



**INDIAN  
RIVER ARC**

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

VOLUME XLV, NUMBER 12

# SPURIOUS EMISSIONS

DECEMBER, 2023

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## HAPPENINGS

### FCC license fee reimbursement.

One of the changes to FCC radio licensing in the last couple of years was the introduction of the \$35 FCC License Fee. The ARRL Youth Licensing Grant Program, in effect since April 19, 2022, will cover the one-time \$35 application fee for new license candidates younger than 18-years old for tests administered under the ARRL VEC program. The \$35 FCC application fee will be reimbursed

after the ARRL VEC receives the completed reimbursement form and after the new license has been issued by the FCC. The reimbursement check will be mailed to the fee payer. Also, candidates who are the age of 18 pay a reduced exam session fee of \$5 to the ARRL VEC VE team at the time of the exam. The \$5 fee is for all candidates under the age of 18, regardless of the exam level taken. Proof of age is required at

the session. Visit [www.arrl.org/youth-licensing-grant-program](http://www.arrl.org/youth-licensing-grant-program) for the program instructions and reimbursement form.

Radio amateurs now have a new tool to help answer questions about their stations. Neighbors of amateur radio operators are sometimes concerned about transmissions and radio frequency exposure from amateur

stations. The ARRL RF Safety Committee, with their international counterparts at the Radio Society of Great Britain (RSGB), the Irish Radio Transmitters Society (IRTS), and the Swedish Society of Radio Amateurs (SSA), has developed a new set of guidelines to help amateurs interact with and talk to their neighbors about RF exposure. The new informational PDF found on the ARRL

## HAPPENINGS

RF Exposure page, [Helping Amateurs Interact with Neighbors Asking About Radio Transmissions](#), was developed after a year of discussions about RF safety.

Every year, for the entire month of December, several youngsters under 26 become active with their national YOTA call-signs. This will continue in the 11th edition of December YOTA Month (DYM). We have already 40 active YOTA call-signs from different countries participating this year. Check out active stations at events. [ham-yota.com/spots](http://ham-yota.com/spots).

## ON THE AIR

### 18th Annual Straight Key Month

Jan 2-Jan 31, 0000Z-2359Z, K3Y\*, Worldwide. SKCC - Straight Key Century Club. 3.550 7.055 14.050 21.050. Certificate & QSL. SKCC c/o Ted Rachwal - K8AQM, 6237 Twin Lakes Driv, eSmiths Creek, MI 48074. \*K3Y/O thru 9 plus KH6, KL7, KP4 and DX member stations in six WAC areas operating straight key, bug and cootie keys. QSL card confirms one QSO per area, up to 19 for all-area sweep. See

A pearl of wisdom from Richard Akelewicz, K4END.

Front Porch

On the first day, God created the dog and said: "Sit all day by the door of your house and bark at anyone who comes in or walks past. For this I will give you a life span of twenty years."

The dog said, "That's a long time to be barking. How about only ten years and I'll give you back the other ten?"

And God said that it was good.

On the second day, God created the monkey and said, "Entertain people, do tricks, and make them laugh. For this, I'll give you a twenty-year life span."

The monkey said, "Monkey tricks for twenty years? That's a pretty long time to perform. How about I give you back ten like the dog did?"

URL for op sched/map, stats, etc. <https://www.skccgroup.com/k3y>

**NAMIBIA, V5.** Gunter, DK2WH is QRV as V51WH from Omaruru until the end of April 2024. Activity is on 160 to 10 meters, including 60 meters. QSL to home call.

32TT Team will be active from **Kiritimati Island**, IOTA OC - 024, Kiribati, 6 - 28 December 2023. They will operate on HF Bands with focus on FT8 as from T22T. QSL via ClubLog OQRS, LOTW.

And God again said that it was good.

On the third day, God created the cow and said, "You must go into the field with the farmer all day long and suffer under the sun, have calves and give milk to support the farmer's family. For this, I will give you a life span of sixty years."

