

RCA AMATEUR RADIO CLUB

DECEMBER, 2012 MONTHLY NEWSLETTER INDIANAPOLIS, IN

Merry Christmas and Happy Holidays THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE

TUESDAY, DECEMBER 11th, 6:30 PM AT <u>G.T. SOUTH'S</u>, 5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE NOVEMBER MEETING – Thanks to all those attending the 13-Nov. Meeting. Jim, AF9A, gave an update on the repeater operation. The site still doesn't have a network connection for Echolink. The details of the fiber and Ethernet over twisted pair telephone were discussed. Bill Mengle said he had solved a similar problem using Ethernet extenders. He may have a couple extra units he would donate to the Club.

Jim, K9RU will handle the repeater coordination for the new site.

Details of changing the club's bank account to the credit union were discussed. The copy of the club constitution was distributed, discussed. The member's present approved the constitution with the changes with the wording in Article X regarding dissolution of the Club revised allowing all membership to vote on it by email and counted at the next meeting after the meeting that the motion to dissolve the club was made.

AF9A called attention to the recent IRC meeting and a presentation by Dave Spoelstra, N9KT. Dave spoke on free software. Copies of Dave's handout were distributed as there some good links there.

K9RU reminded the group of the Ft. Wayne Hamfest this coming Saturday. Three people indicated they plan to attend. Leroy, WA4OTD, reported he has received some more parts to be sold at the 2013 Indy Hamfest. The CQWW and good 10M conditions were noted. Plus, the upcoming ARRL SS phone and 10 Meter Contests were mentioned.

Dick, W9ZB, reminded the Club about the upcoming FMT on Wed., 11/14, and described his success in the previous tests. WA4OTD announced he is planning another aeronautical mobile flight but the date hasn't been set.

NEXT TEST SESSION: 12/08/2012 - Saturday starting at noon Location: Public Safety Commission, Communications Training Center, 8468 E 21st St, Indianapolis, IN 46219 Contact: Jim Rinehart Email: k9ru@arrl.net

HAMFESTS, OPERATING EVENTS & TESTING

Dec 8 VE Test Session, 12 noon, Public Safety Comm. Training Cntr, 8468 E 21st St, Indy.

Dec 8 - 9 ARRL 10M contest

Dec 16 ARRL Rookie CW contest

Jan 1 ARRL Straight Key Night

Jan 5 - 6 ARRL RTTY contest

All dates, unless otherwise stated, are UTC. <u>http://www.arrl.org/contest-update-issues</u> Contests updates <u>http://www.hornucopia.com/contestcal/</u> WA7BNM Contest Calendar <u>http://www.arrl.org/special-event-stations</u> ARRL Special Event Stations page <u>http://www.arrl.org/exam_sessions/search</u> ARRL training page for test sessions <u>http://indyhams.org/events/</u> Indiana events and public service opportunities.

10 METER CONTEST THIS WEEKEND

The 10 meter contest is this weekend and should be a lot of fun with the current band conditions. It is both SSB and CW and the report is simple, 59(9) Indiana. The exchange is the state for U.S. stations, not ARRL section. A DX station will give you a QSO number. Check out ARRL for complete rules. YouTube 10 meter contest video <u>http://www.youtube.com/watch?v=N5xJjThOlic</u>

FCC SEEKS TO ASSIGN ENTIRE AMATEUR PORTION OF 160 METER BAND TO PRIMARY STATUS TO AMATEUR RADIO SERVICE, PROPOSES NEW LF AMATEUR BAND AT 135.7-137.8 KHZ

On Tuesday, November 20, the FCC released a *Notice of Proposed Rulemaking* (ET Docket No. <u>12-338</u>) that proposes to amend Parts 1, 2, 74, 78, 87, 90 and 97 of the Commission's rules. <u>Part 97</u> governs the Amateur Radio Service. These changes will implement allocation decisions from the 2007 World Radiocommunication Conference (WRC-07) that concern those portions of the radio frequency spectrum between 108 MHz and 20.2 GHz and make certain updates to the rules in this frequency range.

