

RCA AMATEUR RADIO CLUB

FEBRUARY, 2014

MONTHLY NEWSLETTER

INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, FEB 11th, 6:30 PM AT [G.T. SOUTH'S](#),
5711 E. 71ST STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE 14-JAN MEETING— Jim, K9RU, reported that the Club insurance has been paid for another year. The Field Day operation with the IRC (June 28-29) at Camp Belzer was discussed. At the Indy Hamfest (July 12) our club will purchase 3 tables in the commercial building. Jon Powell, KC9GUM, and Bill Mengel, N9AYD, will also get 3 adjacent to ours. K9RU talked about a hand-held spectrum analyzer, RF Explorer, which he has purchased. Sounds pretty neat. Again, the computer, or lack thereof came up. John, KF9UH, will not be able to acquire one. Bob, W9KVK, has one in mind and he will get it. KC9GUM announced he has several rolls of RG-8 in his truck and will give them to whomever wants them. Thanks, Jon.

NEXT TEST AMATEUR RADIO LICENSE TEST SESSION --

Time: Saturday, February 8, 2014, 12:00 PM (Walk-ins allowed)

Location: Salvation Army EDS Training Facility, 4020 Georgetown Rd., Indy, IN 46254-2407

Contact: Jim Rinehart, K9RU. k9ru@arrl.net 317 495-1933

PUBLIC SERVICE OPPORUNITIES --The Hamilton County ARES team is looking for amateur radio operators to assist with two upcoming events. If you are interested in volunteering, please contact the radio coordinator for each event.

- Sam Costa Marathon on March 22nd in Carmel. To volunteer, contact Tim Vermande KD5URS by e-mail at kd5urs@gmail.com
- Carmel Marathon on April 12th. To volunteer contact Steve Kremer KF9ZA by e-mail at kf9za@kremer.com

HAMFESTS, OPERATING EVENTS

Feb 22	Third annual Brownsburg Hamfest, Brownsburg, IN http://www.hcars.org/
Feb 22	Cabin Fever Hamfest, LaPorte, IN http://lpcarc.org
Mar 08	Terre Haute Hamfest & Computer Expo, http://www.w9uuu.org/
Apr 12	North Central Indiana Hamfest, Peru, IN http://www.nci-hamfest.net/
June 28-29	ARRL Field Day
July 12	Indianapolis Hamfest, Marion Co. Fairgrounds

All dates, unless otherwise stated, are UTC.

<http://www.arrl.org/contest-update-issues> Contests updates

<http://www.hornucopia.com/contestcal/> WA7BNM Contest Calendar

<http://www.arrl.org/special-event-stations> ARRL Special Event Stations page

http://www.arrl.org/exam_sessions/search ARRL training page for test sessions

<http://indyhams.org/events/> Indiana events and public service opportunities.

INDIANAPOLIS ENTREPRENEUR, POLITICIAN, PUBLISHER BEURT SERVAAS, W9WVO SK

Beurt SerVaas, W9WVO, of Indianapolis, Indiana, died February 2. He was 94. Known in his home city as the politician who revamped Indianapolis and Marion County politics, he presided over the

City-County Council for three decades. Outside of Indianapolis politics, though, he may be best remembered as the person whose publishing company rescued *The Saturday Evening Post* magazine in the 1970s and moved it to Indianapolis.

"Indianapolis has lost one of its greatest champions and chief architect of its success," said a statement issued by Mayor Greg Ballard. "Beurt set a gold standard for public service in this city that all current and future leaders should emulate."

Bert was very active in amateur radio operating from his station at home. With his support The Saturday Evening Post sponsored a Dxpedition to Gibraltar and carried an article about the experience. He played an integral role in establishing the W87PAX Special Event Station at the 1987 PAN-AM Games held in Indianapolis and the W9IMS Indianapolis Motor Speedway Special Event Station.

Berut working with Mike Koss, W9SU wanted to put together a first class Special Event Station for the 1987 PAN-AM Games being held in Indianapolis. At 1984 Olympics, the FCC issued "W84" callsigns but in 1987 the FCC was not issuing Vanity or Special Event callsigns. Berut worked with the FCC to get a work around to allow for the use of W87PAX callsign. The Special Event Station was a big success with the special event QSO's and handling message for the athletes. There were foreign visitors and hams on the TV crews covering the games that stoping by the station and operating. This became the model that W9IMS was built around.