The cow said "That's kind of hard to want me to live for sixty years. How about twenty and I'll give back the other forty?"

And God agreed it was good.

On the fourth day, God created humans and said, "Eat, sleep, play, marry and enjoy your life. For this, I'll give you twenty years."

But the human said, "Only twenty years? Could you possibly give me twenty plus, the forty

V6EU Team will be active from **Chuuk Island**, IOTA OC - 011, Micronesia, 4 - 16 December 2023.

Team - DL2AWG, DK2AMM, DL2AMD, DF4GV. They will operate on 160, 80, 40, 30, 20, 17, 15, 12, 10m and maybe 60m Bands, SSB, CW, RTTY, FT8. QSL via DL2AWG.

TX5S Team will be active from **Clipperton Island**, IOTA NA - 011, 18 January - 2 February 2024.

Team - Jacky ZL3CW, Dave K3EL, Steve W1SRD, Ricardo

the cow gave back, the ten the monkey gave back, and the ten the dog gave back; that makes eighty, okay?"

"Okay," said God, "You asked for it." So that is why for our first twenty years, we eat, sleep, play and enjoy ourselves. For the next forty years, we slave in the sun to support our family. For the next ten years, we do monkey tricks to entertain the grandchildren. And for the last ten years, we sit on the front porch and bark at everyone.

Life has now been explained to you.

There is no need to thank me for this valuable information. I'm doing it as a public service. If you are looking for me, I will be on the front porch.

PY2PT, Gene K5GS, Heye DJ9RR, Laci HAONAR, Walt N6XG, Rob N7QT, Glenn KE4KY, Chris N6WM, Arliss W7XU, Philippe FO4BM, Dave WD5COV, Andreas N6NU, Nodir, EY8MM, Allan, EA3HSO, Francesco, IK0FVC. They will operate on 160 - 6m, CW, SSB, Digital Modes, including 60m Band. QSL via MOURX, OQRS.

**Vasteras Radio Klubb 80th Anniversary** Jan 5-Dec 31, 0000Z-2359Z, 8S80AA, Vasteras, SWEDEN. Vasteras Radio Klubb. All bands, all modes; 2 - 160 meters. Certificate. . This is an operating event. [www.sk5aa.se](http://www.sk5aa.se)

## The National Traffic System: A Revival by Armando Delgado, KN4JN

From the beginnings of radio, amateurs have engaged in relaying messages. Radio's initial use was exclusively for communications across national boundaries and most importantly to communicate with ships out at sea. It was also extensively used by the US Navy for ship exchanges. Besides communicating with other hams, early amateurs listened in on much of the commercial traffic. At the time, most radios transmitted in a limited range of wavelengths, mostly between 600 and

300 meters and it was easy for anyone with a receiver to pick up the signals. Some early young hams shared various interesting messages they picked up from Navy transmissions with local newspapers leading to some embarrassment for the Navy. Following the sinking of the HMS *Titanic* in 1912, the survivors transmitted messages to their families and friends from the rescue ships. Some hams in the east coast copied and shared many of these messages with

the newspapers that published stories for a public anxious for news of the disaster. Unfortunately, many of the survivors, who probably assumed the transmissions were private, became offended by these stories, resulting in a scandal, many blaming the hams for the intrusion even though it was the newspapers who published the stories, and calls arose for abolishing amateur radio all together. Congress conducted an investigation during which the

enemies of amateur radio, that included those who wanted to monopolize commercial radio communications and those who wanted total control over radio transmissions, raised loud objections against amateurs. Fortunately, cooler heads prevailed and Congress resolved the issue by requiring amateurs to be licensed and limited to operating at wavelengths shorter than 200 meters, far away from commercial and naval wavelengths.

Among the defenders of amateur radio at the time was Hiram Percy Maxim, the son of the inventor of the machine gun, a ham and an influential voice in Congress. He argued amateurs were a national resource that could be invaluable during times of emergency when regular communications broke down. The following year, Maxim founded the American Radio Relay League (ARRL) with the dual intention of giving American hams a political voice and of creating a system of relay radio stations capable of passing messages over long distances, his lifelong dream.

