



**INDIAN  
RIVER ARC**

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

VOLUME XLIII, NUMBER 1

# SPURIOUS EMISSIONS

JANUARY, 2022

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**STEVEN LUCHUK**  
N4UTQ

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KJ4VGR

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**ARMANDO DELGADO**  
KN4JN

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KU0R

### DIRECTOR

**ROBERT SCORAH**  
WOAGE

### NEWSLETTER EDITOR

**ARMANDO DELGADO**  
KN4JN

## CLUB MINUTES

The meeting was called to order by President Steve Luchuk, N4UTQ at 7:15 PM.

After the Pledge of Allegiance, visitor Richard Newman, K4RPN was introduced.

Steve then mentioned that there was an effort to reconstitute BEARS.

Treasurer Report: the General Fund has \$1106.17 available and the Equipment Fund \$1883.65.

Next, the minutes of the November meeting were approved.

Old business: None.

Near future club activities: The Winter Field Day will be on January 29. The plan is to run 3 HF stations with setup starting at around 11:00 AM at the club meeting place at The River of Life Church on Merritt Island. A chili dog buffet and sodas will be available. Steve will email more details to the members before the event.

The next Simplex Exercise will be held on February 26. Activity

starts at 9:00 AM on the simplex frequency, 142.56 MHz. Other planned club events include the MS Walk, the March for Babies, and the JDRF Walk. These are presently TBD.

Steve mentioned that BCAT presently maintains the principal contact with the county emergency department.

Steve emailed an Emergency Preparedness Survey to 97 members some time back. He got 8 responders, or 8.2% response rate. Steve reviewed the survey questions and the proportion of responses provided.

Following the business meeting, Steve gave a presentation on Digital Communications. FT8 seems at present to be the most popular and active digital mode in HF. Another software is JTDX, that offers multiple modes and shows the country of origin of the signal. J8S Call is digital software that allows exchange of messages and group networking that permits

messages to be forwarded at a later time to a recipient who may not be available at the time of the transmission. FIDigi offers many modes and NBEMS is the most important for traffic handling and messaging in emergencies. It supports IC 213 forms and several Red Cross message formats.

Winlink was the first digital application used for emergency traffic in HF. It allows emails through the airwaves or via link nodes to the internet.

Summarizing, Steve encourages club members to gain awareness and experience with these modes that may provide unique opportunities for communications during serious emergencies that disrupt the normal communication channels.

The meeting adjourned at 8:15 PM.

Respectfully submitted,  
Armando Delgado, KN4JN  
Secretary

## HAPPENINGS

Japan's [OMOTENASHI](#), the world's smallest moon lander, will have an X-band and UHF communication system, although it will not carry an amateur band transponder. OMOTENASHI is a 6U CubeSat set for launch via a NASA SLS rocket as early as February 2022

The spacecraft is made up of two separable components, both having independent communication systems — an orbiting module

and a surface probe. The orbiting module will take the surface probe to the moon. It will transmit beacon or digital telemetry data on UHF (437.31 MHz). The surface probe — the moon lander — will transmit digital telemetry or three-axis acceleration analog-wave with FM modulation on UHF (437.41 MHz). Transmitter power will be 1 W in both cases. The orbiting module beacon will transmit on 437.31 MHz using PSK31.

The surface probe beacon will transmit on 437.41 MHz using FM, PSK31, and PCM-PSK/PM.

Achieving secure and resilient voice and data communications across the Emergency Communications Ecosystem is essential for public safety agencies to execute their missions. Continuity capabilities-building principles, practices, and resources are available at the

FEMA [National Continuity Resource Toolkit](#) and other sites. It's important to periodically review and update or upgrade capabilities and leverage the NECP to understand and build emergency communications resilience. [Get additional information on the webinar series.](#)— *Cyber Security and Infrastructure Security Agency (CISA), US Department of Homeland Security*

## HAPPENINGS

**Orlando HamCation®** – Friday, Saturday, and Sunday, February 11-13, 2022; Central Florida Fairgrounds and Expo Park, 4603 West Colonial Drive, Florida 32808; | [Tickets and Info](#)  
**Official Websites:**  
[www.hamcation.com](http://www.hamcation.com)  
[www.arrrl.org/expo](http://www.arrrl.org/expo)

### Other Related Activities and Information:

The Florida Contest Group (FCG) Contest Banquet – Friday, February 11, 2022 – [www.floridacontestgroup.org](http://www.floridacontestgroup.org)

The WRTC 2022 Committee has announced a first time ever award, promoting World Radiosport Team Championship 2022. Starting on January 1 and concluding July 10, 2022, over 100 Italian operators will activate special WRTC call signs, one for each Italian call area. Each participant's QSO totals and award hunter scores will be displayed on a

real-time leaderboard at [www.wrtc2022.it/award](http://www.wrtc2022.it/award). Each participant will be able to download the award in digital format at the end of the event. Read the full rules at [www.wrtc2022.it/award](http://www.wrtc2022.it/award).

