



GOAT NOTES

Celebrating Amateur Radio!



<https://gotahams.com>

February – March 2023

WG60TA RPT: 449.160 (-) PL 77.0 enc/dec

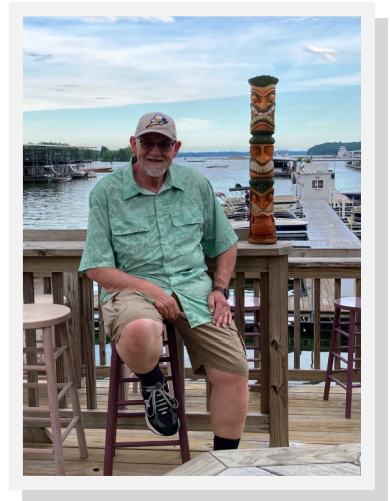
The Editors' two bits...

Happy early spring to all y'all! Pat and I hope each and every one of you had a good holiday season and a great Valentine's Day.

Well, its been a pretty good year so far, and your editor hopes you continue to prosper throughout 2023.

Our club continues to grow, 155 members strong as of February 14th, and we expect this trend to continue throughout the year. We are an active, friendly and very social organization, and it shows as growth. Please feel free to invite your friends to attend and join!

There's plenty of activities coming up, with Radio and Elmering in the Park sessions, contests, and Field Day, which will be here before you know it. What are YOUR plans for FD?



73 de N6PCD

**JOIN US FOR FIELD DAY,
ALL ARE WELCOME!**

RADIO ACTIVITIES

Monthly Club Meeting

GOTAhams Monthly Club Membership Meeting - the second Tuesday of the month, 7PM , Zoom and In-Person. If you would like to join the meeting in person, please join us at Casa Jimenez Mexican Restaurant in Claremont at 921 W Foothill Blvd. Please arrive an hour early (at least) at 6PM so that you can order your dinner and have it out of the way ahead of the meeting. (The restaurant does expect you to order a meal). We'll be in the back room. See the weekly email for Zoom details.

GOTAHams Nightly Net

Held each evening at 8:00 PM on the club repeater: 449.160 (-) PL 77.0. Please see Dave's weekly email for a list of topics.

Radio In The Park & Elmering in the Park

See the weekly email for days and times. These are fun events, so come on out and join the fun!

Monthly Simplex net

Hosted by Erik KN6NRQ on 146.580MHz. A great way to explore the reach of your 2 meter equipment without benefit of repeater, both receiving and transmitting. Last Wednesday of the month. See the Weekly email for vital details.

V.E. Amateur Radio License testing

LAST SATURDAY EACH MONTH AT 1PM. Location is Brackett Field airport in La Verne. Sponsored by the GOTAhams. Frank Westphal and his experienced team of examiners are resuming in person Amateur Radio License testing at Bracket Field Airport in La Verne. [See Dave's weekly email for testing requirements and other important details.](#)

Field Day 2023

Planning for Field Day 2023 – Field Day weekend for 2023 includes setup on Friday, June 23rd, operations beginning Saturday June 24th and concluding with teardown the afternoon of Sunday June 25th. GOTAhams planning is underway. Please see Dave's weekly email for current status and opportunities to join in!

[Interested?](#)

If you would like more information about Amateur Radio, GOTAhams Club Activities, or have any interest in joining the GOTAhams Amateur Radio Club please contact the Club Secretary Dave Wilkie (K6EV) at K6EV@ARRL.NET. All are Welcome and no license is required to become a member.

For your consideration...

Free US Tower TX-438 Antenna Tower

Vince Barker, KM6DFU is offering - FREE - a US Tower TH-438 tower including a mast and rotor. He is looking for a good home for it. The tower is 'down' on the ground so no de-installation is needed. However, Vince is leaving the area soon so the tower would need to be picked up within the next few weeks. First come first served. If you are interested or would like additional details please contact Vince at VINCENTBARKER@GMAIL.COM You can see technical details of this model by googling US Tower TH-438. The tower is located in Claremont. You would need to pick it up.

Just a reminder - GOTAhams is not a party to any buy/sell/trade/gift transactions and all agreements or representations are entirely between the parties involved in the transaction.



