GOAT NOTES

Celebrating Amateur Radio!

https://gotahams.com

April-May 2023

WG6OTA RPT: 449.160 (-) PL 77.0 enc/dec

The Editors' two bits...

Hi all!

Well, we finally are blessed with some good weather. I don't know about you, but I was starting to develop webbed feet!

Spring has sprung and it's time to start thinking about summer and Field Day. It'll be here before you know it! Will you be part of the club's effort, working it from home, or from your own remote location. Give it some thought.

Our club membership continues to increase and we have 152 members at my last count. We grow because we are welcoming and actually DO stuff! Go Goats!

73 de N6PCD

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 7:30 PM Pacific time 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

Usually on the 3rd Saturday of the month. 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. Usually on the 4th Wednesday of each 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 – Join the planning meetings on the 1st and 3rd Thursday of each month ! 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)

In The News

Amateur Radio Included in FEMA Guide for National Emergency Preparedness

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.

NIMS guides government, non-governmental organizations, and the private sector to work together to prepare for, respond to, and recover from disasters and other emergencies. "This is a major step in the recognition of the need and usefulness of amateur radio and other communications services in our national preparedness," said Josh Johnston, KE5MHV, Director of Emergency Management for the ARRL®. "It also gives official guidance to pave the way for future training and education of volunteers in ARRL's Amateur Radio Emergency Service® (ARES®)," Johnston added.

The NIMS ICT guide (PDF) is available at https://www.fema.gov/sites/default/files/documents/fema_ict-functional-guidance.pdf. *From The ARRL Letter, March 23,2023*

Radio Fun Facts!

The 1946 radio show 'Adventure of Superman' revealed the secret rituals and codes of the KKK, making it a laughing stock. As a result, the Klan recruitment was dried up almost overnight.

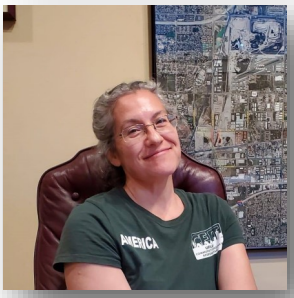
Did you know that there are nearly 3 million amateur radio operators World Wide?

Although there is a lot of technology available today, in emergency situations people are still reliant on ham radio. When more common and modern technology fails, this is still a reliable way to keep in touch. It is not hard to understand that many believed that ham radio would become insignificant with the growth of the internet but that was not the case.

The ARRL was founded in Hartford, Connecticut in 1914 by inventor Hiram Percy Maxim. ARRL has remained in the Greater Hartford area since its inception and has been headquartered in Newington, Connecticut since 1938.

In 1969 a HAM radio operator in Louisville Kentucky listened to the Apollo 11 transmissions from the moon on home built equipment. He verified that the transmissions were not edited for TV broadcast, and verified they were coming from the moon. A fact overlooked by the moon hoax nut-jobs.

RITP



Radio In the Park, March 2023. Many thanks to America Ornelas KN6UXL for providing these great pictures!

The weather was magnificent and we had a great turnout!

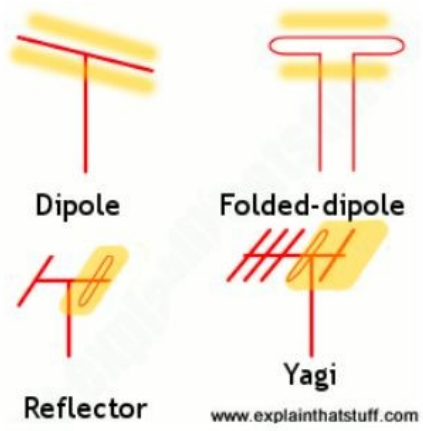
Tech Stuff: Important properties of antennas

Important properties of antennas

Three features of antennas are particularly important, namely their directionality, gain, and bandwidth.

Directionality

Dipoles are very **directional**: they pick up incoming radio waves traveling at right angles to them. That's why a beam antenna has to be properly mounted on your home, and facing the correct way, if you're going to get a clear signal. The vertical antenna on an HT is less obviously directional, especially if the signal is strong: if you have it pointed straight upward, it will capture good signals from virtually any direction. The ferrite AM antenna inside aa AM radio is much more directional. Listening to AM, you'll find you need to swivel your radio around until it picks up a really strong signal. (Once you've found the best signal, try turning your radio through exactly 90 degrees and notice how the signal often falls off almost to nothing.)