Most of the *NPRM* does not concern the Amateur Radio Service, but the FCC is requesting comments on the three parts that do: changing the allocation to the amateur portion of the 160 meter band, allocating a new Amateur Service band at 135.7-137.8 kHz and cleaning up the rules for the 10.0-10.5 GHz band. Comments on these proposed rules changes will be accepted until 60 days after the *NPRM* is published in the <u>Federal Register</u> (this can take up to six weeks after release of the *NPRM*). Reply comments will be accepted until 90 days after publication in the *Federal Register*.

Allocation Changes to 160 Meter Band The FCC is proposing to change the Amateur Radio Service allocation to the 160 meter band (1800-2000 kHz), reallocating the 1900-2000 kHz segment to the Amateur Radio Service on a primary basis. In the *NPRM*, the FCC noted that "the ARRL has identified the 160 meter band and the amateur HF bands as "by far, the heaviest-used [Amateur Service] allocations."

Historically, the 1715-2000 kHz band was allocated exclusively to the Amateur Service. In 1953, the

FCC removed the 1715-1800 kHz segment from the Amateur Radio Service and allocated the 1800-2000 kHz band to the Amateur Service on a shared basis with the Radionavigation Service. Then in 1983, the FCC allocated the 1800-1900 kHz band to the Amateur Service on an exclusive basis and the 1900-2000 kHz band to the Radiolocation Service on a primary basis for federal and non-federal use and to the Amateur Service on a secondary basis. The FCC stated that "The purpose of allocating this band [1900-2000 kHz] to the Radiolocation Service was to provide reaccommodation spectrum for radiolocation users that will have to move out of the 1605-1705 kHz band when AM broadcasting is implemented in that band." The AM broadcasting proceeding was resolved in 2000, and a review of the FCC's Universal Licensing System (ULS) database finds that no one is licensed to use this non-federal Radiolocation Service allocation.

Currently, federal use of the 1900-2000 kHz segment is light, with only 10 assignments authorized to operate in this segment. "A single federal assignment authorizes land and mobile stations in the Radiolocation Service to transmit on 1922 kHz using a necessary bandwidth of 600 Hz within a protected radius of 193 kilometers centered on San Diego, California," the FCC noted in the *NPRM*. "All other federal assignments in the 1900-2000 kHz band are for unallocated uses, and thus, these assignments operate on an unprotected and non-interference basis."

The FCC is proposing to amend the US Table of Allocations and remove the federal and non-federal Radiolocation Service allocations from the 1900-2000 kHz band and the raise the secondary Amateur Radio Service allocation to primary status because "there appear to be few (if any) Radiolocation Service stations operating in this band," it said. "In addition, we note [from WARC-79] that 'this [Radiolocation Service] allocation was made for reaccommodation purposes and not to provide additional spectrum for radiolocations needs,' that the Commission has concluded its AM Expanded Band proceeding that would have prompted non-federal RLS licensees to relocate to the 1900-2000 kHz band and that this band was historically allocated to the Amateur Service on an exclusive basis."

New Amateur Service Band at 135.7-137.8 kHz In the US, the 130-160 kHz portion of spectrum is allocated to the Fixed Service and the Maritime Mobile Service on a primary basis for both federal and non-federal use. Delegates at WRC-07 allocated 135.7-137.8 kHz to the Amateur Radio Service in all ITU Regions on a secondary basis. Delegates also chose to restrict the use of this low frequency allocation to those Amateur Radio stations transmitting with a maximum equivalent isotropically radiated power (EIRP) of 1 W, as set forth in RR 5.67A.

Even though there are no non-federal stations in the Fixed Service or the Maritime Mobile Service that are licensed to operate at 135.7-137.8 kHz and federal use of this portion of spectrum is light, the FCC noted that electric utilities operate Power Line Carrier (PLC) systems in the 9-490 kHz band for "communications important to the reliability and security of electric service to the public." In ET Docket No. 02-98, the FCC considered allocating the 135.7-137.8 kHz band to the Amateur Radio Service on a secondary basis and examined the potential for amateur transmissions to cause harmful interference to the PLC systems. At that time, however, the FCC declined to do so "after finding the potential for interference between amateur operations proposed at that time and the incumbent PLCs, and noting the importance of the PLC operations in helping maintain critical electric infrastructure." The FCC noted the potential for some limited amateur operations in this band under individual experimental licenses and observed that such operations would "allow empirical data to be developed on the sharing possibilities in this band for future consideration."