WHAT IS FIELD DAY?

Field Day is an annual amateur radio exercise, widely sponsored by IARU regions and member organizations, encouraging emergency communications preparedness among amateur radio operators, and is typically the largest single emergency preparedness exercise in the country, with over 30,000 operators participating each year. Field Day is always the fourth full weekend of June, beginning at 18:00 UTC Saturday and running through 20:59 UTC Sunday.

Since the first ARRL Field Day in 1933, radio amateurs throughout North America have practiced the rapid deployment of radio communications equipment in environments ranging from operations under tents in remote areas to operations inside served agency Emergency Operations Centers (EOCs), or from their own homes. Operations using emergency and alternative power sources are highly encouraged, since electricity and other public infrastructures are often among the first to fail during a natural disaster or severe weather.

To determine the effectiveness of the exercise and of each participant's operations, there is an integrated competitive component, and many clubs also engage in concurrent leisure activities (e.g., camping, cookouts). Operations typically last a continuous twenty-four hours, requiring scheduled relief operators to keep stations on the air. Additional contest points are awarded for experimenting with unusual modes, making contacts via satellite, and involving youth in the activity. –*Wikipedia*



Many thanks to Cliff Wickey N6CTW for submitting this vital and timely information.
Do YOU have a plan when the Big one hits?

Seven Steps to Earthquake Safety



Follow the Seven Steps to Earthquake Safety to be prepared to survive and recover from the next damaging earthquake. Learn more at EarthquakeCountry.org/sevensteps.

Prepare



Step 1: Secure your space by identifying hazards and securing moveable items.



Step 2: Plan to be safe by creating your emergency plan and deciding how you will communicate.



Step 3: Organize emergency supplies in convenient locations.



Step 4: Minimize financial hardship by organizing important documents, strengthening your property, and considering insurance coverage.

Survive



Step 5: Drop, Cover, and Hold On or other recommended actions (if you feel shaking or get an alert).



Step 6: Improve safety after earthquakes by evacuating if necessary, helping the injured, and preventing further injuries or damage.

Recover



Step 7: Reconnect and Restore daily life by reuniting with others, repairing damage, and rebuilding community.



Tech Stuff: What is CW?

Transmissions before CW

Very early radio transmitters used a spark gap to produce radio-frequency oscillations in the transmitting antenna. The signals produced by these spark-gap transmitters consisted of strings of brief pulses of sinusoidal radio frequency oscillations which died out rapidly to zero, called damped waves. The disadvantage of damped waves was that their energy was spread over an extremely wide band of frequencies; they had wide bandwidth. As a result, they produced electromagnetic interference (RFI) that spread over the transmissions of stations at other frequencies.

This motivated efforts to produce radio frequency oscillations that decayed more slowly; had less damping. There is an inverse relation between the rate of decay (the time constant) of a damped wave and its bandwidth; the longer the damped waves take to decay toward zero, the narrower the frequency band the radio signal occupies, so the less it interferes with other transmissions.



Transition to CW

It was realized that the ideal radio wave for radiotelegraphic communication would be a sine wave with zero damping, a continuous wave. An unbroken continuous sine wave theoretically has no bandwidth; all its energy is concentrated at a single frequency, so it doesn't interfere with transmissions on other frequencies. Continuous waves could not be produced with an electric spark, but were achieved with the vacuum tube electronic oscillator, invented around 1913 by Edwin Armstrong and Alexander Meissner. After World War I, transmitters capable of producing continuous wave, the Alexanderson alternator and vacuum tube oscillators, became widely available.

Damped wave spark transmitters were replaced by continuous wave vacuum tube transmitters around 1920, and damped wave transmissions were finally outlawed in 1934.

Key clicks

In order to transmit information, the continuous wave must be turned off and on with a telegraph key to produce the different length pulses, "dits" and "dahs", that spell out text messages in Morse code, so a "continuous wave" radiotelegraphy signal consists of pulses of sine waves with a constant amplitude interspersed with gaps of no signal.