Although highly directional antennas may seem like a pain, when they're properly aligned, they help to reduce interference from unwanted stations or signals close to the one you're trying to work. But directionality isn't always a good thing. Think about your cellphone. You want it to be able to receive calls wherever it is in relation to the nearest base station, or pick up messages whichever way it happens to be pointing when it's lying in your bag, so a highly directional antenna isn't much good. Similarly for a GPS receiver that tells you where you are using signals from multiple satellites. Since the signals come from different satellites, in different places in the sky, it follows that they come from different directions, so, again, a highly directional antenna wouldn't be that helpful.

Gain

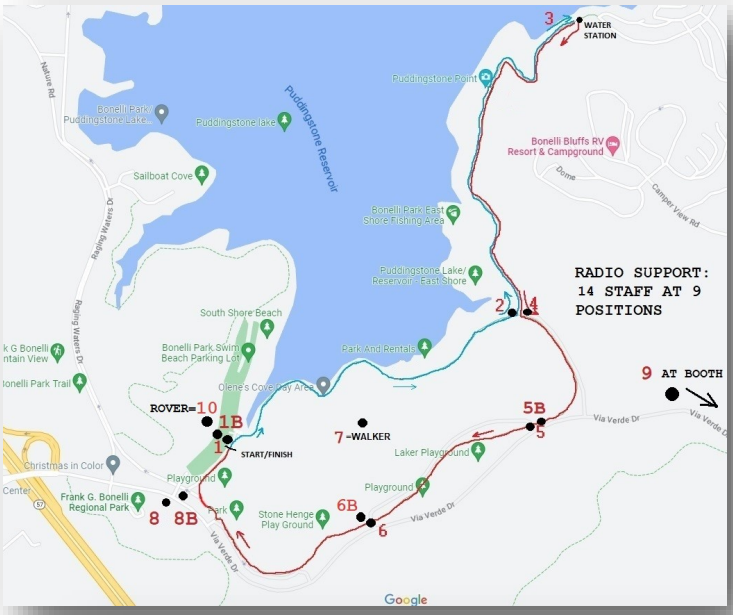
The **gain** of an antenna is a very technical measurement but, broadly speaking, boils down to the amount by which it boosts the signal. TVs will often pick up a poor, ghostly signal even without an antenna plugged in. That's because the metal case and other components act as a basic antenna, not focused in any particular direction, and pick up some kind of signal by default. Add a proper directional antenna and you'll *gain* a much better signal. Gain is measured in decibels (dB), and (as a broad rule of thumb) the bigger the gain figure the better your signal. In the case of Ham rigs, you get much more gain from a complex outdoor antenna like a Yagi than from a simple dipole. Most all outdoor antennas work better than indoor ones, as a general rule. Multi element beam antennas have higher gain and work better than vertical ones.

Bandwidth

An antenna's **bandwidth** is the range of frequencies over which it works effectively. The broader the bandwidth, the greater the range of different radio waves you can pick up. That's helpful for something like television, where you might need to pick up many different channels, but much less useful for amateur radio, cellphone, or satellite communications where all you're interested in is a very specific radio wave transmission on a fairly narrow frequency band.

KidCare 5K Walk/Run

Thanks to the many club members who got up painfully early and donated their time to supporting the KidCare 5K Walk/ Run charity event at Bonelli Park in San Dimas on Saturday April 29th. We had a full team of 14 volunteers. Every member was on time (with a number of our members on duty from 5:30AM), every radio was prepped and ready to work.



Radio traffic was effective and fast. We were delighted that we had no real emergency traffic to deal with but just as delighted that we were ready to go had the need arisen.

