# SPURIOUS EMISSIONS

AUGUST, 2022

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KN4JN

## CLUB MINUTES

The meeting was called to order by President Steve Luchuk, N4UTQ at 7:17 PM. Following the Pledge of Allegiance, Steve called for visitors. There were none. He then announced that BEARS has been dissolved and its assets absorbed by BCAT. Vice-President Report: Nothing to report this month. Treasurer's Report: The General Fund has a total of $1061.16 and the Equipment Fund $1884.11. The report was accepted and approved for audit.
The minutes of the July meeting were then approved.
Technical Report: All equipments are working.
Past President Report: QRP operation at Manatee Park Saturday.
Following the business meeting, Steve gave a presentation using funny slides of the things he finds most annoying in ham radio:
People who correct you on the air.
People who call you and then expect you to do all the talking.
People who say, "Roger That".
People who are uncomfortable talking on the air but do it anyway.
People that push children to talk on the air.
Manually programming VHF/UHF radios.
People who confuse CB with amateur radio.
People who substitute IRLP/Echolink for HF activities.
Desk mics that pick up all ambience noise.
People who don't hold the mic close enough.
DX stations operating split.
DX stations who don't identify often.
DX stations that don't identify using phonetics.
Broadcast stations in the 40 meter band.
People who leave the net without checking out.
Provincial nets on 80 meters.
Low power operations on Field Day.
Strong power line noise.
People who have multiple hand-held radios but no base station.
People who sell external HT microphones. (They don't work).
Following Steve's presentation, Armando, KN4JN gave a presentation on how best to learn CW.
The meeting adjourned at 8:15PM.
Sincerely submitted,
Armando Delgado, KN4JN, Secretay.

## HAPPENINGS

For some reason or other August seems to have become the international weekend for lighthouses. Countries all over the world have become involved in one form or another of lighthouse activity. Some years ago the United States Congress declared August 7th as National Lighthouse Day and during that first week in August amateur radio operators in America set up portable stations at lighthouses and endeavor to make contact with each other. This event is known as the US National Lighthouse Week.

In Britain the Association of Lighthouse Keepers, ALK, conducts International Lighthouse Heritage Weekend on the same weekend as the ILLW in August. Their objective is to encourage Lighthouse managers, keepers and owners to open their lighthouse or light station and related visitors centers to the public with a view to raising the profile of lighthouses, light vessels and other navigational aids, and preserving our maritime heritage.

However, the major event which takes place in August is the International Lighthouse Lightship Weekend, ILLW, which came into being in 1998 as the Scottish Northern Lights Award run by the Ayr Amateur Radio Group. The ILLW usually takes place on the 3rd full weekend in August each year and attracts over 500 lighthouse entries located in over 40 countries. It is one of the most popular international amateur radio events in existence probably because there are very few rules and it is not the usual contest type event. It is also free and there are no prizes for

# HAPPENINGS

contacting large numbers of other stations. There is little doubt that the month of August has become "Lighthouse Month" due largely to the popularity and growth of the ILLW. This year, the ILLW will be on 20th August, 00:01UTC to 21st August 2022, 24:00UTC (48 hours).

**The Point of Ayre Lighthouse** is an active 19th-century lighthouse, sited at the Point of Ayre at the northeastern end of the Isle of Man. Dale (EI7HDB) along with members from the Isle of Man Amateur Radio Society will be activating the lighthouse IM0001 for the weekend of 20th and 21st of August for the Lighthouse and Lifeboat weekend. The club call GT3FL will be used for the event and they hope to be active for the full 48 hours. The station will be live from 80M to 70CM operating CW, SSB and digital modes.

