



# SHORT SKIP

Volume 64 Issue 3

March 2016

## From the Oval Office

by Marv, WV9O, LCARC President

### OFFICERS

Marv, WV9O, President  
 Tim N9CA, V President  
 Jim, KE9FX, Treasurer  
 Russ, KB9HO, Secretary

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 Bill, N9QLS  
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 Webmaster, John, W9WY

## 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.



Tim N9CA, I would like to thank you for the program tonight, you have done two great programs the last two months!

We had three new gust this month, let's be sure to make them feel welcome them when the show up.

This has been two great meetings this year let's keep going and make 2016 a fantastic year for LCARC!

What a great presentation by Tim N9CA on "Build a ham radio satellite antenna with simple parts from hardware stores and how to talk around the world through orbiting satellites with those antenna. We had a drawing; prize is 2-satellite antenna. The winner was Jim KE9FX. Jim made it a twosome by also winning the 50/50 drawing!

### The club is having three-club event for 2016.

#### Indiana QSO Party May 7,2016

- Objective: For Amateurs worldwide to contact as many stations in Indiana as possible on the 160, 80, 40, 20, 15, and 10-meter Amateur bands.

#### IPOTA {Indiana Parks on the Air} club picnic September 10, 2016

- Indiana Parks on the Air (INPOTA) is an awards program for radio amateurs and shortwave listeners that encourage portable operation in Indiana State Parks..

#### 2016 ARRL Field Day is June 25-26

- To work as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands) and to learn to operate in abnormal situations in less than optimal conditions. Field Day is open to all amateurs in the areas covered by the ARRL/RAC Field Organizations and countries within IARU Region 2. DX stations residing in other regions

Coming this spring, Sign up for our free upcoming ham radio license class. An ARRL study guidebook is highly recommended. It looks like a busy night and another great meeting for March, "Be there or be square"! From the Oval Office, 73 Marv WV9O

Reminder, If you have not paid your dues now is the time. If you already have paid for 2016, Thank you. Send them to the PO Box or to my home address below.

**Full member \$20, Family \$25, Associate-Non Ham- \$10**

LCARC, PO Box 90, Crown Point, IN 46308-0090

James W. Harney Sr., KF9EX  
 2600 W. 61st Place, Merrillville, IN 46410, (Home) 219-980-1798  
 (Cell) 219-671-1814  
 jwharney@sbcglobal.net



Yehh - I'm paid up my dues are paid for another year.  
 Are yours?

# Minutes LCARC

January 8, 2016

Meeting called to order at 7:28PM

Introductions were made with 14 members and 4 visitors for a total of 18 attending

Treasury's report was read and accepted as read.

The audit was done and everything was OK with audit with the pineapple upside-down cake was very good also.

Minutes of last meeting were read and accepted as read.

Club events for this year are Indiana QSO party, Field day and INPOTA at the Dunes State Park. Will make Indiana QSO party a fun event for everyone to operate HF for as long as we have operators. The club will use the EMA trailer. Field day is the last full weekend in June. The club will also use the EMA trailer for the event with food and pop for everyone that attends. INPOTA is in September at the Dunes State Park Tremont Shelter where the club will also have a cook out with food and pop for everyone.

The club net had 6 check ins. The net will be the first and third Thursday of every month. Dan is net control and he is also requesting help with the net.

RACES report The RACES drill on Saturday will be digital which Lake County EMA had digital so Lake County will not precipitate in the drill.

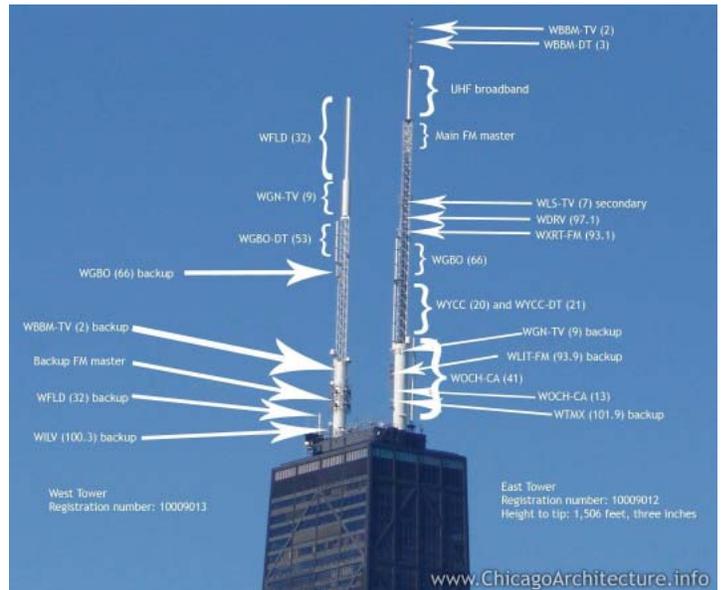
Repeaters are OK

No DX report but 10 meters has had some openings. Sandwich Island DX expedition has been on the air.

