend many stations signing "POTA" can be heard. Over the past month there were over 2000 operators who activate 4255 parks in 30 different DX entities. During June and July, the best chances of contacting a POTA station will be on 20 meters or 40 meters between 15:00 and 21:00 UTC.

There is an interesting new open source digital radio protocol for data and voice attempting to compete with the commercial modes now popular, such as DMR, DStar, Fusion, and P25 repeaters. The M17 project is a

native ham radio digital mode for VHF and above. In their [website](#) they state, "Our protocol's voice mode uses the free and open Codec 2 voice encoder. This means there are no patents, no royalties, and no licensing or legal barriers to scratch-building your own radio or modifying one you already own. This freedom to build, understand, and innovate is core to amateur radio, but has been missing from the commercially available digital voice modes. This is part of why amateur radio digital voice modes have largely stagnated since the 1990s and we're almost wholly dependent on commercial products that aren't well designed for amateur radio users. M17 is about unlocking the capabilities that amateur radio hardware should already have."

## ON THE AIR

**100 Years of Thales Nederland B.V.** Jul 6-Dec 31, 1000Z-2359Z, PA100THALES, Many cities, NETHERLANDS. PA100THALES Team. all bands, all modes. QSL. Email, pa100thales@qsl.net, for information, NETHERLANDS. This is an operating event. [www.qsl.net/pa100thales](http://www.qsl.net/pa100thales)

**Whiskey Rebellion** Jul 5-Jul 9, 0000Z-2300Z, NY9H/WA3COM, Prosperity, PA. Washington Amateur Communications. 14.280 7.,280 18.160. Certificate & QSL. Bill Steffey, NY9H, 401 Bells Lake Rd., Radio Hill, Prosperity, PA 15329. Event info and background on the "Original" Whiskey Rebellion at [www.whiskeyrebellionfestival.com](http://www.whiskeyrebellionfestival.com) & [www.wa3com.com](http://www.wa3com.com)

**World Games - 2022 Birmingham** Jul 7-Jul 17, 0000Z-2359Z, W4G, Birmingham, AL. Birmingham Amateur Radio Club. 7.2 MHz. QSL. Birmingham Amateur Radio Club - W4G, PO Box 603, Birmingham, AL 35201. Look for W4G on various spotting sites. We will be operating all bands and modes - including satellites. [w4cue.com/w4g](http://w4cue.com/w4g)

Hiroyuki, JG7PSJ will be active again as JD1BMH from **Chichi Jima Island**, IOTA AS-031, Ogasawara (Bonin) Islands, 18-26 June 2022. He will operate on 80-10m CW, SSB, RTTY. QSL via JD1BMH buro or via JG7PSJ direct. Hiroyuki Kawanobe, 1-4-1, Mikamine, Taihaku, Sendai, Miyagi 982-0826, Japan.

Pertti, OG2M will be active as OJ0MR from **Market Reef**, IOTA EU-053, 26 June - 6 July 2022.

He will focus on 6m activity, CW, SSB, FT8. QSL via OG2M direct PERTTI TURUNEN, KOLUNKULMA 157, 17130, VE-SIVEHMAA, Finland or LOTW preferable

Henri, OH3JR will be active again as OJOJR from Market Reef, IOTA EU-053, 26 June - 6 July 2022.

He will concentrate on HF Bands, CW, SSB, FT8. QSL via home call. HENRI OLANDER, HELAVALKEANTIE 15, FIN 13270 HAMEENLINNA, Finland.

Eric, FP/KV1J will be again active from **Miquelon Island**, IOTA NA-032, 28 June - 12 July 2022. He will operate on 80-6m SSB, RTTY, CW, FT8 and FM Satellites QSL via home call, LOTW. Direct QSL: ERIC A WILLIAMS, 763 PLEASANT ST,

MARLBORO, MA 01752, USA.