Twenty years from now we might get a call from an alien. In 2017, a powerful radio transmission was aimed at exoplanet GJ 273b, thought to be able to support life. Its message, sent by the alien-hunting group Messaging Extraterrestrial Intelligence International, contained instructions on how to understand Earthling math, music and time. If it lands on intelligent alien ears once it arrives in about a decade, E.T. now has our number. Read the full story [here](#).

### WSJT-X Version 2.5.4 GA Released

WSJT-X 2.5.4, a bug-fix release correcting flaws in release 2.5.3, is now available as a General Avail-

ability (GA) release. Changes from v2.5.3 are: WSJT-X: Repair a defect that caused occasional crashes when in QSO with stations using nonstandard call signs. MAP65: Correct a bug that prevented "Best-fit Delta phi" solutions from being displayed to the user. Links to WSJT-X 2.5.4 installation packages for Windows and Linux are available at [physics.princeton.edu/pulsar/k1jt/wsjitx.html](http://physics.princeton.edu/pulsar/k1jt/wsjitx.html), with the installation package for macOS being added soon.

### Growing Number of Operators Completing WAS on 222 MHz

ARRL announced that it has validated the 222-MHz WAS application of John Swiniarski, K1OR, for WAS # 13. His last contact was with NH6Y in Hawaii on January 9. Full story [here](#).

The Northern Arizona DX Association will hold its third Distance Challenge Special Event at

Quartzfest (QF) on January 23 – 29, 2022. The idea behind the event is to see which QF attendee can make the longest-distance portable contact from the Sonoran Desert using whatever radio and antenna they can bring in and set up. If they don't bring in a radio and antenna, they can still enter by using the special event W7Q communication trailer at QF. The trailer, owned by the Northern Arizona DX Association (NADXA), will have three operating positions that can be used simultaneously – one for SSB, one for FT8, and one for CW. There will be four entry classes. Details are on the NADXA website. Winners will each receive the unique trophy hard hat, sponsored by CABLE-X-PERTS.

## ON THE AIR

### 80th Anniversary of the 8th Air Force SPECIAL EVENT

Jan 19-Jan 24, 0400Z-0359Z, WW2FLY, Attica, NY. WWII Flying Fortress Amateur Radio Club. 1.900 3.850 7.180 14.250. Certificate & QSL.

WWII Flying Fortress Amateur Radio Club, 3339 Stroh Rd, Attica, NY 14011. SSB and FT8 Check spotting networks to find us on HF More info at [www.grz.com/db/WW2FLY](http://www.grz.com/db/WW2FLY)

### EARS (Ellijay Amateur Radio Society) 25th Anniversary

Feb 5-Feb 13, 1500Z-2300Z, W4HHH, Ellijay, GA. Ellijay Amateur Radio Society (EARS). 14.171 7.171. Certificate & QSL. Ellijay Amateur Radio Society, 78 N Garrett Branch Road, Ellijay, GA 30536. W4HHH will transmit on 10, 12, 15 17, 20 40 80 & 160 meter bands off and on throughout the 9 days of the event. The

certificate will indicate which of the several operators are contracted and, hopefully, participants will try for a clean sweep and contact all EARS operators. w4hhh.org

### Republic of Texas Central National Road

Feb 5, 1400Z-2200Z, K5R, Rockwall, TX. Rockwall Amateur Radio Club. 14.050 14.074 14.265. QSL. Rockwall Amateur Radio Club, P.O. Box 1791, Rockwall, TX 75087. Commemorating the Republic of Texas Central National Road and its impact on the history of Rockwall and all of Texas. Planned operation on CW, FT-8, and SSB. QSL card available for download from the Rockwall Amateur Radio Club website. [sites.google.com/site/rarck5rkw](http://sites.google.com/site/rarck5rkw)

**Traveler's Rest RV Resort and Golf Course 50th Anniversary** Feb 5, 1200Z-2000Z, W5O, Dade City, FL. Traveler's Rest ARC. 7.240

14.240. Certificate. K4TRR Anniversary, 29129 Johnston Rd. Lot 09-03, Dade City, FL 33523. Members of K5TRR (club station for Traveler's Rest RV Resort and Golf Course) celebrating 50 years of service to the RV-Ham traveler. k4trrinfo@gmail.com

FS/VA3QSL will be active from **Saint Martin Island**, IOTA NA - 105, 6 - 22 February 2022. He will operate on 40 - 6m, CW, SSB, Digital modes. QSL via home call. Jeff Richardson, 36 Crawley Drive, Brampton, ON L6T 2S1, Canada.