Now that 135.7-137.8 kHz is now allocated internationally to the Amateur Radio Service on a secondary basis in all ITU Regions, the FCC has concluded that "it is an appropriate time to re-examine the potential for shared Amateur Service-PLC use of this band." It stated in the *NPRM* that it is seeking comments on whether 135.7-137.8 kHz band should be allocated to the Amateur Service on a secondary basis in accordance with RR 5.67A.

"Because PLC systems operating under Section 15.113 of the rules serve important functions, such as tripping protection circuits if a downed power line or other fault is detected in the power grid, we would only consider adding an amateur allocation if we were comfortable that Amateur Radio and utility PLC systems could successfully co-exist in this band," it stated in the *NPRM*. "We seek comment on the advantages and disadvantages, and other costs and benefits associated with changing our rules. For example, what benefits might accrue to the Amateur Radio community? To what extent do utilities deploy PLC systems on distribution lines in the 9-490 kHz band under our Part 15 rules, and how would those operations be affected were we to add a new secondary amateur radio service allocation in this band? What specific actions would PLC systems operators need to take if there were a secondary amateur radio service allocation in the band, and what are the associated costs?"

In addition, the FCC stated that is looking for comments on the whether the concept of requiring individual amateur stations to be "quasi-coordinated" for fixed use at a specific location still holds merit. The FCC did not pursue this option in 2003. "Are there other steps, such as limiting operating privileges in this frequency band (e.g., to Amateur Extra Class licensees) that would better facilitate amateur use of the band?" the FCC asked. "We also seek comment on the relevance of studies that discuss the potential for in-band Amateur Service radio transmitters to operate compatibly with PLC systems in light of any developments since our 2003 decision. In particular, we seek comment on the appropriate maximum field strength level and minimum separation distance from PLC systems for secondary Amateur Service operations in this band."

Cleaning Up the 10.0-10.5 GHz Band Rules With the concurrence of the National Telecommunications and Information Administration (<u>NTIA</u>), the FCC proposes to amend the Federal Table by revising the "10-10.45" GHz band and the reference to "G2" to read "10-10.5" and "G32," respectively. In the WRC-07 Table Clean-up Order, the FCC combined the 10-10.45 GHz and 10.45-10.5 GHz bands in the Federal Table. In doing so, the frequency band was inadvertently not changed to 10-10.5 GHz. In addition, the reference to G32 was mistakenly changed to G2.

The FCC will also revise the text of three footnotes (US58, NG42, NG134) that pertain to the 10-10.5 GHz band. First, it will revise US58 by adding the existing Amateur-Satellite Service allocation to the list of permitted non-federal services in the 10-10.5 GHz band so that this footnote correctly lists all permitted non-federal services, and it will renumber this footnote in frequency order as US128. Second, it will combine the text of NG42 and NG134 (which require that non-federal stations in the Radiolocation Service not cause harmful interference to the Amateur Service in the 10-10.5 GHz band and that these stations not cause harmful interference to the Amateur-Satellite Service in the 10.45-10.5 GHz sub-band, respectively) and renumber the new footnote in frequency order as NG50. --ARRL

HOMELAND SECURITY HAS SPENT \$430 MILLION ON RADIOS ITS EMPLOYEES DON'T KNOW HOW TO USE

Getting the agencies responsible for national security to communicate better was one of the main reasons the Department of Homeland Security was created after the Sept. 11, 2001, terrorist attacks.

But according to a recent report from the department's inspector general, one aspect of this mission remains far from accomplished.

DHS has spent \$430 million over the past nine years to provide radios tuned to a common, secure channel to 123,000 employees across the country. Problem is, no one seems to know how to use them.