**Iowa Railroads on the Air IRROTA Jul 1-Aug 31, 0000Z-2359Z, W0DBQ**, Dubuque, IA. Great River Amateur Radio Club. 14.347 14.340 7.280 7.250. Certificate & QSL. IRROTA c/o the Great River ARC, P.O. Box 1384, Dubuque, IA 52004. For details see IRROTA on the Event drop-down menu at W0DBQ.org. Celebrating Iowa's rich railroad history clubs and individuals will be activating as many of the 387 remaining railroad depots (active and inactive) as possible during July and August 2022. Certificates to any clubs or individuals activating five depot/stations. QSL cards for any confirmed hunter contacting an activator by sending a SASE. W9UPK@arrl.net or www.w0dbq.org

## The Phonetic Spelling Alphabet by Armando Delgado, KN4JN

Soon after the invention of the telephone, users discovered that reception at times left much to be desired. Often, words sounded unintelligible and required repetition. Sometimes, speakers resorted to spelling the word in order to get it across. Unfortunately, spelling created another problem, due to the fact that many letters of the alphabet have similar sounds and can be confused. Eventually, to solve this problem, users would say things such as "A' like in apple". Agencies engaged in regular communications eventually realized that an established set of words to represent the alphabet would expedite communications. The first such spelling phonetic alphabet was created in 1898 by the British Signal Corps for their telephone transmissions. That version was limited to the most frequently confused letters. In time, telephone companies, like Western Union, introduced their own phonetic alphabets. Commonly, these alphabets used the names of well known cities and countries.

With the advent of voice radio, operators soon realized they had the same communication problem as their telephone predecessors but capitalized on the previous experience and implemented phonetic alphabets. Just about every agency and military organization in the world had their own phonetic alphabet. Prior to WW2, the US Army and Navy had their own respective phonetic alphabets. World War Two, particularly after the Allied invasions began, required a unified military phonetic alphabet, so in 1943 the Army and Navy adopted the same phonetic alphabet (Figure 1) which was also used by the Allied Forces. Following the war, many returning veteran amateur radio operators continued to use that phonetic alphabet. After WW2, the North Atlantic Treaty Organization was created to protect Europe from the Soviet threat. NATO is composed of many different nations, most with different languages. To allow communi-

cations, NATO needed a common language and adopted English as its official language. Unfortunately, foreigners speaking English generally have an accent and NATO realized that many words in the existing phonetic alphabet were frequently confused with words of another language or misunderstood. The International Civil Aviation Organization (ICAO) that also uses English as its official language tasked itself with developing a fool proof phonetic alphabet that left little chance to misunderstandings due to accents or foreign words. After undergoing hundreds of thousands of trials, it came up with a phonetic alphabet in 1956 (Figure 2). NATO accepted that version after some minor changes and it soon was adopted by other international agencies, including the International Telecommunications Union and the International Amateur Radio Union, in which the ARRL represents American hams. This is the spelling phonetic alphabet that we all use at present.

Figure 1. Allied Forces Phonetic Alphabet

Symbol	Code word
A	Able
B	Baker
C	Charlie
D	Dog
E	Easy
F	Fox
G	George
H	How
I	Item
J	Jig
K	King
L	Love
M	Mike
N	Nan
O	Oboe
P	Peter
Q	Queen
R	Roger
S	Sugar
T	Tare
U	Uncle
V	Victor
W	William

X	Xray
Y	Yoke
Z	Zebra

Figure 2. ICAO/NATO Phonetic Alphabet

Symbol	Code word
A	Alfa
B	Bravo
C	Charlie
D	Delta
E	Echo
F	Foxtrot
G	Golf
H	Hotel
I	India
J	Juliett
K	Kilo
L	Lima
M	Mike
N	November
O	Oscar
P	Papa
Q	Quebec
R	Romeo
S	Sierra
T	Tango
U	Uniform
V	Victor
W	Whiskey
X	X-ray
Y	Yankee
Z	Zulu



### 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



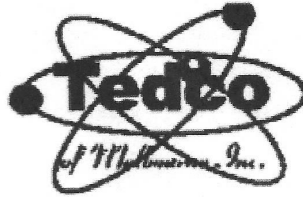
### Editor's Note:

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

olardelga@aol.com.