Break taken at 8:02PM with program from Tim N9CA on Satellite Antennas and how to build antennas for satellite communication. Jim KF9EX won antennas.

50/50 drawing was held with Jim KF9EX winning the drawing. Meeting adjourned at 9:03PM.

# What's on the Hancock Tower



## February Program

- MLA 2500 Dentron Linear Amp
- Dentron 160-10 Transmatch
- Yaesu SSB Transceiver FT-100EE
- Yaesu 2- meter
- Heathkit SB634
- Heathkit AC Power Supply
- Curtis Deluxe Keyer Model EK420A
- CW Key
- Speaker
- Wilson WR-1000 directional antenna
- Turner Plus 3 Microphone

If interested please contact  
Lynn Jacobs, WB9SCS  
7125 E 157 th Street  
Hobart, IN 46341



TIMEWAVE PK-232 WITH ALL THE UPGRADES. Works on HF and VHF built in sound card, rig control and USB. Has radio 1 for HF radio 2 for VHF. Has all the bells and whistles for digi, fsk or afsk and other digital modes, very good tech support via internet or phone support. Call Nick for price if you are interested. 219-924-7559

# ARRL Announces Partnership with RFinder — The Worldwide Repeater Directory

ARRL Feb 3, 2016

ARRL has established an agreement with RFinder, the creator of a web and app-based directory of Amateur Radio repeaters worldwide, to be its preferred online resource of repeater frequencies.

RFinder is a steadily growing worldwide repeater directory with over 50,000 repeater listings in over 170 countries. An annual \$9.99 subscription to RFinder provides access to repeater data through its collection of apps for Android and Apple devices, and from nearly any web browser. With one subscription, users have access to repeater data worldwide from computing devices on Windows, Mac, Linux, Android, Apple iOS, and popular GPS systems. A growing list of third-party memory programming applications support radio programming. RFinder provides integrated support for EchoLink on Android and iPhone, allowing users a one-click connection to repeaters worldwide from the directory.

“The RFinder team is honored to be ARRL’s partner, providing the very latest online repeater information and directory technology for radio amateurs in the United States,” said Bob Greenberg, W2CYK, creator of RFinder — The Worldwide Repeater Directory. “We look forward to working with ARRL to make RFinder even better for US hams.”

ARRL will receive a portion of each annual subscription to RFinder. US radio amateurs who subscribe to RFinder will have online access to its entire worldwide directory while supporting ARRL.

ARRL will discontinue its own products that had supported digital listings of repeater data including the TravelPlus for Repeater™ software and its own apps. ARRL is working with RFinder on a plan to migrate existing ARRL app users to RFinder, in order to support remaining subscription terms.

“Rest assured that the printed ARRL Repeater Directory, up-

dated and published each year, will continue to be produced,” said ARRL Marketing Manager Bob Inderbitzen, NQ1R. Inderbitzen explained that The ARRL Repeater Directory, available in pocket-sized and spiral bound desktop editions, is especially popular with new radio amateurs, mobile and portable operators, and public service volunteers who rely on the printed copies when they are offline and on the go. ARRL’s source of repeater data for The ARRL Repeater Directory is voluntarily contributed information from repeater owners and frequency coordinators in the US and Canada. RFinder, on the other hand, assembles its data from worldwide sources, including repeater owners, national and regional coordinating bodies, and carefully reviewed crowd-sourced contributions. RFinder uses dynamic data, allowing users to access listings that regularly reflect new, updated, revised, and deleted information.

RFinder will have an exhibit at the upcoming Orlando HamCation®, this year’s ARRL National Convention, February 12-14, at the Central Florida Fair and Expo Park in Orlando, Florida. “We are excited and proud to announce our partnership during the ARRL National Convention!” Greenberg said.

ARRL is the most recent national Amateur Radio society to establish a partnership with RFinder. RFinder is the official repeater directory of Radio Amateurs of/du Canada, the Radio Society of Great Britain, the Deutscher Amateur Radio Club (Germany), and others.