The club received a very nice thank you note from the organizers and a tip of the hat from the First Responders that were onsite at the park in case of emergency. For those that didn't get a chance to participate, keep in mind that we also have the Tour De Foothill Bicycle event in November and the Covina Christmas Parade in December. Thank You All! Dave K6EV

Photo by Gary Totten KE6CBW

KidCare 5K Walk/Run

Photos by Jere KN6PED

Repeater Update

Photo by Gary Totten KE6CBW

The Sunset Goats repeater team is extremely grateful to the well over 30 donations totaling $3105 (so far) to go towards our ongoing repair and upgrade construction expenses. It has really made a difference in moving us along efficiently, not to mention the morale boost that comes from having such enthusiastic supporters.

Thanks to each and every one who donated, and donated so generously.

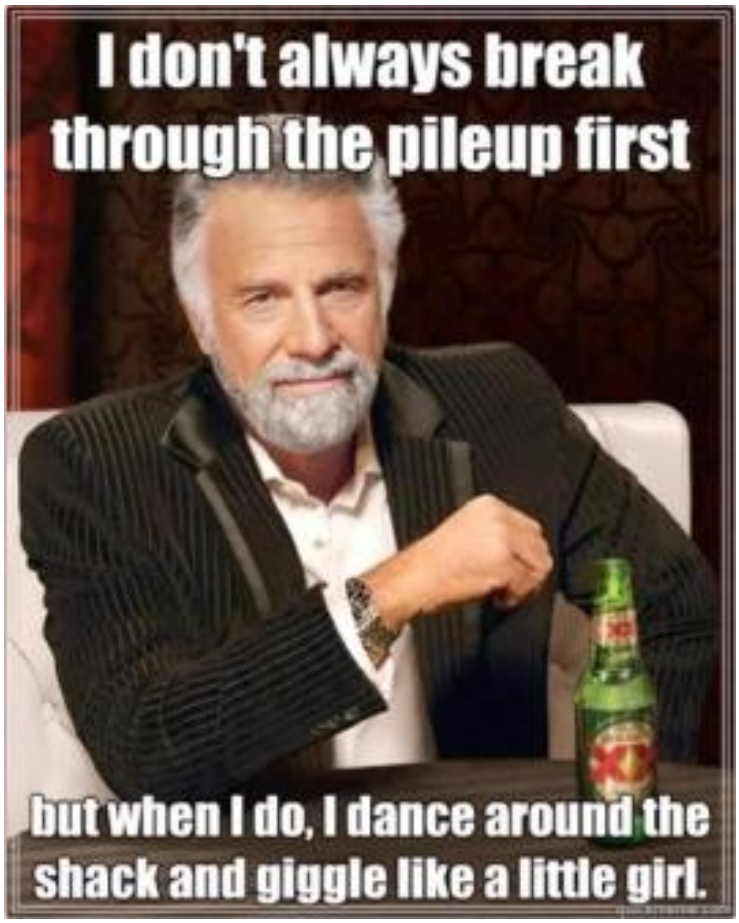
Thank you also to the many who have donated time, labor, transportation and great ideas to the WG6OTA repeater.

VITAL SHACK FACTS

THE SHAQ...