Only one of 479 DHS employees surveyed by the inspector general's office was actually able to use

the common channel, according to the report. Most of those surveyed — 72 percent — didn't even know the common channel existed. Another 25 percent knew the channel existed but weren't able to find it; 3 percent were able to find an older common channel, but not the current one.

The investigators also found that more than half of the radios did not have the settings for the common channel programmed into them. Only 20 percent of radios tested had all the correct settings. The radios are supposed to help employees of Customs and Border Patrol, the Transportation Security Administration, the Coast Guard, Immigration and Customs Enforcement, the Federal Emergency Management Agency, the Secret Service, and other agencies with DHS communicate during crises, as well as normal operations.

DHS officials did not immediately respond to questions from ProPublica about what effect the radio problems could have on how the agency handles an emergency.

The \$430 million paid for radio infrastructure and maintenance as well as the actual radios.

In a response letter to the report, Jim H. Crumpacker, the Department of Homeland Security's liaison between the Government Accountability Office and the inspector general, wrote that DHS had made "significant strides" in improving emergency communications since 2003. But he acknowledged that DHS "has had some challenges in achieving Department-wide interoperable communications goals."

The recent inspector general's report is the latest in a string of critical assessments DHS has received on its efforts to improve communication between federal, state and local agencies. The Government Accountability Office reported in 2007 that the Department of Homeland Security had "generally not achieved" this goal.

DHS has assigned a blizzard of offices and committees to oversee its radio effort since 2003, which the inspector general's report claimed had "hindered DHS' ability to provide effective oversight." Also, none of the entities "had the authority to implement and enforce their recommendations," the report concluded. Tanya Callender, a spokeswoman for the inspector general, said the current office overseeing the effort hadn't been given the authority to force agencies to use the common channel or even to provide instructions for programming the radios.

The inspector general recommended DHS standardize its policies regarding radios, which DHS agreed to do. But it rejected a second recommendation that it overhaul the office overseeing the radios to give it more authority.

"DHS believes that it has already established a structure with the necessary authority to ensure" that its various agencies can communicate, Crumpacker wrote in his response letter. --Theodoric Meyer, TPM, ProPublica

ARRL'S LOGBOOK OF THE WORLD: BUG FIX IS IN PLACE

The fix for the Logbook of The World (<u>LoTW</u>) bug was implemented at 2103 UTC on November 28. Full credit goes to ARRL Information Technology Manager Michael Keane, K1MK, for figuring out what was happening and how to correct it.

There are two ways of uploading logs: via the LoTW website and by e-mail. LoTW users should note that e-mailed logs were not affected by the bug, so no e-mailed logs will need to be resubmitted.

At the time the fix was implemented, LoTW processing was running almost exactly three days behind. If a user's most recent upload was made before 2100 UTC on November 25 and it has not yet been

processed the file should be resubmitted. There should be no need to resubmit logs uploaded since 2100 UTC on November 25, which would include all CQWW CW DX Contest logs submitted after the end of the contest.

There is, however, a very slight chance that logs uploaded after this date might have been overwritten. If you find that your logs that were uploaded after November 25 are not appearing in your LoTW account, please wait until after December 3 to upload them again.

Thanks to everyone who has been patient while we grappled with this bug. The issue of slow processing speed is also being addressed, but it requires a hardware upgrade that will take several weeks to implement. Your continued patience and understanding will be appreciated. --ARRL Letter

ARRL UHF/MICROWAVE BAND PLAN COMMITTEE SEEKS INPUT 6 AND 3 CENTIMETER BANDS

Last year, in recognition of the need to update the published band plans for our UHF and microwave bands, the ARRL Board of Directors formed the UHF/Microwave Band Plan Committee to develop revised national plans for the amateur bands between 902 MHz and 3.5 GHz. After receiving extensive user input, the committee completed its task and the resulting band plans were approved by the Board in July 2012. The committee has now received an additional assignment to conduct a similar update to the 6 and 3 centimeter bands. In order to do this effectively, the committee needs to know how various segments of these bands are now being utilized around the country. You can help them by sharing what you know about local usage in your area and by asking other users -- both individuals and groups -- to do the same. Read more here. --ARRL Letter

QST -- THERE'S AN APP FOR THAT!

