



# SHORT SKIP

Volume 63 Issue 10

October 2015

## From the Oval Office

by Marv, WV9O, LCARC President

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## REPEATERS

Freq	Location
147.000	Merrillville
147.240	St. John
442.075	Merrillville

All Lake County ARC Repeaters are open to all amateurs. All repeaters must have a PL of 131.8 set in order to access.



Fall is here, the temperatures are dropping, the leaves are changing and the days are getting shorter. We are coming to the end of the year. It's time to think about the club elections for officers for 2016. Any one that would like to run please get a hold of me. We are always looking for new officers. Nominations and Election will be held at the November meeting.

To improve the use of the repeaters the club is looking at change the 442.075 MHz repeater DMR. The club has started a repeater fund and is looking for donations to make the change. Our goal is half the cost of a new repeater and the club will finance the other half. Until we meet our goal we cannot move forward on the project.

### Upcoming programs:

October: Nick, W9UM DXCC Program  
 November: Nominations Elections  
 December Coffee and Cake

Looks like another busy meeting see you there!

From the Oval Office, 73 Marv WV9O

## Hamvention Makes New Scooter-Only Policy

By K5PO, on the scene

DAYTON, Ohio – The dust from the Dayton Hamvention has settled, but the work doesn't stop for Dayton Area Amateur Radio Club (DAARC), the local club heavily involved in the organization of the Dayton Hamvention.

Each year after Hamvention, the DAARC group meets to discuss what worked and what didn't in the "Hamvention Correction of Errors" meeting. This year's Hamvention was largely considered a great success with a record-breaking turnout and enthusiastic vendor and forum involvement.

One concern from this year's event was the volume of electric scooters, or electric mobility devices. While scooters have been a staple of Hamvention for years, attendees noted that the number of scooters has continued to grow and has caused some logistical concerns for the world's largest hamfest.

In one noted event, Hamvention attendee Robert Milman had a four inch chunk of flesh on his leg ripped off when an errant scooter ran him over. Milman said that after the "last call" was given

*Continued on page 5*



# Minutes

September 11, 2015

- Called to order at 7:28PM
- Introductions made with 15 attending meeting
- Minutes were read and approved as read.
- Treasury's report was read and accepted we now have a total of 50 paid members.
- We canceled INPOTA due to lack of interest with club members.
- No Skywarn report
- No Red Cross Report
- 147.24 repeater due to construction is now almost not usable. Request to take down repeater and surrender the frequency. The only thing that now is worth any money is the duplexers. Motion made to get repeater down and to sell or store repeater. Motions seconded and passed. John to coordinate move with Bens help. Proceeds will go toward club's share of DMR repeater.
- Motion made to sell spare repeaters, and seconded. Motion passed.
- Break at 8:02PM
- Program is SDR Foxhunt by Ben KC9UNS
- Nick will be next months speake
- Meeting adjourned 9:17PM

## Capital Records Blinks Hollywood



After dark, you might notice that the spire high atop the Capitol Records building is topped by a red light which continually blinks on and off.

Some people think it looks like it's sending out a message in Morse Code. It is.

The red light blinks out the word "Hollywood" in code, every few seconds.

In 1956, the granddaughter of Samuel Morse (inventor of the Morse code) threw the switch that turned on the tower light. This single-word message was changed only once, in June of 1992, to celebrate Capitol Records' 50th anniversary. For that one year, it blinked: "Capitol 50."

In 1993, it returned to sending the original message: "Hollywood."

## Program Schedule - Oct

October: Nick, W9UM DXCC Program  
November: Nominations Elections  
December Coffee and Cake

Over the past couple of months, I've heard people questioning over the air, online, and in person "Can you have a QSO on the North America talkgroup or is it just strictly a calling channel?" The answer is North America can be used as a calling channel and for short QSO's.