There had been a lot of interest over the years of establishing an amateur radio station at the Speedway, possibly located at the museum for a special event operation. After a number of years meeting with the Speedway about the possibility of operating a special event station during the Indy 500, Beurt SerVaas met with Indianapolis Motor Speedway CEO Tony George in April 2004 and on May 25, 2004 Tony gave his consent for W9IMS to became the Official Amateur Radio Club of the Indianapolis Motor Speedway — the first time in history that a ham radio club has received this designation." The first ever W9IMS contact on May 25, 2004 was with W9WVO.

Berut was an ARRL member and staunch supporter of the League during his life. "Beurt was a generous and gracious donor," said ARRL Chief Development Officer Mary Hobart, K1MMH. "On a visit to Indianapolis he gave me a tour of the city and shared his fascinating experiences with the OSS. He was truly a remarkable man!"

A World War II US Navy veteran, SerVaas served as an OSS intelligence officer during the war and later worked for the Central Intelligence Agency. According to his [obituary](#) in *The Indianapolis Star*, *The Saturday Evening Post* was one of an eclectic variety of businesses that SerVaas owned or started. His first was an electroplating business he bought in the 1950s. He entered politics in the early 1960s, winning election to the Indianapolis City Council. He retired from politics in 2002 and, then in his 80s, sold off most of his businesses at around the same time.

Survivors include his wife Jane, who ran *The Saturday Evening Post* for decades, as well as five children. Services will be February 8. — *Thanks to Brian D. Smith, W9IND*

FCC OPENS BRIEF WINDOW FOR COMMENTS ON WRC-2015 DRAFT RECOMMENDATIONS

The FCC has invited comments by February 18 on the latest batch of [draft recommendations](#) of its Advisory Committee for World Radiocommunication Conference 2015 (WRC-2015). At its January 27 meeting, the Advisory Committee (WAC) approved draft recommendations on a number of issues that will be considered by WRC-2015. Some items, including one which could possibly lead to changes to 60 meters in the long term, could affect the Amateur and Amateur-Satellite services. ARRL Chief Technology Officer Brennan Price, N4QX, is a member of the WAC, which is chartered to allow non-

federal government entities to "provide to the [FCC] advice, technical support, and recommended proposals for the 2015 World Radiocommunication Conference."

"Based upon an initial review of the draft recommendations forwarded to the Commission, the International Bureau, in coordination with other Commission bureaus and offices, tentatively concludes that we can generally support most of the attached WRC-2015 Advisory Committee draft recommendations," the Commission said in a January 28 [Public Notice](#).

The FCC also seeks comment on [draft proposals](#) from the National Telecommunications & Information Administration ([NTIA](#)) as well as on the International Bureau's initial conclusions with regard to the WRC-2015 Advisory Committee draft recommendations.

WRC-2012 Resolution 649 invited WRC-2015, to consider allocating "an appropriate amount of spectrum, not necessarily contiguous," to the Amateur Service on a secondary basis within the band 5250 to 5450 kHz. "In order to maintain effective and reliable communications capability throughout the sunspot cycle, allocations at regular intervals are desirable, in order to permit operation as close to the maximum usable frequency as possible," the WAC said in its draft recommendations. Incumbent services in the 5250 to 5450 kHz range include fixed, mobile, and radiolocation services.

"A secondary allocation from 5275 to 5450 kHz avoids the unsuitable segment allocated to the Radiolocation Service, reduces the interval between HF amateur allocations below 10 MHz to permit reliable operation throughout the sunspot cycle, maximizes the flexibility of Amateur Service stations to effectively communicate within the secondary allocation, and fulfills their obligations to avoid harmful interference to primary services," the WAC concluded.

WRC-2015 will also consider a number of issues that could impact amateur allocations above 420 MHz, including a possible extension of the current worldwide allocation to the Earth Exploration-Satellite service in the band 9300 to 9900 MHz by up to 600 MHz "within the frequency bands 8700 to 9300 MHz and/or 9900 to 10,500 MHz."

Incumbent services in the 9900 to 10,500 MHz range include the Radiolocation, Fixed, Mobile, Amateur, and Amateur-Satellite services. The Amateur Service is secondary at 10,000 to 10,500 MHz worldwide, and the Amateur-Satellite Service is secondary at 10,450 to 10,500 MHz worldwide.

The FCC said comments provided by interested parties will assist it in its consultations with the US Department of State and NTIA in the development of US positions for WRC-2015. "The recommendations...may evolve in the course of interagency discussions as we approach WRC-2015 and, therefore, do not constitute a final US Government position on any issue," the FCC *Public Notice* stressed.