On July 21 ten amateur radio CubeSats built by students at the Southwestern State University were deployed from the ISS. QSL cards and a diploma are available for receiving the SSTV, APRS and Voice messages. To receive a QSL card, you need to send information: call sign, location, session date and time, carrier frequency, modulation type (APRS, FM-Voice, Robot36) and the result of a successful session (audio sample, telemetry text and image). The data is sent in the form of Applications for QSL. In the return letter you will receive the address where you need to send the card. To obtain a diploma, you need to take 10 different SSTV images and voice messages, as well as decode 10 APRS telemetry messages (AFSK 1142 baud format) from any of the satellites, and apply for a Diploma. Details here. https://r4uab.ru/2022/08/02/diplomnaya-programma-mka-yuzgu-55/

**Spratly Islands** DX0NE Team planning activity from Spratly Islands, IOTA AS - 051, 1 August - 31 December 2022. Team - DU1XX (AE6DG), Michael; DU3JA, Jong; 4F1OZ, Ed; and 4F2KWT, Gil.
They will operate on 160 - 6m, CW, SSB, FT8.
QSL via 4F2KWT, LOTW, ClubLog OQRS.

# ON THE AIR

To commemorate its 40th anniversary, The Fair Lawn (NJ) Amateur Radio Club (FLARC) will take the lead in hosting the special event station **W2I** celebrating The Intrepid Sea, and Air and Space Museum on Tuesday, August 2, 2022, from 0000-2359 EDT (0400 August 2nd- 0359 August 3rd UTC) at various locations within the immediate New York City area.

**Iowa Railroads on the Air IR-ROTA** 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. 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. QSL cards for any confirmed hunter contacting an activator by sending a SASE. W9UPK@arrl.net or www.w0dbq.org

**Amateur Radio Software Award** Aug 26-Sep 5, 0500Z-0700Z, K3A, K3R, K3S, Ames, IA. Amateur Radio Software Award. 3.950 7.078 7.185 14.250. QSL. Amateur Radio Software Awards, Special Event Station, P.O. Box 126, Ames, IA 50010-0126. Special event stations K3A, K3R, and K3S are operating from Iowa, Colorado and California to promote free and open amateur radio software. For more information about the Amateur Radio Software Award or a detailed schedule of the special visit https://arsaward.com/special-event.html

**National POW MIA Recognition Day** Sep 10-Sep 18, 0000Z-2359Z, K4MIA, Loxahatchee, FL. PBSEC. 7.195 14.265 18.150 28.400. Certificate & QSL. Michael Bald, 6758 Hall Blvd., Loxahatchee, FL 33470. Observances of National POW MIA Recognition Day are held across this country on the third Friday in September each year. This year it will be on September 16. On Sept 16, K4MIA will be transmitting from a Vietnam UH1H Huey helicopter. There will be sister stations K4MIA/2, K4MIA/4, K4MIA/5 K4MIA/7 and K4MIA/8 in operation. Possibly more. Modes used will be, SSB, CW, FT8 and Satellite operation. Throughout the month of Sept, K4MIA will be on less used digital modes, SSTV, and hopefully EME again.

## Learning CW  by  Armando Delgado, KN4JN

During the first two decades of amateur radio, the only mode for radio transmissions was telegraphy using Morse code. Anyone wanting to communicate via radio at that time had to learn the code. The early radios generated their radio emissions by triggering an electric spark on the closing of the telegraph key. After the invention of the vacuum tube, the method of generating the radio signal was by modulating a carrier. At the time, this method was referred to as *continuous wave* telegraphy to distinguish it from the earlier spark gap method. With usage, the term was shortened to CW, which we still use today.

At the International Radio Union conference of 1929, signatory countries agreed on multiple international regulations for radio practice, including determining the country prefix for radio call signs, the frequencies allotted to different radio services, including amateur radio, and the regulations for amateur radio licensing. The latter required that prospective hams passed a knowledge test and be able to copy at least 5 words per minute of Morse code. The United States being a signatory of the treaty required amateurs to learn Morse code, a requirement that remained in effect until 1992 when the FCC removed the requirement following the International Amateur Radio Union's decision to dispense with the Morse code license requirement.

Although learning CW is no longer a requirement for amateur radio licensing, hams continue to learn the code because of its multiple benefits, such as the simplicity of required equipment, the ability of CW to get through propagation conditions when other modes cannot perform as well, and because hams as a group love challenges.

Unfortunately, many hams who

want to learn CW fail at the task, primarily because of misunderstanding the nature of the code, inappropriate learning techniques, and wrong expectations.