In 1914 amateur radio equipment was mostly homebrewed and there were no specific operating frequencies, thus the beginning of amateur messaging was disorganized and intermittent. By the 1920's a trunk line system evolved that included stations 200-300 miles apart able to relay traffic across the nation. However, because there were no fixed frequencies and the ones available were plagued by static, traffic flow was irregular and sporadic.

In 1929, the ARRL implemented the Army Amateur Radio System (AARS) that was sponsored by the US Army Signal Corps. This system paralleled the trunk line system in relaying messages. Yet, whether through the trunk system or the AARS, traffic flow from origin to destination was haphazard, inefficient and at times lost in the flow.

World War II put an end to amateur activity for the duration of the war, but it also provided great technical advances in radio equipment. Also, at war's end much military equipment became available to hams as inexpensive surplus. Within a short time after the war, hams were able to transmit in specific frequencies that allowed scheduled contacts.

In 1949, George Hart, W1NJM, proposed a revision to the amateur traffic system that created a systematic set of time-coordinated nets that allowed traffic to flow from Sections to Regions and then

to Areas, forming an efficient flow of messages spanning the country and Canada. The new National Traffic System (NTS) went into effect on October 1, 1949 and over the subsequent years gradually evolved into the present traffic system.

The NTS system remained vigorous for several decades, but then the internet and later cell phones came on the scene and the volume of traffic handled by amateurs dropped gradually and drastically. For some time, and up to the present, enterprising hams began to generate traffic by sending congratulatory messages to new hams whose names and addresses they obtained from the FCC. This well-intentioned effort to maintain the efficiency of traffic handlers was not universally well received and many operators refused to deliver what they called "spamograms", some refused to receive the traffic, and some even quit the traffic nets all together. In some parts of the country nets even disbanded due to the lack of activity.

The ARRL, who sponsors and coordinates the NTS, fears that the entire message relay system may collapse, destroying one of the most important tenets of amateur radio, which is to provide communications during emergencies. With this in mind, they have embarked on a new project, called NTS 2.0, to train message handlers on the message formats of different official emergency agencies, forms like the ICS-213. These forms, designed for digital transmission, differ from the ARRL radiogram format, which dates from the days of the telegram, but one that present traffic handlers are familiar with. The idea of this effort being to demonstrate and guarantee to official emergency agencies that amateur radio is capable of providing all forms

of communications during emergencies.

Presently, the NTS has very limited digital communications in traffic handling; however, there is a Digital Traffic System (DTS) that parallels the NTS and that carries digital traffic nationwide. The DTS uses Packet VHF, and VARIA-HF primarily for their traffic, and AIRMAIL for the formatting of their messages. Also, DTS uses many BBS-based operations that allow 24/7 messaging without the time restrictions of the scheduled NTS nets.

One new scheme from the ARRL to enhance radio traffic is NTSGTE: an APRS-NTS Gateway. You can now use APRS to send a radiogram through the NTS gateway. NTSGTE is an APRS information service that receives radiograms and forwards them on to the Digital Traffic Network. Radiograms are then relayed on as usual. This service can be useful in situations where you need to send a radiogram but are unable to check in to a traditional NTS net. Their website has a [video](#) that leads you through how to use the NTSG.

The ARRL has an ambitious plan to revitalize the NTS and not only bring it into the 21st Century, but also to keep it alive. In a recent [video](#) conference, the coordinators of this new program review their plans of action.

The program is just starting and only time will tell if it will succeed.



### 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



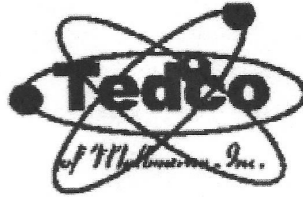
### Editor's Note:

**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		195 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	W12KPB	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 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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COMPUTER REPAIR  
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TUBE EQUIPMENT

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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

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W2AU BALUNS  
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WILSON ELECTRONICS

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