VOLUME XLV, NUMBER 5

SPURIOUS EMISSIONS

MAY, 2023

INDIAN RIVER ARC

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

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KN4JN

CLUB MINUTES

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

The club's video equipment was out of order and Steve had to adlib the meeting, plus he could not give the presentation he planned.

Next, Steve called for visitors: Present were KG7HTH and his friend Bryan, no call sign. Also present Rick Harrison, K4KGR, .

Viron, N4VEP announced that next Saturday, May 20 there will be a QRP event at Kelly Park East starting at 10 AM until about 1:00 PM.

On Saturday, May 27, Steve plans a Simplex Exercise on 147.42 MHz. The exercise generally starts at 9:00 AM. This time, Steve plans to try using hand held radios after initial check-in to determine their effectiveness in simplex contacts. Following the exercise, a meeting at the club house is planned. Steve will bring a new barbeque grill to make hamburgers.

Field Day will be on the last weekend of June, June 24-25. This year the plan is to use high power. Again, Steve will provide hamburgers and other food and drink.

On other topics, Steve indicated that there is a growing interest among many club members to use GMRS. During the recent SET it was used to successfully send a message to the control station. Also used was the phone link hamshack hotline, although being a landline system, it was officially not allowed for event communications.

Steve reminded the members of the Friday SMAH breakfast at Umpa's Diner on North Courtenay Parkway.

The meeting adjourned at 7:42 PM.

Respectfully submitted

Armando Delgado, KN4JN

Secretary

HAPPENINGS

The Federal Emergency Management Agency (FEMA) has released a final version (March 2023) of the National Incident Management System (NIMS) Information and Communications Technology (ICT) Functional Guidance. The guidance, which provides a framework for communications resources within incident management, officially includes support from amateur radio operators. The expanded Communications Unit (COMU) structure now includes the Auxiliary Communicator (AUXC) role, which covers personnel from services that provide communications support to emergency management, public safety, and other government agencies. This includes amateur radio. The NIMS ICT guide (PDF) is available from FEMA.

The National Council of Volunteer Examiner Coordinators (NCVEC) has released a 2nd Errata for the 2023 - 2027 General Class Element 3 Question Pool. The NCVEC Question Pool Committee (QPC) has released the second revision of the 2023 - 2027 General Class element 3 Question Pool. This revision supplants the question pools released on December 1, 2022, and February 1, 2023. The changes are reflected in the new General pool downloadable files, dated April 15, 2023. Three questions have been withdrawn from use and removed from the pool: G6B09, G9C06, and G9D13. Most of the other questions had minor changes. ARRL VEC

HAPPENINGS

teams are advised to check the NCVEC website or the ARRL website regularly for updates to the question pools, which may include errata and withdrawn questions. The new General Class Element 3 Question Pool goes into effect on July 1, 2023.

The Federal Communications Commission (FCC) is seeking comments about changing the secondary allocation available to radio amateurs on 60 meters. The FCC issued a Notice of Proposed Rulemaking (NPRM) on April 21, 2023, that deals with the band. Currently, radio amateurs in the US have access to five discrete channels on a secondary basis: 5332 kHz, 5348 kHz, 5358.5 kHz, 5373 kHz, and 5405 kHz. Users of these channels are limited to an effective radiated power (ERP) of 100 W PEP.
The FCC proposes to allocate 15 kHz of contiguous bandwidth between 5351.5 - 5366.5 kHz on a secondary basis with a maximum power of 15 W EIRP (equivalent to 9.15 W ERP). The FCC proposed to allocate the 15 kHz bandwidth but stopped short of making a proposal on whether the existing channels should remain allocated to amateur radio and what the power limitations should be. They requested comments on their proposal and the related channel and power issues. The NPRM can be found online at, https://www.fcc.gov/
Comments will be due 60 days after the NPRM is published in the Federal Register, which is expected within the next two weeks.

Bill Keicher, KC1HTT, presented a seminar titled "A Low Power Earth-Moon-Earth Amateur Radio Station - Physics, Engineering, Construction, and Operation", at the April 20, 2023 meeting of the Southeastern Connecticut Amateur Radio Society (SECARS). A YouTube video of the seminar is available at https://youtu.be/HVE4n79rD2E.

A new company based in Midland, Texas is developing a satellite system capable of allowing regular smartphones to connect via satellites.
A call between a phone user in Texas and another in Japan was reportedly routed through a low Earth orbit satellite manufactured by AST SpaceMobile. These were standard, unmodified smartphones: a Samsung Galaxy S22 in Texas and an iPhone in Japan. The BlueWalker3 satellite that made the call possible is powerful enough to pick up cellphone signals from over 1,000 miles away thanks to an array of 100,000 individual antenna elements on board. the first and only space-based cellular broadband network to be accessible by standard smartphones. Called SpaceMobile, this ultra-powerful network is being designed to provide connectivity at 4G/5G speeds everywhere on the planet – on land, at sea and in flight.