The primary concept to learn CW is to understand that it is a set of sounds, using dots and dashes that can be produced with a simple telegraph key, that represent the alphabet. A graphical representation of the Morse alphabet is just an aid to remind the operator of the sounds of the letters, yet many beginners lose time trying to memorize the graphical alphabet instead of concentrating on the sounds.

In the old days, the correct Morse sounds were learned by listening to an experienced operator producing them using a key and an oscillator. Today, the student can obtain those sounds by using programs in the internet that can perform that task. https://morsecode.world/international/trainer/generator.html is a good site.

The first step in learning CW is to listen to and memorize the **correct** sound for each letter of the alphabet. Using one of the available programs, by typing each letter individually several times, the student can become familiar with those sounds in a short time.

The second step in the learning process is to memorize the correct sounds. By using one of those programs, this can be easily achieved by thinking of the correct sound before typing the letter of the alphabet and then confirming the correct response by typing the letter. If the answer is wrong, the student should return to the beginning of the alphabet and repeat the process. Two to three hours of practice should suffice to be able to run through the alphabet without mistakes.

After achieving this very important point, the next step is to reinforce that knowledge by trying to reproduce in the head in Morse code any text available. Thus, while reading a book, a newspaper, or the internet; while driving, traffic

signs and license plates (these are good because they include numbers as well as letters) the beginner can practice and reinforce his knowledge of CW.

This practice should be continued until the student is certain that he can reproduce in his head the correct Morse code sound for any letter or number. Once this level is achieved, the student can proceed to the next one.

Having solidly memorized the CW sounds of all letters and numbers, the student should proceed to try to copy actual CW transmissions. The best source for these is the W1AW code practice transmissions, because they are perfectly timed and provide the best quality reproduction of the Morse alphabet sounds. Ideally, if the ham has HF capability he should listen to the on air transmissions sent three times a week, Monday, Wednesday and Friday at 7:00 PM, for the slow code practice. The reason on air transmissions are important is that they offer the real world setting, including QRM, QRN and fading that the student will need to learn to tune out while trying to copy CW.

Lacking HF capability, or to increase the practice time, the W1AW practice is available in the internet. This medium gives the student access to the code practice any day of the week, at any time, and as often as the student wants to practice. The web site for the 5 wpm practice archive is http://www.arrl.org/5-wpm-code-archive.

When copying CW there are a few errors beginners make that slow down their progress. The most common is on missing a character pausing to try and figure it out. Bad mistake. Doing that invariably leads the operator to miss one or more following characters. It is critical to always focus on the coming character. It takes practice

to successfully do this, but it is essential. Ignore any character not clear or missed and continue to focus on what is coming next.

The other common beginner error is to try to read what has been received before the end of the transmission. Like the pausing error, this one distracts from the focus on the coming characters and causes missed characters. Wait until the end of the transmission to read the text. Not surprisingly, having the full text allows the operator to figure out missing characters.

To become proficient in CW, it is important to have the right expectations. One should begin with 5 wpm, writing each character down, of typing them on a keyboard. The beginner should not try to copy code in his head. That requires a lot of training and is extra difficult at slow speeds. Once proficient at 5 wpm, which should not take more than two to four weeks of regular practice, the student can continue to train for faster speeds. It will probably take about three months of regular practice to reach 15 wpm, which is the average speed used in CW contacts. However, getting on the air as soon as able to copy 5 wpm will help expedite the learning process and introduce the operator to the joy of CW.

To begin with, use a straight key. These are inexpensive, easily obtainable at hamfests or in the internet and will reinforce the learning process by permitting the operator to form each character sound correctly in a more controlled fashion than with other keying systems, such as the iambic paddles.

The beginner should expect pauses in the learning curve, but patience and persistence will eventually lead to much pleasure in ham radio.



**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

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 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 | PCARS | |
| 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

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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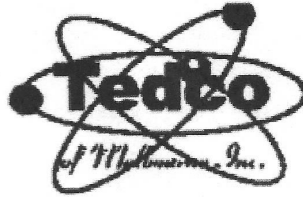
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