ACTIVE REPEATERS INCLUDING DMR, PACKET & SIMPLEX							RACESBRE0008 REV B
Repeaters & Packet are open for all licensed amateur radio operators to use.							
OUTPUT FREQ.	STD. NAME	OFFSET	TONE/CC	CALL	LOCATION	OWNER	NOTES
<b>WBFM</b>							
145.130	130 VB	-600	107.2	AB4AZ	VERO BEACH, INDIAN RIVER	AB4AZ	
145.350	350 SC	-600	103.5	K4OSC	St. CLOUD, OSCEOLA	K1XC	Radio Science Club, FI Club
145.370	370 CO	-600	156.7	W2SDB	COCOA-BROADCAST CT.	IRARC	Yaesu Repeater replaced with Bridgecom FM
145.470	470 ME	-600	107.2	K4HRS	MELBOURNE- RIALTO PL.	HIRAC	
145.490	490 TI	-600	100.0	WN3DHI	TITUSVILLE SR405 & Fox lk rd.	WN3DHI	
146.610	610 ME	-600	None/107.2	W4MLB	MELBOURNE- HOLMES HOSP	PCARS	Tone Downlink only
146.625	625 MM	-600	100.0	KE4NUZ	NW of MIMS NEAR HARRISON RD.	KE4NUZ	Limited coverage
146.775	775 MM	-600	100.0	K4KSC	NW of MIMS Hog Valley , W of I95	K4KSC	
146.850	850 ME	-600	None/107.2	W4MLB	PALM BAY- Port Malabar Rd.	PCARS	Tone Downlink Only
146.880	880 RO	-600	107.2	W4NLS	ROCKLEDGE- WUESTHOFF HOSP.	IRARC	FUSION Repeater replaced with Bridgecom F
146.895	895 PB	-600	107.2/107.2	K4EOC	PALM BAY- DeGroot Library	EOC	TSQL as of 5/2018
146.910	910 TI	-600	107.2	K4KSC	TITUSVILLE Water Tower on south st.	TARC	
146.940	940 RO	-600	None	K4GCC	ROCKLEDGE Carver Rd.WLRQ Tower	LISATS	
146.970	970 TI	-600	107.2	K4KSC	TITUSVILLE-T'VILLE TOWERS	TARC	
147.075	075 SC	+600	107.2/107.2	K4EOC	SCOTTSMOOR Near US1-Aurantia Rd	EOC	TSQL as of 5/2018 Relocated 4/2019
147.135	135 RO	+600	107.2/107.2	K4EOC	ROCKLEDGE-EOC	EOC	TSql as of 5/2018
147.240	240 DE	+600	123.0	KV4EOC	DELAND	VARES	
147.255	255 PB	+600	107.2	K4DCS	Near Babcock & Palm City S City limi	PBARC	
147.330	330 TI	+600	107.2	K4NBR	TITUSVILLE-PARRISH HOSP.	NBARC	
147.360	360 TI	+600	107.2	N4TDX	TITUSVILLE-PARRISH HOSP.	NBARC	DSTAR Gateway in work
442.850	850TI4	+5000	107.2/107.2	N4TDX	TITUSVILLE-PARRISH HOSP.	NBARC	TSql;FUSION/WBFM/WIRES-X
444.325	325ME4	+5000	107.2	K4DCS	MELBOURNE-TRINITY TWRS-E	PBARC	
444.375	CNLBRE	+5000	107.2		I95 FDT Twr 1/2 Mile N of County Lin	SARNET	"SARNet Sebastian Repeater"
444.425	425ME4	+5000	107.2	W4MLB	MELBOURNE- RIALTO PL.	PCARS	
444.525	525RO4	+5000	103.5/103.5	K4EOC	ROCKLEDGE-EOC	EOC	TSql; VOICE/NBEMS
444.650	CNMBRE	+5000	107.2	W4NLX	COCOA-FHP SR520	IRARC	"SARNet Cocoa Repeater"
444.750	750TI4	+5000	156.7/156.7	N4TDX	TITUSVILLE- TGO WATERTOER 230 ft.	NBARC	TSql
444.875	875MI4	+5000	107.2	KC2UFO	MERRITT IS. COURTNEY SPRS.	K4UJZM	
444.925	925KS4	+5000	131.8/131.8	N1KSC	KENNEDY SP. CTR.-VAB	KSCARC	FM Tsql ; P25 capable
224.120	120CO2	-1600	123.0	AA4CD	COCOA Broadcast Ct.	AA4CD	
<b>DMR</b>							
444.150	150TI4	+5000	CC1	K2JO	TITUSVILLE-PARRISH HOSP.	KC2CWT	DMR FL
444.575	575CO4	+5000	CC3	K4DJN	COCOA BROADCAST CT.	AA4CD	DMR Brandmeister
444.675	675TI4	+5000	CC3	K4DJN	TITUSVILLE-T'VILLE TOWERS	AA4CD	DMR Brandmeister
<b>ATV</b>							
427.250	250CO4			K4ATV	COCOA BROADCAST CT.	LISATS	NTSC INPUT 439.25 See www.lisats.org
<b>PACKET STATIONS:</b>							
145.090	WL2KPB	WINLINK		W2PH-10	PALM BAY-W2PH QTH	PBARC	WINLINK GATEWAY