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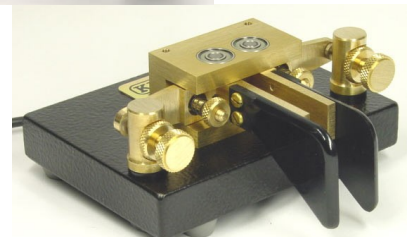
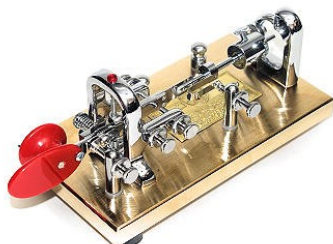
In on-off carrier keying, if the carrier wave is turned on or off abruptly, communications theory can show that the bandwidth will be large; if the carrier turns on and off more gradually, the bandwidth will be smaller. The spurious noise emitted by a transmitter which abruptly switches a carrier on and off is called "key clicks." The noise occurs in the part of the signal bandwidth further above and below the carrier than required for normal, less abrupt switching. The solution to the problem for CW is to make the transition between on and off to be more gradual, making the edges of pulses soft, appearing more rounded, or to use other modulation methods (e.g. phase modulation). Certain types of power amplifiers used in transmission may aggravate the effect of key clicks.

Persistence of radiotelegraphy

Early radio transmitters could not be modulated to transmit speech, and so CW radio telegraphy was the only form of communication available. CW still remains a viable form of radio communication many years after voice transmission was perfected, because simple, robust transmitters can be used, and because its signals are the simplest of the forms of modulation able to penetrate interference. The low bandwidth of the code signal, due in part to low information transmission rate, allows very selective filters to be used in the receiver, which block out much of the radio noise that would otherwise reduce the intelligibility of the signal.

Continuous-wave radio was called radiotelegraphy because like the telegraph, it worked by means of a simple switch to transmit Morse code. However, instead of controlling the electricity in a cross-country wire, the switch controlled the power sent to a radio transmitter. This mode is in common use by amateur radio operators due to its narrow bandwidth and high signal-to-noise ratio compared to other modes of communication.

In military communications and amateur radio the terms "CW" and "Morse code" are often used interchangeably, despite the distinctions between the two. Aside from radio signals, Morse code may be sent using direct current in wires, sound, or light. For radio signals, a carrier wave is keyed on and off to represent the dits and dahs of the code elements. The carrier's amplitude and frequency remain constant during each code element. At the receiver, the received signal is mixed with a heterodyne signal from a BFO (beat frequency oscillator) to change the radio frequency impulses to sound.



RADIO

The club held it's monthly Radio and Elmering In The Park for January at Larkin Park in Claremont. It was a beautiful day and everyone had a great time. Many thanks to America Ornelas KN6UXL for the photo collage.



Looking for just the right words to express yourself to those that annoy you? I humbly submit the following as an aid to help you do just that. You're welcome!

Shakespeare Insult Kit

Combine one word from each of the three columns below, prefaced with "Thou":

Column 1

artless
bawdy
beslubbering
bootless
churlish
cockered
clouted
craven
currish
dankish
dissembling
droning
errant
fawning
fobbing
froward
frothy
gleeking
goatish
gorbellied
impertinent
infectious
jarring
loggerheaded
lumpish

Column 2

base-court
bat-fowling
beef-witted
beetle-headed
boil-brained
clapper-clawed
clay-brained
common-kissing
crook-pated
dismal-dreaming
dizzy-eyed
doghearted
dread-bolted
earth-vexing
elf-skinned
fat-kidneyed
fen-sucked
flap-mouthed
fly-bitten
folly-fallen
fool-born
full-gorged
guts-griping
half-faced
hasty-witted

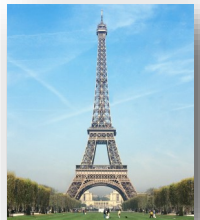
Column 3

apple-john
baggage
barnacle
bladder
boar-pig
bugbear
bum-bailey
canker-blossom
clack-dish
clotpole
coxcomb
codpiece
death-token
dewberry
flap-dragon
flax-wench
flirt-gill
foot-licker
fustilarian
giglet
gudgeon
haggard
harpy
hedge-pig
horn-beast

Radio Fun Facts!