Comments should reference [IB Docket 04-286](#) and specific recommendations by WAC document number. Interested parties may file comments via the FCC's Electronic Comment Filing System ([ECFS](#)). The ARRL plans to file comments in this proceeding. --ARRL Letter

AMSTERDAM ISLAND FT5ZM DXPEDITION MAKING A BIG SPLASH

After a January 26 start, the 14-member Amsterdam Island [FT5ZM DXpedition](#) team is on the air from two camps on the small South Indian Ocean island outpost. The FT5ZM operators have been attacking gigantic pileups that sometimes spread across 10 or 15 kHz or more of spectrum. Despite the imprecations of the self-appointed "DX police," many stations continue to call FT5ZM on its transmitting frequency instead of *up* the band where the operator is listening. FT5ZM operators use split-frequency operation. Considerable intentional interference has slowed progress too.

The kickoff to this approximately [\\$450,000 venture](#) to provide a rare DXCC entity to eager DXers around the globe came in the wake of a difficult sea voyage and dozens of trips from the M/V *Braveheart* via Zodiac to the island to get the gear ashore. Team member Jerry Rosalius, WB9Z, called it "one of the (if not the) roughest DXpeditions [I've] ever been on."

Team Leader Ralph Fedor, K0IR, said the island's logistics make activities time and energy consuming. "For example, at the Antonelli site the grasses are chest high and conceal holes and rocks," he said, adding that the terrain varies wildly. "All this makes antenna installation, placing radials, and running feed lines very difficult." The hike between the two sites is rough and can take nearly 2 hours.

Amsterdam and St Paul Islands is the seventh most-wanted DXCC entity, according to [Clublog](#). The ARRL has made a [Colvin Award](#) grant to help support the Amsterdam Island DXpedition.

The FT5ZM DXpedition appears to put putting in good signals to all areas of the world, as it follows propagation from band to band, handing out the new one at a rapid rate. "We are struggling with noise on 12 and 30 meters and occasionally on 15," Fedor said January 30. "While we work to resolve this, we ask your patience, if we have difficulty hearing you on these bands. After installing our 160 meter antenna, taking it down, and replacing it, [the] first full night on 160 meters netted 500 QSOs We are very happy about that."

Difficulties aside, the team is reported to be in good spirits. As of January 29, the team already had more than 36,000 contacts in the [log](#).

Frank Donovan, W3LPL, has advised US stations to turn their beams to peak the FT5ZM signal. Given the DXpedition's location relative to the US, he explained, it may arrive at different headings on different bands and times of day.

The team will not have e-mail service during the DXpedition and pilot stations do not have log or QSO information.

"The only channel to pass your remarks and suggestions to the team is to [contact](#) one of our [pilot operators](#) assigned to your area," a January 27 website post advised. "Please *do not* contact the Pilot Station about a busted call or if your call is missing from the [online log](#). Keep a record of your QSO details and contact the QSL manager after the DXpedition. Alternately, work FT5ZM again." The DXpedition is not accepting sked requests.

The FT5ZM DXpedition has a [Facebook](#) page. DXers also can follow its activities via [Twitter](#) or [RSS](#) feed. The DXpedition has allocated 18 days "to set up, conduct the DXpedition, and tear down for departure."

Discovered by the Spanish in 1522, Amsterdam Island is under the administration of Terres Australes et Antarctiques Francaises ([TAAF](#)), which controls access to the islands in the French Antarctic Territories. The UN Global Atmosphere Watch ([GAW](#)) maintains a presence on the island. -- *Thanks to [The Daily DX](#) for some information*

W1AW CENTENNIAL OPERATIONS NOW IN MINNESOTA AND TEXAS

The ARRL Centennial "[W1AW WAS](#)" operations taking place throughout 2014 from each of the 50 states are in Minnesota ([W1AW/0](#)) and Texas ([W1AW/5](#)) until February 5 at 0000 UTC (the evening of February 4 in US time zones), when they will shift to Georgia ([W1AW/4](#)) and Hawaii ([W1AW/KH6](#)). During 2014 W1AW will be on the air from every state (at least twice) and from most US territories, and it will be easy to work all states solely by contacting W1AW portable operations.

In conjunction with the 100th anniversary of the ARRL, the [ARRL Centennial QSO Party](#) kicked off January 1 for a year-long operating event in which participants can accumulate points and win awards. The event is open to all, although only ARRL members and appointees, elected officials, HQ staff and W1AW are worth ARRL Centennial QSO Party [points](#). Working W1AW/x from each state is worth 5 points per contact.

