

RCA AMATEUR RADIO CLUB

MARCH, 2012

MONTHLY NEWSLETTER

INDIANAPOLIS, IN

THE NEXT MEETING OF THE **RCA AMATEUR RADIO CLUB** WILL BE
TUESDAY, MARCH 13th, 6:30 PM AT G.T. SOUTH'S,
5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE FEBRUARY MEETING -- At the 14-February meeting K9RU announced there has no action on a new home for the repeater. It currently is resting in his basement. No Field Day site has yet been selected for the joint Indy Radio Club / RCA Club FD operation. Several sites are being investigated. There is a fairly large contingent of the FD "regulars" who are planning to drive to New Mexico to operate. If you're interested in attending, email Jim at k9ru@arrl.net.

SOME RCA HISTORY – We recently received a copy of *RCA Employees Amateur Radio SSB Net*, Net Newsletter from September, 1969. It was sent to us by Wendel Arms, K9ILD, who found it when his father-in-law, K9FHD, became a silent key. Old RCA guys, take a look and see if you recognize any names or calls: http://www.w9rca.org/RCA_SSB_Net.pdf

Speaking of history, remember *RCA Ham Tips*? N4TRB has almost a complete set here: http://n4trb.com/AmateurRadio/RCA_Ham_Tips/rca_ham_tips.htm

TELESCOPING MAST AVAILABLE -- A metal telescoping mast, approximately 40 to 50 ft., is available from the family of a silent key. It is on the east side of Indianapolis. Send an email to <mailto:af9a@arrl.net> for the contact info.

TO ALL INTERESTED IN AMATEUR RADIO AND RELATED AREAS: Don't miss the next meeting of the Indianapolis Radio Club, this coming Friday, March 9, at 7:00pm.

The meeting will be held at the North Meridian Center of IVY Tech. This is the old AUL building located just north of Fall Creek Parkway, east of Illinois Street. Point your browser to http://indyradioclub.org/pictures/IVYTech_map.pdf to see a map. The building marked "NMC" is where the meeting will be.

Dave Gingrich, K9DC, will be giving a presentation on IRLP and related areas. Quoting from an email that Dave sent out: "If you are interested in learning a bit more about IRLP, repeaters, and how to use it, plan on attending the next meeting of the Indianapolis Radio Club, Friday March 9 at 1900. I will be presenting at the club meeting.

How it works. How to operate it. Photo tours and equipment demo." Hope to see you there!

WEATHER SPOTTER TRAINING, MARION COUNTY – The annual weather spotter training session for Marion County will be on Saturday, March 24, 9:00 to 11:00 AM at the Masonic Lodge, 7502 E 56th St. in Lawrence. That is just east Lawrence Central High School on the north side of 56th St. All amateurs and others interested are invited to attend. For other sessions <http://indyhams.org/events/>

HELP NEEDED FOR TWO MARATHONS SCHEDULED FOR HAMILTON COUNTY -- Hamilton County has two events that need some volunteer amateur radio operators.

The **Sam Costa Marathon** on March 24th <http://samcosta.com/> has an expected need of 15 operators and right now we need around 8 more operators.

The **Carmel Marathon** on April 21st. <http://carmelmarathon.com/pages/home> has an expected need of 28 operators total and right now we need at least 10 more operators.

If you're interested in helping to provide communications for these events your assistance would be greatly appreciated. Please contact Russ Simpson, EC Hamilton County to volunteer for these events

INDIANAPOLIS RADIO CLUB WILL CHARTER A BUS TO DAYTON -- The Indianapolis Radio club is chartering a bus to go to the Dayton Hamvention again this year. This will be on Saturday, May 19, 2012 and the cost will be \$30 per person for the round trip. Admission to the Hamfest and the food stops are not included in this price. This is a great way to go to the hamfest and avoid any parking problem. It is to the door service and they stop at McDonalds in Richmond on the way over for breakfast and at MCL for dinner on the way back. --K9RU