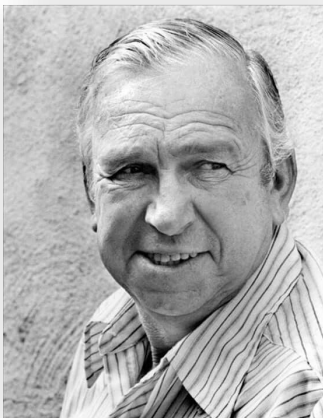
The term electricity comes from the Greek word elektron, which means amber. This is a reference to the experiments performed by Thales on pieces of amber, resulting in the discovery of static electricity.

In the 1600s, English scientist William Gilbert published De Magnete in Latin. This book contained Gilbert's research regarding electricity and magnetism. He is credited for coining terms such as "electric force", "electric attraction", and "magnetic pole". He is also the one who coined the word "electricity".

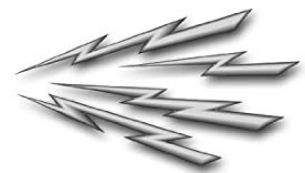


The Eiffel Tower Is Basically One Big Radio Antenna

It wasn't created to be, but over the years, the famous Parisian landmark engineered by Gustave Eiffel has had a few uses in radio. The first public radio broadcasts were done at the top of the Eiffel Tower by radio scientists. Lee de Forest is viewed as the father of radio broadcasting. Being an opportunist, he took a break from his honeymoon in 1908 and climbed the landmark to broadcast a selection of music to the Parisian suburbs. He's basically the first radio DJ!



When the cowboy and actor Slim Pickens joined the military during World War II, he stated that his profession was 'rodeo.' The recruiter heard 'radio.' Slim spent his entire wartime service as a radio operator.



One Theory: Ham radio got its name from the first amateur station CALL from the Harvard radio club. Their names were ALBERT S. HYMAN, BOB ALMY and POOGIE MURRAY. Tapping out their names in code was too much so it became Hy-Al-Mu. This was eventually shortened to HAM.

VITAL SHACK FACTS

Featuring our members' stations

This time featuring the station of N6PCD and N6PRC

Here is the station shared by me, N6PCD, and my dear wife Pat, N6PRC. It's a decent station but with a compromise HF antenna, a Comet CHA-250b. The 2M-440 antenna is a Comet CB-9, which is excellent. The 220 antenna is a Hustler colinear on a magmount. Works good for my purposes. Living in a townhouse I'm thankful to be able to put any antennas up!

Radios are a mixture of Yaesu, Icom, Jetstream, and a Uniden P-25 capable scanner. Yaesu FT-991a, Icom IC-7000, IC-7300, and a Jetstream JT220M. IC-7000 tunes through an LDG AT-200Pro autotuner. Power supply is an Alinco DM-330MV. Computer is an HP EliteDesk 800 G2. I've earned WAS, WAC, DXCC, and CQ WPX digital. You CAN have fun and earn awards with a small station!

73 es DX!



THE SHAQ...





IN THE PARK, FEBRUARY 18th 2023

We had a fantastic turnout at the February Radio In The park with somewhere north of 30 attendees (we captured 30 on the sign in sheet) and a goodly number of stations set up. A shout out to those that made it and enjoyed the nice weather, fresh air and radios! We also had three hams join GOTAhams as new members. Please join me in welcoming Stella, Raoul and Paul to the club. 73 de Dave K6EV



Photos by Milt, N6MG



RADIO

IN THE PARK, FEBRUARY 18th 2023



Photos by Shelia, KM6KNO



The Book Report

By Ken Campbell, N6PCD



Ham Radio Guides and Accessories

Having trouble figuring out the menu structure on that shiny new radio? Trying to remember how the HECK you setup a memory? Well, these little gems will get you sorted out!

Modern rigs can be hard to figure out, especially the shack-in-a-box units. Nifty Guides take the sometimes difficult factory manuals and blow off all the foam, leaving the reader with a concise guide as to how to actually run the radio. I have one of these for each radio I own and refer to them frequently.

This is important, especially if you've not used some of the functions on your rig in awhile.

Nifty also make a line of accessories that operators may find useful. Available at most radio dealers and Amazon.com.