To earn the "Worked all States with W1AW Award," work W1AW operating portable from all 50 states. (Working W1AW or W100AW in Connecticut does *not* count for Connecticut, however. For award credit, participants must work W1AW/1 in Connecticut.) A W1AW WAS certificate and plaque will be available (pricing not yet available). --ARRL Letter

NEW GUIDE PROMOTES FUNCUBE-1 'S EDUCATIONAL VALUE

A new [FUNCube](#) guide developed by ARRL Education & Technology Program ([ETP](#)) Director Mark Spencer, WA8SME, aims to maximize the educational focus of the tiny AO-73 satellite. Spencer's [Pragmatic Guide for Using the FUNCube \(AO-73\) Materials Science Experiment in the Classroom](#) prompts readers to dig beyond AO-73's Amateur Radio transponder and telemetry uploads and downloads and "take a closer look at what is really going on" as the satellite orbits Earth. The diminutive spacecraft includes an [AMSAT-UK](#)-developed materials science experiment (MSE). Spencer's guide helps teachers and students to analyze telemetry and apply the laws of thermodynamics to examine how heat is radiated into space from materials having different surface finishes.

"The primary mission of the FUNCube is education, and the MSE is the focus of that mission," Spencer said. When it's not in educational mode the spacecraft switches on an Amateur Radio SSB/CW inverting transponder (435.150-435.130 MHz LSB up / 145.950-145.970 MHz USB down). "I know there is an ongoing discussion of the value of cubesat telemetry when compared to transponder operations," he said. "[Y]ou just might find that an occasional look at the telemetry will help you better understand satellites and make you a better satellite operator."

As Spencer explained, the FUNCube-1 MSE includes two separate experiments -- one using the thermally isolated aluminum bars mounted on one face of the satellite, and the second using four aluminum bars that form part of the satellite's body in the corners of the cube. MSE data are transmitted via a 2 meter downlink (145.935 MHz BPSK) and decoded and displayed by the AMSAT-UK [Dashboard](#) software.

"Collecting the data is only part of the education mission," Spencer said. "The other -- and more meaningful part -- is interpreting the data." That, he explained, starts with a thermodynamics refresher. "In the broadest terms, thermodynamics is the study of how heat moves from one place to another," he continued. "The purpose of the FUNCube MSE is to allow students to witness heat transfer by radiation firsthand in an environment -- space -- where convection and conduction are not present."

Spencer called the FUNCube MSE "an exceptional educational resource," and he praised AMSAT-UK's efforts. "It's now our turn to gain as much as we can from their efforts, and I hope the *Guide* will help you get started."

The ARRL's [Classroom Library: Satellite Communications](#) page includes a link to the new guide and has more information on bringing space into the classroom. Read [more](#). --ARRL Letter

K9LA NAMED TO RECEIVE THE 2013 BILL ORR, W6SAI, TECHNICAL WRITING AWARD

Carl Luetzelschwab, K9LA, of Fort Wayne, Indiana, has been named the winner of The Bill Orr, W6SAI, Technical Writing Award for the 2013. The [ARRL Foundation](#) Board of Directors selected Luetzelschwab at its January 21 meeting for his article "[The Sun and the Ionosphere](#)," which appeared in the March 2013 issue of *QST*. Luetzelschwab won the March [QST Cover Plaque Award](#) last year for the same article. Luetzelschwab, who frequently writes on solar and propagation phenomena and trends, is the "Propagation" columnist for [NCJ](#) -- *National Contest Journal*.

"I am honored to receive the William Orr Award from the ARRL," Luetzelschwab said. "Orr's *Radio Handbook* (23rd ed) is one of my favorite references in my library, because of its practical information."

K9LA received his Novice license (WN9AVT) in 1961, upgrading to General (WA9AVT) the following spring. He obtained K9LA in the mid-1970s. His Amateur Radio interests include propagation, DXing,

contesting (he was *NCJ* editor from 2002 until 2007), antennas, and vintage equipment, and he has contributed many articles to Amateur Radio publications. Luetzelschwab holds both bachelor's and master's degrees in electrical engineering from Purdue University. He recently retired after 41 years as an RF design engineer.

The Bill Orr, W6SAI, Technical Writing Award is bestowed each year to the *QST* author who writes an outstanding *QST* article or series on new or existing technologies or on methods or means of amateur communication. Articles must be written in an easily understood style, worthy of the Bill Orr "stamp of approval" and encourage interest and expand the knowledge and understanding of amateurs who may lack a strong technical background.