HAMFESTS, OPERATING EVENTS & TESTING

Mar 9 IRC monthly meeting, IRLP
Mar 10 RCA/IRC Test session, 12pm-2pm, EDS Training Facility, 4020 Georgetown Rd., Indy.
Contact Ronda Curtis, ws9h@arrl.net
Mar 24 Weather Spotters training, Marion County
Mar 24 Columbus Hamfest, Columbus, IN
Apr 13 IRC monthly meeting, Tom Chance, K9XV on antennas
Apr 21 North Central Indiana Hamfest, Kokomo, IN <http://www.nci-hamfest.net/>
May 11 IRC monthly meeting, VOIP by Dave Gingrich, K9DC
May 18-20 Dayton Hamvention, Hara Arena, Dayton, OH <http://www.hamvention.org>
June 8 IRC monthly meeting, annual auction
June 23-24 ARRL Field Day
July 14 Indy Hamfest, Camp Sertoma, Indianapolis <http://www.indyhamfest.com/>

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.

ARRL PUBLISHES NEW GUIDELINES FOR 60 METERS

Thanks to the FCC's *Report and Order* issued November 18, 2011, radio amateurs will enjoy a number of new privileges on the 60 meter band, beginning at midnight (EST) March 5. These new privileges include a boost in effective radiated power from 50 to 100 W, as well as the ability to use CW and certain digital modes.

Late last year, the ARRL HF Band Planning Committee surveyed 60 meter operators to gather opinions about how to best use the new privileges. On the subject of creating a specific band plan, the survey results indicated little consensus beyond the fact that 5403.5 kHz should retain its status as a *de facto* "DX channel." On the other hand, survey respondents made a number of suggestions for general operating practices.

Based on the survey results and subsequent research, the committee declined to propose a specific band plan for 60 meters at this time. Instead, the committee created a "Recommended Practices" document, [http://www.arrl.org/files/file/Regulatory/Recommended Practices for 60 Meters%20-%20Version%206_4.pdf](http://www.arrl.org/files/file/Regulatory/Recommended_Practices_for_60_Meters%20-%20Version%206_4.pdf) The 60 meter pages on the ARRL website have been updated to reflect the changes brought about by the *Report and Order*.

The April issue of *QST* will also include an article by ARRL Regulatory Information Manager Dan Henderson, N1ND, offering a detailed discussion of the new 60 meter privileges and recommended operating practices. –ARRL Letter

AMATEUR RADIO GETS SECONDARY MF ALLOCATION AT WRC-12

It's official -- delegates attending the 2012 World Radiocommunication Conference (WRC-12) have approved a new 7-kilohertz-wide secondary allocation between 472-479 kHz for the Amateur Radio Service. Agenda Item 1.23 had both its first and second readings in Plenary Session on Tuesday, February 14; to become part of the ITU's Radio Regulations, each Agenda Item must be read twice in Plenary Session. While the Final Acts will be signed on Friday, February 17 at the close of the Conference, the new allocation will not take effect until it is entered into the Radio Regulations on January 1, 2013. In any case, no amateur can use the band until his or her national regulations are revised to implement the allocation. Read more <http://www.arrl.org/news/amateur-radio-gets-secondary-mf-allocation-at-wrc-12> –ARRL Letter

500 KHZ EXPERIMENTAL GROUP SPARKED INTEREST IN MF OPERATION

In September 2006, the FCC's Office of Engineering and Technology granted a Part 5 experimental license -- WD2XSH -- to the ARRL on behalf of a group of radio amateurs who were interested in investigating spectrum in the vicinity of 500 kHz. Called the ARRL 500 kHz Experiment, this group of hams -- led by Fritz Raab, W1FR -- received permission to experiment and do research between 505-510 kHz using narrowband modes at power levels of up to 20 W effective radiated power (ERP), using CW and PSK31.