Subscribe to RFinder by visiting <http://subscribe.rfinder.net> from your iPhone, iPad, iPod Touch, or from your Android smartphone or tablet. Those without an Apple or Android device can subscribe using the link at the bottom of <http://subscribe.rfinder.net/>.

## Militia Radio Frequencies

from RadioMasters Reports Online

The militia-patriot movement in America has embraced radio communications in a big way. Within the past decade, the methods and communications gear have evolved from basic CB or FRS radios, to now include VHF-UHF FM, HF SSB, and HF digital communications. This article focuses on some of the radio gear and channel frequencies utilized by various groups. Radio comms now play an active role in armed confrontations, as part of rump militia training, in outreach, and in organizing groups.

SWL Short Wave Listeners, UTE utility radio listeners, Ham operators, and radio scanner buffs enjoy tuning in to unusual activities on the radio spectrum. When a militia activates its radios for a training exercise or mission in any given area, it is likely to pop up on the receiver of some radio listener. There are thousands of radio aficionados everywhere, they are in every county in America. Many tend to mutually share information about unusual activity and the frequencies they hear it on. This RadioMaster Report includes such information, along with validation imagery, some data gleaned from internet sources, and some captured through real time monitoring by anonymous sources close to the scenes.

Read the entire article at: <http://tinyurl.com/hgbrxc2>

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## Ham Scoffs At Store Bought Radios

By WBØRUR, on the scene

DISTURBANCE, ARIZONA – In a surprise announcement, local ham radio operator Martin Jeffries says he has “had enough of the commercialism” and “war on Christmas” and will be building his next transceiver.



He plans on starting the project within days and being on the air with the new rig sometime during the summer of 2021.

### HamHijinks.com

# How cops are catching grow ops with AM radios

reprinted with permission of the author, Keith Graves -- original page <http://tinyurl.com/lpjd8ww>



Many ham operators can locate a grow simply by taking a radio and portable antennae out into their neighborhood and using the radio to triangulate the exact location of the grow

With the proliferation of indoor marijuana grows, the indoor “horticulture” industry has been booming. Chinese manufacturers are turning out indoor grow equipment at a rapid pace with little to no regulatory oversight or compliance. Because of this, there has been a significant amount of radio frequency interference (RFI).

Before we get into how to detect a marijuana grow with your car radio, you have to understand some simple mechanics of how a grow operates. To grow marijuana indoors, you need supplemental lighting necessary for photosynthesis. These lights may be fluorescent, LED, and for larger operations, high pressure sodium (HPS) or metal halide (MH).

The HPS and MH lamps may be 1000W per lamp and require a ballast for proper operation. These ballasts were originally magnetic but in the past few years have become electronic. These devices are subject to FCC part 18 rules but there appears to be a total disregard for the FCC rules. Many (if not most) electronic ballasts are manufactured in China and may have little ‘FCC’ stickers on them but there is no evidence of any testing for compliance having been done. Because of this, a large amount of RFI is interfering with nearby electronics. As an example, one grow next to a CalFire station — California’s state fire agency — caused a continuous hum over the station’s callbox speaker and interfered with them receiving radio broadcasts over their station’s PA.

## Ham Radio Helpers

Reports have begun to flood into the National Association for Amateur Radio about interference with their ham radios from their neighbor’s marijuana grows. The most complaints come from California and Colorado, for obvious reasons. Many ham radio operators began to see a correlation with marijuana grows and this RFI.

One amateur radio operator located five marijuana grows near his house due to RFI alone! Many ham operators can locate a grow simply by taking a radio and portable antennae out into their neighborhood and using the radio to triangulate the exact location of the grow.

One industrious ham operator went to his local grow shop and borrowed several lights and ballasts to test for RFI. He found that one light and ballast set up would cause interference up to 700 meters. From our experience, we know that most indoor grows have more than one light and ballast, which would amplify the RFI.

## Pioneering Field Use

One narcotics officer from the San Francisco Bay Area turns his car radio to 560 AM when he checks out potential indoor grows. He’s checked out seven indoor marijuana grows since learning about the RFI issue. All seven times, the car’s radio showed significant interference from the ballasts inside of the grow location.

One ham radio operator described the interference this way: “It can be pops, it can be a buzzing sound, whistles — just all kinds of different noises that we’ll hear.”