The North America talkgroup is a very wide area talkgroup that keys up hundreds of repeaters all across the United States and Canada. Anytime we make contacts thru DMR repeaters, we want to use the talkgroup that utilizes the least amount of resources to get the job done, meaning tying up the least amount of repeaters. If you are talking to someone that is within a few hundred miles of you, a statewide or regional talkgroup such as Midwest would suffice.

What do you do when the other person is farther away say in New Jersey? That's were your tactical push to talk (PTT) and user activated (UA) channels come in to play

such as TAC310, UA113, and UA123 (there is no difference between how a PTT channel and a UA channel work, just different terminology).

After making initial contact with the other ham in New Jersey, you need to find out if he has any PTT or UA activated channels available (in Northwest Indiana, W9CTO has TAC310, UA113, and UA123, while N9IAA/AA9VI has UA113). Once you find a PTT/UA talkgroup that is in common with your local repeater, you change over to that talkgroup. Both ends of the QSO must first kerchunk or transmit on the talkgroup, which links their local repeater to the talkgroup. The talkgroup stays linked on most repeaters usually for five minutes (the timer is reset every time you transmit). By using a PTT/UA talkgroup, only those that kerchunk/transmit on the talkgroup are actually receiving the talkgroup traffic. This way, when you have a QSO with someone far away, you're only tying up his/her local network and your local

network versus hundreds of repeaters.

If your listening on North America, and hear a qso in progress and they go over to a PTT/UA talkgroup and you still want to participate as a listener, just kerchunk the talkgroup (you will not interfere with them). It's perfectly ok to listen this way. When the audio cuts out in five minutes, you will need to kerchunk the talkgroup again).

You have to keep in mind that the talkgroup offerings on each repeater sometimes differ. Some systems don't even offer PTT/UA talkgroups and others might have one that is not in common with the system that you are using. In this case, you are forced to use a wider area talkgroup like North America. Be considerate and try to keep the QSO short (no more than 10 to 15 minutes) and leave some hang time between transmissions for others that may want to join.

## Carl & Vicky Luetzelschwab Talk DX at next NWI DX CLUB meeting

The next NWI DX Club meeting will feature Carl & Vicky Luetzelschwab talking about DXpeditions. They will have audio/visual material for their talk as well.

The will be Dec 5th, at the Viking Chili Bowl, in Valparaiso, Meeting time is still 12 noon CST.

Please try to make it and let your ham friends, who may not be club members, know they are quite welcome too.

## BAOFENG PREPARES FOR PRODUCT LAUNCH IN 2016 BY LINING UP BETA TESTERS

July 29, 2015 James Kvochick <https://factualradio.wordpress.com/>

**PLEASE NOTE: all beta test slots are now full! Testers have been notified!!!**

Factual Amateur Radio has recently learned that Baofeng is preparing a slew of products targeted for the 2016 calendar year, and is preparing to engage beta testers for several of them. It is believed that the first products released will be reworked Tokyo High Power labs inspired amplifiers and tuners (see our previous entry) with a followup rollout of their new "SDR with knobs" transceivers, later in the year.

Baofeng intends to put a strong push on marketing to US amateur radio operators. We believe that the "new" TenTec, (RKR Designs LLC) will be the only official US distributor of the Baofeng HF products, in a similar fashion that the manufacturer has used with selecting a single supplier for their VHF/UHF transceivers. (I'm kidding...we've seen the likes of Baofeng and Wouxun tell every reseller that they are "special" or "unique" and the "only official supplier")

Again, we at Factual Amateur Radio believe Baofeng intends

to start customer shipping in 2016. Their amplifier product family could become a game changer, and we suspect that their SDR radios could become the new standard for rigs of that class.