The original 500 kHz license called for 23 discrete fixed sites across the US: at Raab's QTH in Vermont, as well as at sites in Arkansas, California, Colorado, Illinois, Louisiana, Massachusetts, Minnesota, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Oregon, Rhode Island, Tennessee, Texas and Virginia. In 2008, the FCC expanded the scope of the experimental license, allowing for more frequencies, more stations and portable operations: The group could now operate between 495-510 kHz, the number of stations increased from 23 to 42 and participants could now operate within 50 km of their designated stations.

At the 2012 World Radiocommunication Conference (WRC-2012), delegates approved an amateur secondary MF allocation between 472-479 kHz. The ARRL would like to acknowledge the contributions of the participants in the ARRL 500 kHz Experiment to the recent approval of a new amateur secondary MF allocation, and to thank them for their efforts. Read more [here](#). –ARRL Letter

PAYROLL TAX BILL INCLUDES PROVISION FOR AMATEUR RADIO STUDY

A bill that passed both the House and the Senate on February 17 -- and signed into law by President Obama on Wednesday, February 22 -- includes a provision for a study of the uses and capabilities of Amateur Radio Service communications in emergencies and disaster relief.

Section 6414 of the *Middle Class Tax Relief and Job Creation Act of 2012* mandates the completion of the study, with a report of the findings to the House Committee on Energy and Commerce and the Senate Committee on Commerce, Science, and Transportation. This study would "use the expertise of stakeholder entities and organizations" to recommend how to best use radio amateurs in emergency communications and disaster relief efforts, and how to best utilize the Amateur Radio Service in coordination with the federal government in these efforts. In addition, the study would also discuss the

effects of unreasonable or unnecessary private land use restrictions on residential antenna installations and recommend ways to remove such impediments.

The bill passed in the House by a vote of 293-132. In the Senate, it passed by a 60-36 vote. Read more <http://www.arrl.org/news/payroll-tax-bill-includes-provision-for-amateur-radio-study> –ARRL Letter

NOBEL LAUREATE JOE TAYLOR, K1JT, ADDRESSES PLENARY SESSION AT WRC-12, RECEIVES ITU GOLD MEDAL

On Friday, February 3, delegates and attendees at the 2012 World Radiocommunication Conference (**WRC-12**) had the pleasure of listening to Joe Taylor, K1JT, share his vision of the future of radiocommunication. Taylor -- an ARRL Member -- won the **Nobel Prize in physics in 1993** for the discovery of a binary pulsar, a discovery which has opened up new possibilities for the study of gravitation. After the speech, International Telecommunication Union (**ITU**) Secretary General Dr Hamadoun Touré, HB9EHT, presented Taylor with the ITU Gold Medal in recognition of Dr Taylor's outstanding contribution to the research in the field of radiocommunication.

Dr Touré introduced Dr Taylor to the Plenary. In his introduction, he told the audience that Amateur Radio led to Taylor's career as a radio astronomer, and ultimately to his winning the Nobel Prize: "I'm told that an early interest in Amateur Radio led Joe Taylor to an exciting career in radio astronomy, which then earned him the 1993 Nobel Prize in physics. I share his interest in Amateur Radio with passion, but will that lead me to a Nobel Prize? I'm working on it!"

Dr Taylor began his seven minute speech by thanking the WRC-12 delegates for the job they were doing at the Conference. "I understand that you have come to Geneva from more than 150 of the ITU's Member States," he said. "You are here to do an important job, an essential one, for nearly all of humanity in today's world. You are charged to do your utmost to accommodate the wide variety of competing interests of all users of the radio frequency spectrum and its available orbits for Earth satellites. This is surely not an easy task. Most people give very little thought to the complicated issues that you face. Why should they, since for most of us, most of the time, the technologies that depend on these limited resources just seem to work. But I know, and each one of you knows, that much background work and many long negotiations are often necessary in order to make everything fit together and work in harmony."