145.090	090 ME	PCARS		W4MLB-2	MELBOURNE-TRINITY TWRS-EAST	PCARS-K1YON	BBS W4MLB-4 EASTNET
145.770	770 PB	SEDAN		K4EOC-7	PALM BAY	N2DB	http://www.fla-sedan.com
145.770	770 TI	SEDAN		KD4MWO-4	TITUSVILLE	N2DB	INACTIVE NODE
<b>BREVARD RACES/ARES SIMPLEX</b>							
146.480	CENTX	SIMPLEX		N/A	CENTRAL REG	IRARC	CENTRAL NET SIMPLEX BACKUP
146.550	SOUTHX	SIMPLEX		N/A	SOUTH REGION	PBARC	SOUTH NET SIMPLEX BACKUP
146.580	MLBX	SIMPLEX		N/A	MELBOURNE REGION	PCARS	MELBOURNE REGION NET SIMPLEX BACKUP
146.595	NORTHX	SIMPLEX		N/A	NORTH REGION	TARC	NORTH NET SIMPLEX BACKUP
147.540	EOCROX	SIMPLEX		N/A	RACES Bay	EOC	EOC VOICE/NBEMS
<b>SIMPLEX</b>							
146.520	CALL52	SIMPLEX		N/A	Station to station, anywhere		VHF national simplex calling freq
146.490	TAC A	SIMPLEX		N/A	Station to station, anywhere		Standardized tactical option since 2006
146.560	NBRX	SIMPLEX		N/A	NBARC -Club/Parrish Hosptial Activities		
146.580	TAC B	SIMPLEX		N/A	Station to station, anywhere		Standardized tactical option since 2006
147.420	TAC C	SIMPLEX		N/A	Station to station, anywhere		Standardized tactical option since 2006
147.420	IRARCX	SIMPLEX		N/A	IRARC "FUN NET" and CLUB ACTIVIES		
147.450	TAC D	SIMPLEX		N/A	Station to station, anywhere		Standardized tactical option since 2006
147.570	TAC E	SIMPLEX		N/A	Station to station, anywhere		Standardized tactical option since 2006
446.000	CALL46	SIMPLEX		N/A	Station to station, anywhere		UHF national simplex calling freq
446.500	TAC A4	SIMPLEX		N/A	Station to station, anywhere		Standardized tactical option since 2006
446.600	TAC B4	SIMPLEX		N/A	Station to station, anywhere		Standardized tactical option since 2006
446.700	TAC C4	SIMPLEX		N/A	Station to station, anywhere		Standardized tactical option since 2006
2 Meter & 70 cm WBFM repeaters use CTCSS; if one frequency is listed it is for uplink (user Tx) , if two are listed the repeater is set for uplink and downlink (user Tx and Rx)							
Repeater Call Signs in bold are owned by Brevard Emergency Management and are maintained by the county. Repeater Trustee: Ron K2RJ							
NOT ON AIR							
Standard Names in Bold are recommended for Emergency Radio in Brevard *							
PBARC= Palm Bay Amateur Radio Club (Replaces DCS for South Brevard) See Ed W2PH for more info							

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ALINCO  
ANTENNACRAFT  
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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  
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MACOM  
MAXON  
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NELLO TOWERS  
NTE ELECTRONICS  
NORMAN LAMPS

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PANAVISE  
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PHILMORE  
PIONEER  
POMONA  
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PRB  
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UNION CARBIDE

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WALDOM - MOLEX  
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