To help facilitate the selection of Beta test candidates, Baofeng is desiring to prescreen potential users, based on the following criteria:

- Amateur Extra Class Licensee
- Active on HF bands
- Strong desire to provide feedback about the product
- Willingness to pay for shipping
- Desire to own the unit your shipped (at no charge)
- Strong communications skills, both written and oral

Baofeng has tasked an in country long time amateur radio operator to assist in the pre screening process. If you're interested in potentially being a part of the Baofeng Beta test sometime in the fall of 2015, send a note capturing the bullet points above, and the title "YOUR CALLSIGN PICK ME" to XXXXX@ARRL.NET. **ALL SLOTS ARE FULL!**

## All Homes in U.S.A. Follow a Standard Color Code



All home electrical wires made in the U.S. follow standard color codes that identify each wire's function in a circuit.

Knowing the electrical color code that dictates which wire does what is imperative not only in the correct configuration of an electrical system, but it's also paramount for your safety.

Be aware that all [electrical wires](#), regardless of their function, could carry an electrical current at some point, so treat all wires with equal caution. Also, highly rated electricians note that older homes, built prior to the 1940s, might use different color codes if the wiring has never been upgraded.

Check out this detailed illustration that explains each wire's color and purpose:

### Black

Black electrical wire is used for power in all circuits. Any circuit's black wire should be considered hot or live. Black wire is never used for a ground or neutral wire and should be used as the power feed for a switch or an outlet. A black wire is often used in a circuit as a switch leg, the connection that runs from the switch to the electrical load.

### Red

Red electrical wire indicates the secondary live wires in a 220-volt circuit, used in some types of switch legs and in the interconnection between smoke detectors that are hard-wired into the power system. You can connect a red wire to another red wire or to a black wire.

### Blue and Yellow

Yellow and blue electrical wires are also used to carry power but are not for wiring the outlets for

common plug-in electrical devices. These colors are used for the live wire pulled through conduit.

You'll use yellow mainly as switch legs to fans, structural lights and switched outlets. You'll use blue mainly as a traveler for a three-way or four-way switch.

### White and gray

White and gray indicate a neutral wire. White is the color most often used for this function. A neutral wire connects to the neutral bus bar within an electric panel. (A bus bar is made of conductive metal that attracts the electric current for distribution outward to feeders.)

You can connect white and gray only to other white and gray wires. Although neutral, they can still carry current, particularly the unbalanced load — the electricity not being used and being returned to the electrical service.

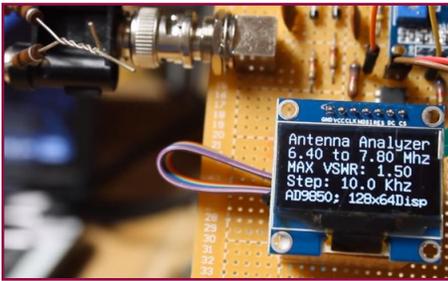
### Green

Green indicates the grounding of an electric circuit. A green wire can connect only to another green wire and should never connect to any other color wire. Green wires connect to the grounding terminal in an outlet box and run from the outlet box to the ground bus bar within an electric panel.

The purpose of the green wire is to provide a path to ground for a circuit's electric current if a live wire within the circuit happens to touch metal or some other conductive material. In the event of a fault, it could carry significant current, so treat green wires cautiously.

# Antenna Analyzers You Can Hack

By Dan Romanchik, KB6NU



I'm a nut for antenna analyzers. I think that they are one of the most useful things a ham can own.

I've often wondered why there aren't more DIY antenna analyzer projects,

though. Perhaps it's because designing measurement circuits isn't easy. An antenna analyzer has to have a signal source as well. Even so, an antenna analyzer doesn't need a whole lot of accuracy to be useful, so you would think that more builders/hackers would tackle a project like this.

I do know of one antenna analyzer kit on the market. The VK5JST Antenna Analyzer Kit (<http://www.ahars.com.au/about/kits/>) costs about \$110 USD. I actually purchased this kit a year or so ago, and it looks like a great unit. The unit seems well-designed, and it comes with a plastic case, unlike many projects these days, but I haven't yet gotten around to building it.