He noted new discoveries "that have fundamentally changed or expanded our understanding of nature's laws, or might do so in the near future." But, he said, these discoveries will not affect the ITU or future WRCs for "at least not for many decades to come. This is because our fundamental understanding of electromagnetism is already in a mature state. **Maxwell's equations**, after all, have been thoroughly tested now for 150 years. And in principle, they tell us everything we need to know in order to exploit the wonders of telecommunications at the speed of light. Our understanding of these laws of nature, including what they tell us is possible and not possible, is not likely to change, even in the more distant future. But of course we can still develop new and improved ways of generating, controlling and detecting electromagnetic radiation, as well as clever new ways of effectively sharing the spectral resources that we have. Such advances as these will surely continue, and perhaps they will even increase. The fundamental science may be mature, but technology's ability to exploit and build upon electromagnetic phenomena is still rapidly developing.

"It's interesting to comment in passing on the fundamental differences between the bounded radio frequency spectrum and the balance, for example, on accessible fossil fuels. Limitations of the radio spectrum are a result of fundamental laws of nature. Every nation on Earth, and indeed every person on Earth, has access, in principle, to the same spectrum as everyone else. The amount of accessible oil, on the other hand, depends on the much more complicated way on how the Earth formed and evolved over time, and fossil fuels are not evenly distributed over the Earth and they are expendable. When it's

gone, there's none left. The electromagnetic spectrum, on the other hand, will always be there, whether or not we humans are around here to enjoy using it. Moreover, the spectrum can be shared by many users simultaneously, and shared use can be especially effective if adequate planning is done in advance. That planning, of course, is an essential part of your assignments here.

"Future technologies will surely make even better uses of wireless communication than we do today. I foresee plenty of scope for contributions for new technologies. Information and communication technologies have much to offer for the betterment of the human condition everywhere, and perhaps especially so in the developing world. It is extremely important to continue seeking the best efficiencies in the use of the spectrum. I wish you every success in your task of creating wise and fair guidelines for regulators and policy makers who must allocate the limited resources in the very best interest of all mankind."

You can view Dr Taylor's speech <http://www.youtube.com/watch?v=F028RkLefl> courtesy of Andy Clegg, W4JE

[From Joe, K1JT -- In addition to the formal address I made to WRC-12, the World Radiocommunication Conference held by the International Telecommunications Union, there was a gala celebration celebrating the 50th anniversary of the International Amateur Radio Club (IARC).

If you're interested, a few more pix of both events can be found at <http://www.flickr.com/photos/itupictures/collections/72157629055161979/>

After the gala dinner, several of us -- OM1AM (president of IARC), SV3SJ, G0MJW, K1JT -- put 4U1ITU on the air on 1296 MHz EME. We had only 4x55 el loopers and 20 W from a DB6NT transverter, but using WSJT we provided new DXCC credits to a handful of stations on three continents. It was a blast! -- 73, Joe, K1JT]

WRC-12 DELEGATES PLACE POSSIBLE 5 MHZ ALLOCATION ON AGENDA FOR NEXT WRC

One of the responsibilities of each WRC delegation is to set the agenda for the next WRC. WRC-12 delegates approved an Amateur Radio-related agenda item for the upcoming WRC-15: To consider the possibility of making an allocation of an appropriate amount of spectrum, not necessarily contiguous to the Amateur Service on a secondary basis within the band 5250-5450 kHz. This will be Agenda Item 1.4 at WRC-15.

"It is always a challenge to have items placed on the agenda for future WRCs," IARU President Tim Ellam, VE6SH, told the ARRL. "I am pleased that we were successful in having an Agenda Item for a potential allocation at 5 MHz on a secondary basis. There will be much work to do over the next ITU study group cycle. Much appreciation is owed to the IARU and the national delegation teams in Geneva for their hard work on this issue."