Bob Luken, W3RDL is scheduling a 2 session course on Basic Electronics (a prequel for the Technician License) for those interested in taking the "Technician Course" but don't have a background in engineering, math, or computer science. The class will start on Saturday, May 27, 2023, 9:30AM at Hobbs Pharmacy Community Room, 133 N Banana River Drive, Merritt Island. Sessions will run 3-4 hours, there will be coffee. A "Technician" class will follow, starting on June 10, same time and place, 5 sessions. It may be possible to do a Zoom session for people that can't make a face to face class. Contact Bob Luken, W3RDL at 321-452-0450 or w3rdl@arrl.net for more information

ON THE AIR

Dog Island IOTA DXpedition NA-085 May 15-May 25, 0000Z-0059Z, K4D, Dog Island, FL. K5TEN . 14.260 21.280 28.310 50.130. QSL. Bruce Brady, 208 Mount Tabor Road , Hot Springs National Park, AR 71913. IOTA NA-085/FL005S is a rare island off the coast of Florida. QSL to K5TEN. SASE required. See qrz.com for details. k5ten@aol.com

Nuclear Ship Savannah - National Maritime Day
May 20, 1300Z-2100Z, K3S, Baltimore, MD. Nuclear Ship Savannah ARC. 7 14 21 28. QSL. ULIS FLEMING, 980 PATUXENT ROAD, Odenton, MD 21113. Operating from the ship. Please check the spotting networks since we may be operating anywhere on 40, 20, 15, or 10m SSB or CW.

National EMS Week
May 21-May 27, 0000Z-2359Z, N4E, Gainesville, FL. W.T. Loften High School Amateur Radio Club. 7.030 14.200 21.340 28.300. QSL. W.T. Loften High School, 3000 East University Avenue, Gainesville, FL 32641. Our Fire/EMS Academy students look forward to contacting people and passing along important safety tips. bobw4gj@gmail.com

The Indianapolis 500 - Race Two
May 22-May 28, 0000Z-2359Z, W9IMS, Indianapolis, IN. The Indianapolis Motor Speedway ARC. 3.840 7.245 14.245 18.140. Certificate & QSL. Indianapolis Motor Speedway Amateur Radio Club, P.O. Box 30954, Indianapolis, IN 46230. See the website for ALL information! w9ims.org

Vietnam Veterans Memorial Special Event Station
May 26-May 27, 2200Z-2200Z, K9V, Columbia City, IN. Whitley County Amateur Radio Club. 14.270. QSL. Vietnam Veterans Memorial Special Event Station, P.O. Box 652, Columbia City, IN 46725. wc9ar@arrl.net

Memorial Day Remembrance
May 29, 1500Z-2030Z, W5KID, Baton Rouge, LA. Baton Rouge Amateur Radio Club. 7.040 7.250 14.040 14.250. QSL. USS Kidd Amateur Radio Club, 305 S. River Rd., Baton Rouge, LA 70802. CW, SSB, FT8 Operation aboard the USS Kidd (DD-661), a World War II Fletcher-class destroyer. www.qrz.com/db/w5kid

D-Day Commemoration
Jun 1-Jun 14, 1300Z-2200Z, W2W, Hunt Valley, MD. Amateur Radio Club of the National Electronics Museum. 14.244 14.044 7.244 7.044. Certificate & QSL. K3NY, 108 Brent, Arnold, MD 21012. Amateur Radio Club of the National Electronics Museum (ARCNEM) will operate W2W in commemoration of the anniversary of D-Day and the role of electronics in WWII. Primary operation will be June 3-June 6 with additional operation possible during the June 1-2 and 7-14 periods as operator availability permits. Operation on 80M (3.544, 3.844), additional bands and digital modes possible during event. Frequencies +/- according to QRM. QSL and Certificate available via SASE; details at ww-2.us

GUINEA BISSAU, J5. Carlos, CT2GQA is QRV as J5JUA until the end of May. Activity is on 15 to 10 meters using mostly FT8. QSL to home call.

NEW ZEALAND, ZL. Members of the New Zealand Association of Radio Transmitters are QRV with special call sign ZL100 to commemorate the 100th anniversary of the first Trans-Tasman amateur radio contact.

Field Day by Armando Delgado, KN4JN

When the ARRL was founded in 1914 by Hiram Percy Maxim and Clement Tuska, the founders had two main objectives in mind: to create an organization that united American amateur radio operators to give them political clout to fight against those who wanted to eliminate them, and to create a "relay league" able to provide communications when the official systems were down, and offer a system of national communications provided by volunteers that could be available for any national emergency.