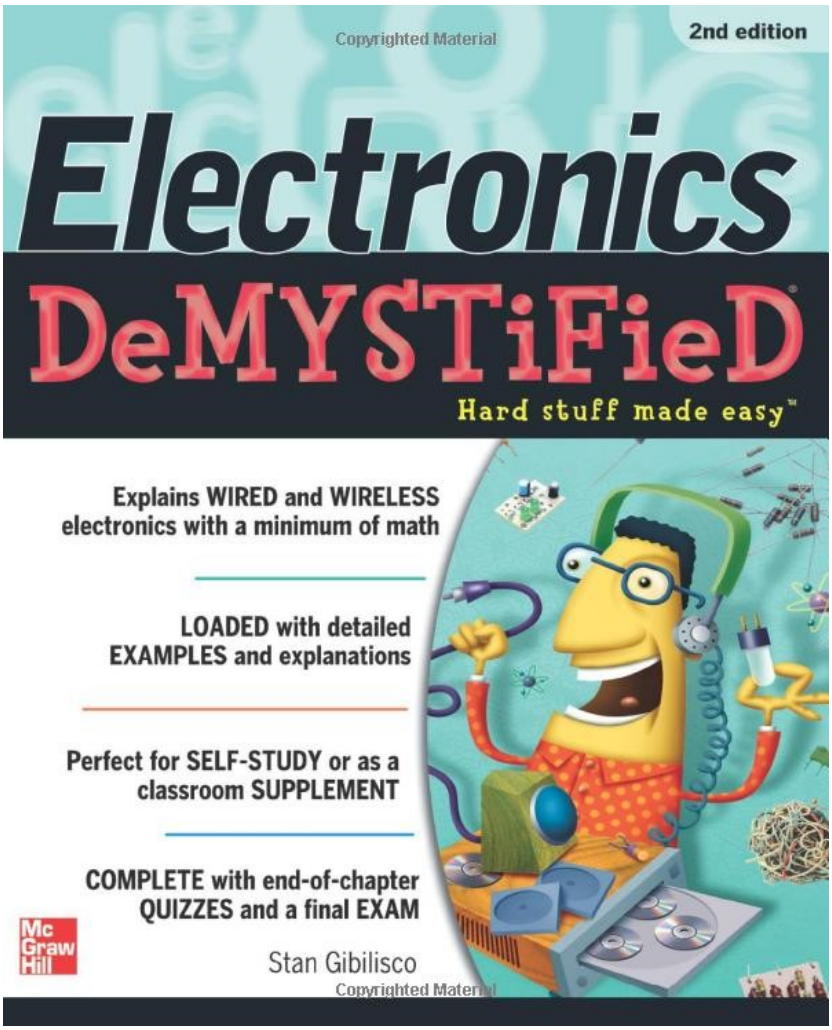
This is YOUR page! Send me a few pictures of your shack and/or mobile installation along with a de-scription of same and I'll be most happy to feature YOUR setup here.

Here's your chance to shine! Many thanks from your newsletter editor, Ken N6PCD.



The Book Report

By Ken Campbell, N6PCD



Interested in learning basic electronics? Have some knowledge of the subject but would like to learn more? THIS is your book! It is essentially a self-teaching course that starts with the very basics of DC and works up through more advance theory, with a minimum of math.

In the book you'll learn about DC and AC theory, impedance, diodes, transistors, integrated circuits, power supplies, amplifiers, oscillators, receivers, transmitters, antennas, and more.

Don't let the above intimidate you! The author assumes you know little to nothing and builds upon that in an entertaining and non-threatening manner. You can also go directly to any subject and study the specifics, as your knowledge level allows.

I personally have it in both printed and electronic forms, and its been my go-to book for years. It's available in large format paperback on Amazon and eBay, and you can find the PDF as a free download by doing a Google search.

RITP

We had a fantastic turnout at Radio In The Park on Saturday, April 15, with around 40 members and guests in attendance including a number of our newer members - and the weather was fantastic. There were some interesting HF setups and I prototyped the UHF net control station to be used for the KidCare5K on April 29th. We also helped a number of our KidCare5K volunteers test their radio programming. Dave K6EV

Many thanks to Sheila KM6KNO for the beautiful photography!

SUMMER IS ALMOST HERE!!!

Field day is June 24-25th. We need more people to sign-up to greet visitors and operate radios.

Volunteers at the Information/GOTA/Activities Station will be grouped with other members to give out information, help kids with activities, and supervise the GOTA radio. This is a job for any club member, you don't need a license or any special abilities, all the information will be there and you will have help. This is an important position because it is the main focus of our club and the purpose of Field Day, to inform the public and get people interested in ham radio. Contact Jere (KN6PED), jereneal@verizon.net, and let him know when you are available to be at the Information/GOTA/Activities Station.

If you want to operate a HF Radio, even if you never have, this is the time to do it. There will be lots of time and radios with people to coach new users but we need people to sign-up for specific time slots, otherwise we will have too many people at some times and not enough at other times. If you are a experienced operator we need you too. Sign-up with any of the station captions be or contact Bruce (K6GH) brucegary@gmail.com.

Tim N6DLC - 7300 with 32' Vertical tim@wnbnet.net

Ken KC6WOK - 7300 with a Vertical kc6wok@gmail.com

Chris N6CTA - FT 897 with Hex beam mail@n6cta.com

Jack W6BZZ - 991a or Flex with Yagi jack.w6bzz@gmail.com

JOIN US FOR FIELD DAY, ALL ARE WELCOME!