The *QST* editorial staff serves as the selection panel and recommends the winner from a review of the year's *QST* articles to the ARRL Foundation Board for final approval at its Annual Meeting. The award comprises an engraved plaque and \$250, to be presented at an ARRL convention.

Established in 1973 by the ARRL, the [ARRL Foundation](#) is an independent IRS 501(c)(3) organization that administers programs to support the Amateur Radio community. The Foundation is funded entirely through the generosity of radio amateurs and friends. ARRL Foundation programs for Amateur Radio award scholarships for higher education, grants for Amateur Radio projects, and special Amateur Radio program grants for The Victor C. Clark Youth Incentive Program and The Jesse A. Bieberman Meritorious Membership Program. --ARRL Letter – Carl has been a guest speaker at the Indianapolis Radio Club and the Hoosier DX and Contest Club on propagations.

AMATEUR RADIO SHOWING STEADY GROWTH IN THE US

The Amateur Radio population in the US continues to show steady growth, according to [statistics](#) compiled by Joe Speroni, AH0A. As of the end of 2013, the FCC database showed 717,201 [licenses](#) in its Universal Licensing System ([ULS](#)). That's the greatest number of US hams ever, and it's up from 709,575 in December 2012. The [volume](#) of Amateur Radio applications slowed somewhat to 141,943 from its zenith of 176,826 in 2007, the year the FCC dropped the Morse code requirement.

"The three current license classes also peaked at the end of 2013," notes ARRL [VEC](#) Manager Maria Somma, AB1FM. "FCC-issued club station licenses are also at an all-time high in the FCC database at 11,363. The number of new licensees has increased by 7 percent over last year -- 28,886 in 2013 and 27,082 in 2012."

The breakdown by license class shows Technicians as the largest group, at 349,163, followed by Generals at 167,257, Amateur Extras at 133,391, and Advanced licensees at 54,293. Slightly more than 13,000 Novice licensees remain on record too. The FCC no longer issues the Novice or Advanced class license. Technician numbers have grown by 8.2 percent over the past decade, with an impressive comeback since 2007 after the population had plummeted from a peak of 338,334 in March 2000. The General class population has risen by slightly more than 18 percent over the past 10 years. But the Amateur Extra class has shown the *most* remarkable growth over the past decade, climbing by slightly more than 27 percent.

While Amateur Radio application volume slipped somewhat overall, that was not the case at the ARRL VEC. "ARRL VEC served 34,896 exam applicants in 2013, up slightly from 32,866 in 2012," Somma said. "July will mark 30 years that ARRL VEC has been certified by the FCC to administer Amateur Radio exams. We're delighted to celebrate our important milestone in the same year as the ARRL's [Centennial](#) celebration and look forward to the promise of another record year." --ARRL Letter

CANADA TO GET FIVE 60 METER CHANNELS

Industry Canada [has granted](#) Amateur Radio operators there the use of five 60 meter channels on a non-interference basis. The center-channel frequencies harmonize with those available to US radio amateurs on 60 meters: 5332 kHz, 5348 kHz, 5358.5 kHz, 5373 kHz, and 5405 kHz.

"Given that use of these frequencies was requested, in part, to allow for cross-border communications in times of emergency," Industry Canada said, "harmonization of the frequencies with the United States would facilitate such communications between the Canadian and the US Amateur Radio communities."

Amateur stations will be restricted to USB, data, RTTY and CW modes, with a maximum bandwidth of 2.8 kHz, and a maximum power output of 100 W ERP -- the same as the US allows.

"Canadian amateur operations shall not cause interference to fixed and mobile operations in Canada or in other countries," Industry Canada ruled, "and, if such interference occurs, the Amateur Service may be required to cease operations. The Amateur Service in Canada may not claim protection from interference by the fixed and mobile operations of other countries."

Elsewhere, Unión de Radioaficionados Españoles ([URE](#)) General Secretary Salvador Bernal, EA7SB, [reported](#) recently that Spain's telecommunications regulatory agency has authorized the use of several 60 meter frequencies through June 30, 2014. The authorized center frequencies are 5268, 5295, 5313, 5382, 5430, and 5439 kHz, with a power of 100 W PEP and a maximum bandwidth of 3 kHz. Center channels authorized for the US and Canada differ. The URE is recommending that hams in Spain use USB on 60 meters, the mode employed in most countries authorizing operation on 60 meters.

