# THE BANDSPREAD

#### NARC Officers:

#### **President:**

Monvel Maskew K9FQ Vice President: Jerry Hedgcoth NT4J Secretary: Adam DeLand W8IFG Treasurer: Randy Dennis WE1W

#### **Board Members:**

Lee Alder KK4SXX Todd Bowman KO4SMP Chris Holden KI4WBZ Dan Sigmund W4WWF

Club Chaplain:

89Years of Community Service We regret to announce that Ed Nutter N1NUT became a silent key on December 13, 2022. Ed was a lifetime member of the Nashville Amateur Radio Club and a U.S. Army Vietnam War veteran.

Ed made countless contributions to the Nashville Amateur Radio Club over his many years as a member. His contributions included various financial and equipment donations as well as valuable liaison work on behalf of the club with various local government bodies and agencies such as the Nashville Davidson Metro Council, Office of Emergency Management, Parks Department, Davidson County Sheriff's Office, Tennessee Highway Patrol, and several charitable partners. Ed loved ham radio and thoroughly enjoyed participating with his fellow amateurs in club-sponsored events such as Field Day, tailgate parties, the Altamont Horseback Ride, Multiple Sclerosis Walk Nashville, and several public service bike rides in the Nashville and Middle Tennessee areas. His large personality and strong leadership skills served the club and its members well during his multiple terms as Club President. Ed was the World-Famous Nut Man and the self-proclaimed No. 1 Nut and will be deeply missed. We honor Ed for his friendship and salute him for his service to our club and to his country. We extend our deepest sympathies to Ed's family and ask that all members and friends join us in keeping them in our hearts and prayers as they navigate this immense loss.

A final radio call for N1NUT will be conducted during the Nashville Amateur Radio Club Incorporated Information Net at 7:30pm on January 2, 2023 on the 147.015 AF4TZ repeater.

Inurnment ceremonies will be held on January 5, 2023 at 10:30am in Florida as follows:

Florida National Cemetery 6502 S.W. 102nd Avenue Bushnell, FL 33513



## Weekly Net 147.015 (+) Monday 7:30PM

**Other Net Information** 

There is a 10M net on Sunday 7:30pm 28.415 (USB) There is a Bible net on Monday thru Friday at 6:00am on 147.015 The Davidson Co. ARES training net is Monday at 7:00pm 442.750 Tone 100.0 The MTEARS net is Monday 8:00pm 442.800 repeater Tone 107.2

### License Exam Session

March 11, 2023 Phone: 615-268-0266 Email K9FQ.mm@gmail.com Pre-register beginning at 8am Testing begins at 9am Crieve Hall Church of Christ Nashville School of Preaching Entrance 4806 Trousdale Drive Nashville, TN 37220

## **Upcoming Contests**

January 2023

February 2023

1	Straight Key Night	13-17	School Club Roundup
7	Kids Day	18-19	International DX-CW
7-8	RTTY Roundup		

21–23 January VHF

#### For Sale

From KW6A:

US Tower TX-438 38-foot 2-section crank-up tower with TRX-80 Winch, Tower 6 Base, TV-2US Thrust Bearing, RP-4 Rotor Plate, and Coax Arm Assembly. Asking \$1,200. Contact Jiro at kw6a.usa@gmail.com or 615-579-4337. He is located at 303 Appomattox Drive, Brentwood.

#### Club Dues

Nashville Amateur Radio Club dues for 2023 are \$20 for regular members and \$10 for associate members. Please submit dues to the P.O. Box or online at www.hamclubonline.com. (Dues paid online will be assessed \$1 extra for processing fees)

#### Yes, amateur radio is still a thing: Here's why

*31 August 2022 Seth Price* 

Amateur or "ham" radio is a method of two-way communication. At first glance, it resembles Citizen's Band (CB) radio or perhaps walkie-talkies, but there is much more to it. Amateur radio has more capabilities beyond what is possible with a walkie talkie or CB radio. Besides local communication, as is possible with a CB radio, amateur radio can be used to bounce signals off layers of the ionosphere, a layer of the Earth's atmosphere with free electrons and ions due to incoming solar radiation. Because this layer is high above the Earth's surface, these reflective layers can be used to bounce signals long distances, making amateur radio a world-wide communication method.