T06S Team will be active from Terre de Haut, Iles des Saintes, IOTA NA - 114, **Guadeloupe**, 20 January - 1 February 2022. Team - Members of the Radio Club de Montceau Les Mines, F6KJS. They will operate on HF Bands. QSL via F6KJS. Radio Club RC

BASSIN MINIER, 3, Rue De Commeny - Pole Associatif Le Magny, MONTCEAU-LES-MINES, 71300, France.

Radio amateurs around the world can obtain our anniversary award by having contacts using CW, Phone or Digital modes with the Danish anniversary station **OZ5ØDDXG** during 2022. The anniversary station may be contacted once on each band and with each modulation type in every month. Each approved contact counts 1 point. Details in QRZ.

DL7BO and DJ6TF will be active as Z220 and Z21A from **Zimbabwe**, 3 - 20 February 2022. He will operate on 160 - 10m, CW, SSB, FT8, FT4. QSL via DJ6TF for Ukraine via UY5ZZ, LOTW. QTH - Harare, Zimbabwe

## Winter Field Day by Armando Delgado, KN4JN

The ARRL Field Day occurs on the last weekend of June. It started in 1933 and has been held every year since then, except during the World War II years 1942-1945 when radio amateurs could not transmit on the air.

The purpose of Field Day is to serve as a training exercise for emergencies. Participants must set up their stations in settings that simulate those that would occur after certain disasters, and they must do so in a limited amount of time. They must operate independent of any sources of commercial power and ideally in locations away from regular habitations, providing their own shelter and supplies. ARRL Field Day tests operator's ability to rapidly set up radio stations that can transmit efficiently in difficult situations. It is not a test of message handling or complex information exchange. The exchange's intent is to allow many contacts in a short period of time, to hone operational skill and at the same time offer a challenge that increases the fun of the activity. Perhaps that is why the ARRL Field Day is so popular. However, in spite of all its advantages Field Day has one small deficiency: it occurs in the summer time and not all emergencies happen during clear, warm weather.

Recognizing this deficit in the ARRL Field Day, in 2006 a group of amateurs decided to hold a winter time field day. The first Winter Field Day was held in 2007 and has been held every year since then on the last weekend in January.

The purpose of the Winter Field Day is to offer hams the opportunity to simulate emergency situations in a different, perhaps more challenging environment than the summer time version. Certainly, erecting antennas in sub-zero temperatures or in 4 feet of snow would be very different and offer unique challenges. Likewise, the choice of antennas could be different: a beam in a heavy snow fall may collapse—most likely in the middle of the night—and setting up a vertical in 4 feet of snow may be a bit of a problem, not to say on a

frozen ground.

Like the summer version, the Winter Field Day is not an exercise in messaging but rather on rapidly setting up efficient stations capable of steady transmissions. The exchange is also brief, to allow for multiple, rapid contacts, but the format differs from the ARRL Field Day.

The ARRL Field Day categorizes mainly by social groups, clubs, individuals, or emergency facilities settings; the Winter Field Day does it based on location. Thus, the Winter Field Day categories are Indoor, Outdoor, and Home. Each category has its own requirements ([see 2022 WFD Rules](#)). The Winter Field Day, like the ARRL version also has classes which are based on the number of simultaneous transmitters used. Thus, a person operating from home with only one transmitter and located in the ARRL South Florida section would send 1H SFL in CW and on phone One Hotel South Florida, for the ARRL section.

The bands used are all the amateur bands, except for the WARC bands. Interestingly, in contrast to the summer Field Day, the winter event suggests certain frequencies for operation. This helps operators to find each other and allows non-participants free sections of the bands where they can carry regular activities without the sort of interfere that happens during the summer Field Day. Those frequencies are  
**HF CW – 1810-1820, 3.530-3.550, 7.030-7.050, 14.035-14.055, 21.030-21.050, 28.030- 28.040**

**HF SSB – lowest 30 kHz of the US General Class Phone bands (160m-15m), 28.400-28.425MHz (10m)**

**6m/VHF/UHF – adjacent to, but not on, nationally recognized simplex calling channels.**

Winter Field Day allows all modes that *“can faithfully*

*transmit the exchange intact without a conversion table”.*

This means that FT8 and FT4 are not allowed. Also, power is limited to 100 watts.

This year Winter Field Day will be held on Saturday, January 29 starting at 2:00 PM EST (19:00 UTC) and will continue for 24 hours until 2:00 PM EST Sunday, January 30 (19:00 UTC). One important rule is that station set up (for those operating away from home) cannot start earlier than Friday at 2:00PM (19:00 UTC).

We are fortunate in Florida that we do not have to contend with the winter woes that our northern neighbors must suffer. Yet, by participating in the Winter Field Day we get to practice for the summer event if operating from home, or to practice for emergencies if operating from an outside site. We also provide contacts for those braving the winter miseries.



### 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](mailto: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	W4NLX	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>BREVAR 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 user 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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