In the Czech Republic, up to 10 radio amateurs are being permitted to operate on 60 meters on an experimental basis until the end of 2014. This experimental phase of 5 MHz operation follows an initial trial that ended two years ago. Czech Republic radio amateurs holding a special permit may use six channels that are common to many current 5 MHz ham radio allocations. The USB dial frequencies are 5288.5, 5330.5, 5366.5, 5371.5, 5398.5, and 5403.5 kHz. Experimenters will be allowed to operate 100 W ERP on USB and CW (+1.5 kHz from the USB dial frequency).

Cuba's Ministry of Communications is reported to have made available to its radio amateurs a 12 kHz segment of 60 meter spectrum, instead of individual channels, as the US and other countries have done. Access is not immediate. Hams in Cuba must obtain approval and a license modification. Access to 5418 to 5430 kHz will be on a secondary basis, with emphasis on its use during emergencies. -- Thanks to Industry Canada and Bryan Rawlings, VE3QN, URE, ARRL, and [Southgate ARC](#)

SHORTS

ON THE WORLD WIDE WEB THIS MONTH – Here are a few links to web pages and videos which may be of interest:

Where time is it? The banquet speaker at last year's DCC (ARRL and TAPR's Digital Communications Conference) was Tom van Baak, the supreme-guru of all Time-Nuts. His presentation can be seen on YouTube thanks to Gary Pearce's Ham Radio Now podcast:

http://www.youtube.com/watch?v=MT2reYXPvGg&feature=c4-overview&list=UUxqXFK9ETC5CWEddD-_HpgA

Related links: Tom's website is at: <http://leapsecond.com/>

And the Powers of Ten 1977 video is at: <http://www.powersof10.com/film>

If you've ever built a Heathkit – Bob Eckweiler, AF6C, has done a wonderful job of writing articles on individual pieces of Heathkit gear. A real treat go read through many of his articles. http://www.w6ze.org/Heathkit/Heathkit_Index.html

REPEATER OWNERS NOW MAY SUBMIT REPEATER DIRECTORY UPDATES DIRECTLY TO ARRL -- Repeater owners now may [submit](#) updated information for use in the *ARRL Repeater*

Directory, *TravelPlus* and other products directly to the ARRL via the League's website. Repeater owners or trustees can use the new web page to notify the ARRL of changes to existing repeaters, such as new CTCSS frequencies or call sign changes. The web page *cannot* be used to add new or uncoordinated repeaters, however.

"This new capability is intended for repeaters that are already on the air, as a means to keep our information as accurate as possible throughout the year," said Steve Ford, WB8IMY, ARRL Publications Manager. Ford was quick to point out that sending information directly to the ARRL does not relieve repeater owners of their obligation to communicate with their coordinators.

"We are simply collecting the most up-to-date information for use in books and software, and only for those instances where something has recently changed," Ford stressed. "This isn't meant to be a substitute for notifying your coordinator. It also isn't a substitute for formal coordination of a new repeater. Only repeater coordinators can do that." – ARRL

THE NEXT TRAINING SESSION FOR THE MARION COUNTY ARES TEAM - will be on Saturday, February 22nd. The starting time will be 1:00 PM with a location to be determined. The topic will be "Shadow Communicator - Level 1" and promises to be full of good information. To register for this training session, please send an e-mail to mcinares@gmail.com with your name and callsign.

If you noticed, we have been offering Level 1 courses and soon will be offering Level 2 courses. The Marion County ARES training plan is a tiered plan that offers basic or Level 1 courses followed by more advanced or Level 2 courses. The current MC ARES training plan can be found here: <http://tinyurl.com/mcarestraining>

LIBRARY OF CONGRESS RELEASES FREE BRAILLE AND AUDIO READING APP --The Library of Congress [Braille and Talking Book Program](#) has a free Braille and Audio Reading Download (BARD) app for iOS devices available via the iTunes Store. QST is among the available publications that can use this app.

"People who are blind, visually impaired or have a physical disability may now download audio and Braille books to their iPhone, iPad or iPod touch, if they are [registered](#) with the National Library Service for the Blind and Physically Handicapped (NLS) in the Library of Congress," the Library of Congress [announcement](#) said. NLS is also working on a version of the app for Android devices.

The program permits readers to [download](#) audio and Braille books from their NLS BARD accounts. Access to BARD is provided through local cooperating libraries. For QST the program describes every circuit. It lets users adjust speed and tone, and it offers a quick rewind to replay the last few seconds or a minute at a time, as well as fast forward, wind back by phrase, and other features. Users can go directly to articles, skip from section to section within an article, and jump from article to article. Read [more](#). --ARRL Letter

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