ARRL members who use Apple iOS mobile devices -- iPhone, iPad and iPod Touch -- can now download a new dedicated app to access and browse all issues of the digital edition of QST. This app allows ARRL members to read QST online or download individual issues of the journal for offline reading. This free app is available to ARRL members in the Apple App Store.

Using the New QST App: From your iOS device, go to the Apple App Store to search for and install the free QST app. Or simply click here to download the app now.

Verify your Apple ID password.

Open the app and go to the "QST Catalog" to browse available digital issues. Tap on the cover of an issue and select "Read" or "Download."

Log in with your ARRL website username and password. If you do not have an ARRL website username and password, please register here.

Each time you download an issue in the app, it is added to the "My QST Library" to view offline. Note: Before viewing issues offline, you must first initialize each issue online using your ARRL website login.

To stream embedded video and audio, you must be connected to the Internet.

This app may send anonymous usage statistics to ARRL and our service providers to help us improve QST and to better meet the needs of our members. To disable sending usage information, turn ON the "Disable Tracking" feature for the QST app in your iOS device settings. For more information, visit the Digital QST FAQ page and the ARRL Online Privacy Policy.

Using an Android or Windows Mobile Device? At this time, a native app is only available for Apple iOS devices. Users with Android or Windows devices can access the digital edition of QST from a web browser. The web version runs in an Internet browser on nearly any device, including desktop or laptop computers, smartphones, tablets and e-book readers. --ARRL Letter

FREEWARE, COMPUTER SECURITY, AND OTHER TOPICS

The following is a list of web sites of interest to amateurs. Dave Spoelstra, N9KT, presented this information at the 9-Nov. Indy Radio Club meeting.

Where to look for good freeware?

- http://www.techsupportalert.com/
- <u>http://ninite.com</u>
- http://www.techsupportalert.com/ good list of ham freeware

How to keep it all up to date:

• <u>http://filehippo.com/updatechecker/</u>

Logging:

- <u>http://www.eqsl.cc/qslcard/ADIFLoggerInfo.cfm</u> has a great list of logging programs. Just make sure you pick one that can read and write ADIF files.
- I use XMLog (<u>http://xmlog.com/</u>) for my general logging.
- http://www.logger32.net/
- http://www.dxlabsuite.com/

Contesting:

• <u>http://www.n1mm.com_N1MM</u> is the hands-down winner for contesting freeware.

Digital Modes:

- http://hamsoft.ca/_RTTY, SSTV, PSK with a Soundcard; Antenna Analyzer software.
- http://www.w1hkj.com/Fldigi.html Fldigi, a digital modem program for Linux/Free-BSD /
- XP / W2K / NT / Vista / Win7 / OS X
- <u>http://www.airlinkexpress.org/</u> Airlink Express is a user friendly digital mode software package.
- http://www.dxlabsuite.com/winwarbler/ WinWarbler
- http://www.iw5edi.com/ham-radio/?zakanaka,50 Zakanaka

SHORTS

DON'T FORGET POSTAGE RATES ARE GOING UP IN JANUARY - The United States Postal Service (USPS) announced price increases that will take place effective on Sunday, January 29, 2013. The USPS also announced the introduction of "a First-Class Mail Global Forever Stamp", which "will allow customers to mail letters anywhere in the world for one set price of \$1.10". The main changes that effect Amateur Radio operators are as follows:

Letters (1 oz.) — 1 cent increase to 46 cents Letters to all international destinations (1 oz.) — \$1.10 (currently \$1.05) Postcards — 1 cent increase to 33 cents

AMATEUR RADIO IN SPACE: THREE HAMS RETURN TO EARTH FROM ISS – Shortly before 9 PM EST on Sunday, November 18 (0200 UTC Monday, November 19), a Soyuz spacecraft carrying Expedition 33 Commander Sunita Williams, KD5PLB, and Flight Engineers Yuri Malenchenko, RK3DUP, and Aki Hoshide, KE5DNI, landed in the steppes of Kazakhstan, returning them safely to Earth from the International Space Station (ISS) after 127 days in space.