During the 1912 Congressional hearings on wireless radio in the United States following the Titanic disaster, there were many voices calling for the elimination of amateur radio. However, there were voices supporting the amateurs and loud among those was Hiram Percy Maxim, who argued in front of Congress that amateur radio was a national resource that could provide communications when official systems went down. Fortunately for amateur radio in the USA, the voices of reason prevailed and Congress chose to keep the amateur service alive, although with many restrictions and frequency limitations.

Over the following years, hams proved that they were willing and able to help their communities during disasters. In 1913 a devastating flood in Dayton, Ohio gave amateurs an opportunity to demonstrate their willingness and capability to provide communications during natural disasters. In the years after World War I, after amateur radio regained its privileges, and even before the ARRL had managed to organize any emergency communications groups, hams continued to offer and provide emergency communications during multiple disasters. In 1921 devastating floods in New Mexico left several regions isolated and amateur radio provided links with the outside world to bring much needed assistance, food supplies, and medical aid to those in distress. In November, 1922, an intense snow storm left a train stranded with passengers in Wyoming. Ham radio operators were able to relay messages between various states to advise the railroad agency of the situation and bring relief to the stranded passengers. Likewise, another severe snow storm in the Mid-West in 1924, left many people stranded in Minnesota and surrounding states. Amateurs in multiple states relayed messages for emergency actions and health and welfare. In some cases, the media carried some of the stories, but most were detailed in the pages of QST, giving details of the actions and the individual hams involved.

Through those initial years, the ARRL continued its efforts to organize hams into a collective capable of responding to emergency situations, when called upon. In 1932, the ARRL introduced a contest to encourage amateurs to use portable radio equipment that at the time was a resurging new possibility for hams and was being increasingly used in emergencies and other outdoor activities. Named Field Day, the contest, held at the beginning of the month of June, not only encouraged amateurs to set up portable stations, but to use the event as a practice stage for real emergencies. Interestingly, to operate portable or away from the FCC designated home station in those days hams had to obtain a special permit from the regional FCC office. This requirement was removed a few years later.

Field Day became popular and was held every year until the USA entered WW2, when all amateur radio activity was suspended. Hams did not regain full radio privileges following the war until 1947. On the last weekend of June 1947, Field Day resumed, and with the "new" war surplus gear amateurs were getting, it became even more popular, since amateur equipment was easier to carry and set up in the field.

During the following decades, Field Day rules and classifications remained mostly unchanged. Since its onset, the idea of Field Day had amateur clubs in mind as the main participants in the activity. Early, it made sense because setting up stations in the wild in those days required a team effort. Equipment was bulky, heavy, and required big antennas that were difficult to set up; plus the logistics of maintaining a group of operators functioning for a few days away from commercial resources required planning and capabilities that a single individual could not easily provide. However, in time, technical changes in amateur equipment made it possible for a single individual to operate in the wilderness without any outside assistance. Also, in time, the politics of amateur radio changed.

Following the tragedy of 9/11/01, the manner of dealing with emergencies changed, and amateur radio changed as well, to accommodate to the new requirements. Amateurs in general have developed an effort to engage more closely with government agencies involved in emergency operations, and vise versa. Thus, in 2003, the ARRL created a new Field Day category, the "F" class to allow operators to participate from locations designated as emergency agencies, being EOCs, Red Cross facilities, or other official emergency non-amateur services. These facilities are certainly not in "the field", but times have changed, and so has Field Day. Although, the intent of the day is to train amateurs in emergency procedures, the equipment available and the politics of emergency services have changed.

In older days, official rapid communications were through ground telegraph and telephone. In disasters, that media broke down readily and radio provided a ready-made patch. However, today we have the internet and cellular phone systems that are very reliable and widely situated. Yet, they may still fail in severe natural disasters, leaving radio as the only means of communication, and amateur radio, with its widespread range of participants is still the best practical resource to maintain communications in those circumstances.

Although some aspects of Field Day have changed, amateurs still need to practice the "old methods" of communication. Today we look at NVIS transmission as a way to bypass repeater breakdowns in emergencies. During some of the recent hurricanes, repeater systems in north Florida failed and the only means of communications became HF transmissions via NVIS stations. That was a wakeup call for everyone involved in emergency operations, and a reminder that amateurs are best trained and available for that kind of operation. So Field Day is not dead; it has changed, but we must change with the times and train in the new ways of communication while maintaining our traditional expertise.

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
WBFM							
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, Fl 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 Fl
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.	K4UZM	
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	
DMR							
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
ATV							
427.250	**250CO4**			K4ATV	COCOA BROADCAST CT.	LISATS	NTSC INPUT 439.25 See www.lisats.org
PACKET STATIONS:							
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
BREVARD RACES/ARES SIMPLEX							
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
SIMPLEX							
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 a

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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HARADA
HITACHI
HYGAIN

ICOM RADIO

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