Unlike CB, amateur radio also allows for multiple communication modes: generally grouped into voice modes, continuous wave (CW) or digital modes. Voice modes are probably the most obvious; each operator speaks into a microphone. However, inside of voice modes are Amplitude Modulation (AM), Frequency Modulation (FM) and Single Side Band (SSB), all of which take the operator's voice, mix in a high frequency and send the signal to an operator elsewhere. The operator's radio then removes the high frequency, and the audio will come through their speaker. CW is a method of sending Morse Code. Morse Code is simply the agreed upon sets of "dits" and "dahs" used to make letters and words, and CW is an on/off switch to an oscillator that sends tones when switched on. In other words, CW is the original digital mode, "on" sends a tone and "off" sends nothing. CW is still very popular, as it tends to be more audible through noise. Digital modes are also very popular and grow by leaps and bounds each year. In these, the amateur radio operator inputs words on a computer, which then packages the characters into a signal to be sent through the radio. There are many different digital modes, with "FT8" being the most popular. Others include phase shift keying 31 Hz, radio teletype and many others. With amateur radio, new modes can be created by amateur radio operators, provided they meet FCC guidelines.

In the earlier days of amateur radio, it was a way to communicate with the rest of the world. Before the internet and smartphones, talking with people at the opposite side of the country or even in different countries was difficult. Amateur radio solved this problem by allowing for long distance communication for reasons like current events, geographical exploration and cultural study.

In amateur radio parlance, homebrewing refers to DIY setups and equipment, as amateur radio's early days were filled with experimenters. Because radio was a new science, amateur radio operators were constantly pushing the technological envelope with new antenna designs, filters and other hardware, as well as communication protocols. Even during its mature age, software packages for modulating communication modes, logging contacts, programming radios and the like were developed by tinkerers and experimenters. Many ham radio operators still use homebrew equipment. Homebrewing is one of the fastest growing fields in amateur radio. In the early days, radio experts built antennas and hardware. Many of today's homebrewers still do so, but there is a rise in microcontrollers and programming as well. Microcontrollers like Arduino, or small computers – Raspberry Pi being the most notable – have been used to make programmable keyers for Morse Code, automatic position reporting system trackers for tracking a mobile station's location, modulators for various communication modes, power monitoring devices and a host of other projects.

Smartphones and wireless internet connections are nice but require a substantial amount of infrastructure to be reliable. The reliability decreases, though, during disasters or emergency situations, such as the power outages over Texas in the winter of 2021, or Hurricane Katrina back in 2005. Even a localized set of severe storms can hamper communication networks for days, leaving first responders without adequate communication. Amateur radio operators have often stepped up to help during emergency situations. Organizations such as Amateur Radio Emergency Services train members to work with emergency organizations, lending their radio expertise to pair with rescuers, set up communication centers and assist accordingly. Most local, county and state emergency organizations have established working relationships with the amateur radio community.

Outside of the practical and educational uses of amateur radio, radio hobbies are also popular. There exists many radio contests, where operators attempt as many contacts in a short amount of time as possible or in as far a distance as possible. Some contests, such as the American Radio Relay League Field Day, emphasize aspects of emergency communications, where extra points are awarded for the use of solar panels over commercial power, yet also rely on making as many contacts as possible in a given timeframe. Besides contests, there are reliability awards like the "Worked All States," "Worked All Counties" and awards for working different numbers of "DX" or foreign stations. DX100 is awarded for working 100 countries.

Once dismissed as an "old man's hobby," amateur radio has grown in popularity since the COVID-19 pandemic. Many who were familiar with the hobby found time to explore and even meet new people without leaving home. The digital modes have breathed new life into amateur radio, where hams are constantly developing new communication protocols and building homebrew equipment and software to communicate with. Learning about electronics through hands-on activities appeals to folks from all ages. Amateur radio is an ever-evolving hobby that will remain relevant for quite some time to come.

The Nashville Amateur Radio Club, Inc. P.O Box 290672 Nashville, TN K4CPO.ORG 37229-0672



## Don't Miss These Next Meetings!

Next Meeting:
Thursday January 19, 2023 7:00 PM (social hour at 6:00pm)
NARC Clubhouse
205 Downeymead Drive
Nashville, TN 37214
Breakfast:
Saturday January 7, 2023 7:30 AM
Shoney's
546 Donelson Pike
Nashville, TN 37214
February Meeting:
Thursday February 16, 2023 7:00 PM
NARC Clubhouse
205 Downeymead Drive
Nashville, TN 37214