I've also recently found out about an Arduino-based antenna analyzer project (<http://hackaday.com/2015/08/06/40-antenna-analyzer-with-arduino-and-ad9850/>). It uses an AD9850 module as the signal source. The approximate cost for all the parts is about \$40, and you can experiment with the code, if you like. If you have the time and inclination, this project might be worth taking a hack at.

Another antenna analyzer project from Australia is the VK3YY antenna analyzer (or "analyser" as they spell it there). It uses an Arduino Nano. The interesting thing about the blog post in which VK3YY describes the project (<https://vk3yy.wordpress.com/2014/09/29/antenna-analyser-project/>) is that you can follow his design and experimentation process.

## Yet another analyzer

While I'm talking about antenna analyzers, let me mention another one that I've just found out about: the IW2NDH Antenna Analyzer (<http://www.iw2ndh.com/>). This antenna analyzer isn't a kit, but at \$175 seems to be a good deal. This unit has a frequency coverage of 2 - 160 MHz, and can be used as an antenna analyzer,

signal generator, and a scalar network analyzer.

Apparently, this started out as an Arduino project. As Maximo, EA1DDO, pointed out on the radioartisan Yahoo Group, there is source code for this project on GitHub (<https://gist.github.com/jackdev23/7876502>), and a schematic is available on the Union de Radioaficionados Espanoles (URE) website (<http://www.ure.es/media/kunena/attachments/2420/Schematic.jpg>).

*When not writing about antenna analyzers, Dan, KB6NU, actually builds an antenna now and then. You can often find him on the HF bands (mostly 40m and 30m), working CW. His #1-rated amateur radio blog can be found at KB6NU.Com, and you can e-mail questions, comments, or complaints to [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).*

## SCOOTERS -- Continued from from page 1

at the cheesecake-on-a-stick stand in the concessions area, scooter user Keyton Marbalm threw the scooter blindly into reverse at full throttle and ran straight up Milman's leg. Milman said that the wound is "healing up nicely" and that the cheesecake-on-a-stick treat is simply "can't miss."

DAARC Hamvention Correction of Errors Deputy Officer Wayne "Piggy" Marx said that in response to this and other incidents that the Hamvention will move to a "Scooter Only Policy" starting next year. Marx stated that they had discussed banning the electric scooters but agreed that, "scooters are an important part of the Hamvention experience and are important asset for those hams that can't move as easily as they once could. We'd have to exclude them and felt we couldn't ban the scooters, so we decided to go a different way."

Marx noted that the "Scooter Only Policy" will require that all Hamvention attendees rent and use a scooter at all times on the Hara convention premises and flea market grounds.

"We felt that the only way to allow scooters and also ensure safety was to level the playing field. All Hamvention tickets next year will include scooter rental, and walking around without one will be strictly prohibited."

### hamhijinks.com

## Assorted Stuff

Want to make a splice that is up to NASA standards? Check out the website below:

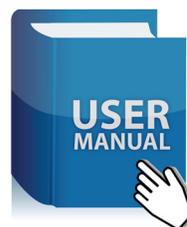
<http://makezine.com/2012/02/28/how-to-splice-wire-to-nasa-standards/>

From Bill, N9QLS comes the following tip:

I've been testing Meijer alkaline batteries, compared to Duracell batteries. The Meijer brand batteries are every bit as good as Duracells, about half the price, and are made in a place called USA.

For some applications, alkaline batteries are better suited than rechargeable batteries. Bill, W9QLS

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Ever try to find a manual for a piece of equipment (not just ham gear)? Need a manual for something you purchased on e-bay? Want to read a manual for gear you are considering purchasing? Fret no more!! Both Tom, W8FIB and Marv, WV9O forwarded me this site.

<http://www.manualslib.com/>

It has over 1,300,000 (yes over a MILLION) manuals, 1,752,800 of them are in PDF format (so they can be searched). Give it a shot!!!!