Tom Thompson, a ham radio operator, told a Colorado newspaper, “If I can track this down, anybody can track this down. If I listen long enough, I can tell when they turn the lights off... You can tell exactly when the harvest is.”

This method of finding marijuana grows isn’t fool proof, but it can be another useful tool in your toolbox.

## About the author

*Keith Graves has been a Police Officer in the San Francisco Bay Area since 1990 and is currently a sergeant assigned to patrol. Keith is a Drug Recognition Expert Instructor (IACP #3292) and teaches both the DRE course and the CNOA Drug Abuse Recognition Course. Keith has also taught at the Basic Police Academy and has developed a number of POST certified drug courses. Keith has held assignments as a Narcotics/Vice Detective, COPPS Officer, Traffic Officer, Training Sergeant, Patrol Sergeant and SWAT Team Leader. Keith has taught thousands of officers and businesses about drug use, drug trends, compliance training and drug investigations. Graves & Associates provides training and consulting services to law enforcement, probation, parole, corrections as well as corporate partners.*

## Assorted Information from the QCWA Chapter 36

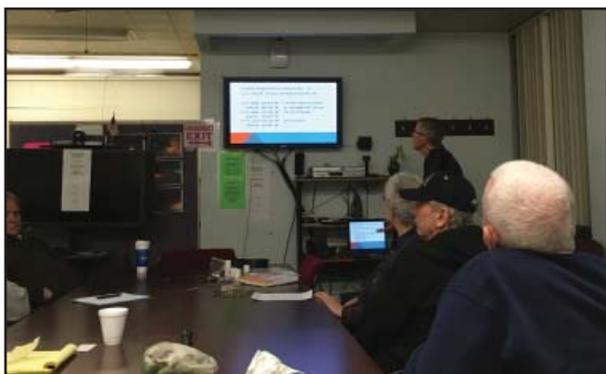
*from Stan, W43SV*

Thanks to Dave, W9DN, who gave me a link to an EXCELLENT website resource for "old radio" history. There isn't an amateur radio category, but things like "Popular Electronics" has many amateur related articles, such as those written by Herb Brier. The entire collection of Popular Electronics is there, but that is only the tip of the iceberg. Much of the material is about broadcast radio, but even more than that. The files are searchable PDF's, and the site has no ads and requests no donations. It's all hosted by a former broadcaster. If you like "old radio"... you'll like this site: <http://americanradiohistory.com/>

Don't forget the Cabin Fever Hamfest coming up in 2 weeks in LaPorte at the Civic Auditorium. It will be held Saturday, Feb. 27th, from 7am-1pm Central Time. Admission is \$7 per adult. Plenty of free parking, VE Testing, door prizes, food, and a chance to catch up with friends. See the details at: <http://lpcarc.org/hamfest/>

## February Meeting Program and Contest

*If you didn't come you missed a great presentation and a chance to win a valuable prize. CU next month!*



Tim, N9CA gives a presentation on Egg Beater Antennas



Want to find an EasySat?  
Check these frequencies.



Is Jim leaving early? NO!



At the end of the night Jim, KF9EX is the lucky WINNER of BOTH of the Egg Beater Antennas

So what is an eggbeater antenna? The "eggbeater" antenna is an omni-directional antenna employing circular polarization to maximize signal capture from low Earth orbit (LEO) satellites. It is, basically, just two full wave loops fed in quadrature. Commercial versions are available from M2 Antennas. The garden-variety home-brew version employs a 90-degree "phasing" line to provide a fixed right-hand circular polarization (RHCP). It also uses, optionally, a pair of parasitic reflector elements to focus more of the radiation pattern overhead. This effect makes it a "gain" antenna, but that gain is at the expense of low-elevation reception. To the horizon it is linear-horizontally polarized. As the pattern rises in elevation, it becomes more and more RHCP.

Membership forms can be downloaded from our web site at [www.w9lj.org](http://www.w9lj.org). If you download the file from the web you can use your computer to fill in the blanks (makes our secretary happy) and then print the form with your information filled in.

## Thursday Night Net Resumes!

The Lake County Amateur Radio Club has restarted the Thursday night net.

The net will be on the 1st and 3rd Thursdays of the month. The net will begin at 7:30 PM on the club's 2 meter repeater, 147.000 MHz, +, PL of 131.8. The net control operator will be Dan, KD9ARD. As you plan for your upcoming week, mark Thursday, Feb 18, 7:30 PM on your calendar. Hope to hear you Thursday. Joe K9JJK