While aboard the ISS, Williams, Malenchenko and Hashide completed 39 contacts with schools via the Amateur Radio on the International Space Station (ARISS) project. According to NASA ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO, this ties with Expedition 15 for the fourth highest number of contacts. In 2011, Expedition 26 -- led by Scott Kelly -- set the record for having the most ARISS contacts at 73. Read more here. --ARRL Letter

HAM RADIO IN HOLLYWOOD: MORSE CODE PLAYS ROLE IN NEW SPIELBERG MOVIE – Producer Steven Spielberg has used Amateur Radio or Morse code in three of his last four movies: Super 8 (2011), The Adventures of Tin Tin (2011) and Lincoln (2012). Members of the Morse Telegraph Club -- an association of retired railroad and commercial telegraphers, historians, radio amateurs and others with an interest in the history and traditions of telegraphy and the telegraph industry -- played an integral part in the production of Lincoln.

"Nine of the 16 telegraph stations depicted in the War Department were fully operational," explained Morse Telegraph Club International President James Wade, WB8SIW. "These instruments could be operated in any combination through the use of a specialized computer program and custom-built terminal units for the process. When necessary, a hand key could be inserted in the individual telegraph loops so messages could be improvised." Read more here. --ARRL Letter

NTSB VS CEA ON DISTRACTED DRIVING AND DISTRACTED TRANSIT -- The National Transportation Safety Board wants to eliminate all driver distraction and is broadening its focus on the use of portable electronic devices in all types of vehicles. The issue is part of the NTSB's recently released "2013 Most Wanted List."

While acknowledging that distracted driving didn't begin when people began making calls or texting in the car, the National Transportation Safety Board still says that portable electronic devices that do not directly support the task at hand have no place in any vehicles. This includes automobiles, planes, trains, and just about any other vessel you might be able to think of. As such it argues that states and regulators can set the proper tone by banning the nonessential use of such devices in all areas of transportation.

The NTSB says that young drivers are more likely to use portable electronic devices while behind the wheel and therefore are especially at risk. It urges that laws, education, and enforcement efforts should place special emphasis on curbing the use of portable electronic devices by these younger drivers.

The NTSB goes on to say that companies should develop and vigorously enforce policies to eliminate distractions. It also says that manufacturers can assist by developing technology that disables these devices when in reach of operators.

But the NTSB has some strong opposition from the Consumer Electronics Association or CEA. That

organization says that while it applauds the effort, it also notes that the NTSB misses the mark on the use of portable electronics in vehicles. It says that calling for an abstinence only approach, the NTSB ignores established realities of human behavior. It also claims that in-vehicle technology when used correctly can make for vastly safer roadways.

The CEA says that rather than calling for broad regulations or outright bans, policymakers should encourage the use of the many innovative driver safety technologies coming on to the marketplace. The CEA notes that it has already forwarded the NTSB a list of third-party applications that promote safe use of portable technologies in the automobile.

How any of this might affect mobile or even hand held pedestrian portable operations in the future by ham radio operators and other users of two-way radio is at this time unknown. But the NTSB stand seems to be that any and all forms of distraction must be removed from the public's hands while in transit. And that's not likely to sit well with the public at large. - Amateur Radio Newline

TOWER WORK WEBINAR DECEMBER 12 - The World Wide Radio Operators Foundation will be presenting a webinar on towers and how to work safely on and around one on.

Titled "Tower Work -- Tips, Techniques, and Tools," this presentation taught by John Crovelli, W2GD, and Don Daso, K4ZA. During the session the two will outline things that they have learned from almost 100 years of combined experience, focusing on safety, cost savings, and of coarse problem solving.

The hour long webinar will begin at 9 PM Eastern Standard Time on Wednesday, December 12th which equates to Thursday, December 13th at 02:00 UTC. Registration is free to hams world-wide at tinyurl.com/tower-webinar-registration. (K4ZW, QRZ.com) – Amateur Radio Newsline

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