According to ARRL Chief Executive Officer David Sumner, K1ZZ, the original 5 MHz proposal came from Cuba. "The IARU team worked hard to line up support," he explained. "The factor that worked most in our favor was that at WRC-07, a proposal for a 5 MHz agenda item for WRC-12 failed to gain enough support, so there was a feeling that the Amateur Service deserved better treatment this time around. We did have active support from a number of administrations in Latin America which helped a lot, but a lot of others also had to agree to get it on the agenda. The coordinators of future Agenda Items on behalf of the regional telecommunications organizations, such as CITEL and CEPT, eventually agreed on a package of Agenda Items that included ours." Read more <http://www.arrl.org/news/wrc-12-delegates-place-possible-5-mhz-allocation-on-agenda-for-next-wrc> -
-ARRL Letter

HOLLYWOOD MOVIE FEATURES MORSE CODE, HOMEBREW EQUIPMENT -- AND SEA MONSTERS!

In the movie *Journey 2: The Mysterious Island*, Sean Anderson (played by Josh Hutcherson) receives a coded distress signal that comes from a mysterious island where no island should exist. Sean decides to follow the signal with the unwilling assistance from his stepfather Hank (played by Dwayne “The Rock” Johnson).

The movie opens in Dayton, Ohio with Sean on his motorcycle, being chased by police officers. Sean had been caught breaking in to a “satellite facility.” When questioned by Hank, Sean confesses that he had received a coded message from his grandfather (played by Michael Caine), but his equipment was too weak to copy it; he decided to go somewhere where there were bigger antennas. The message -- a string of one and two syllable words taken from the books by Jules Verne -- makes no sense to Sean. Hank, a former US Navy cryptographer, offers to help decode the message; he feels this will be a good chance to bond with his stepson.

Immediately, Hank figures out that the message is really in Morse code: each one syllable word is a “dit,” while each two syllable word is a “dah.” Hank translates the message, which gives clues to the location of the grandfather’s whereabouts.

Sean explains to Hank why he wants to hunt down the signal: “A few nights ago, a radio signal got sent out from these coordinates. It could be the mysterious island that Jules Verne wrote about.”

Hank replies: “You think you’re gonna travel halfway around the world and meet up with some lunatic who’s messing around on a ham radio?”

“That’s not some lunatic,” Sean says. “That’s my grandfather.”

This scene takes place at Sean’s desk in his bedroom. There are various pieces of radio gear -- such as a Kenwood TS-450s transceiver, an Ameritron AL-80 linear amplifier, an ICOM IC-28A 2 meter transceiver, an MFJ 949E antenna tuner, a Lowe HF-150 receiver, a microphone and books on radio dating from the 1930s -- on the desk; when Sean’s house is shown from the street, however, no antennas are visible. Behind the desk are posters from Jules Verne works, as well as maps -- including *The Radio Amateur’s World Map* from Yaesu -- and QSL cards on the bulletin board behind the desk. One of these QSL cards belongs to Ned Conklin, KH7JJ, of Honolulu, Hawaii. Conklin is the President of the Battleship *Missouri* Amateur Radio Club, **KH6BB**. “The movie people contacted Joe Speroni, AH0A, looking to borrow radio gear for the movie,” Conklin told the ARRL. “He didn’t know anyone who had equipment they could loan, so he contacted me to see if the *Missouri* had any. We provided him with some gear, as well as some beautiful QSL cards that we had received from hams in the South Pacific. They shot the scene with the radios here in Hawaii, but the movie people asked if they could take the equipment to North Carolina in case they had to use it again.”

Through the clues in the coded message, Sean and Hank learn that Sean’s grandfather is on an island off the coast of Palau, located about 500 miles east of the Philippines. The two go to Palau, in hopes that they can charter someone to take them to the island where they believe Sean’s grandfather to be. There, they meet up with Gabato (a helicopter pilot played by Luis Guzman) and his daughter Kailani (played by Vanessa Hudgens). The group makes their way to the island and finds the grandfather, who takes them to the hut that he has built out of the boat that brought him to the island.

The grandfather explains that he was glad Sean was able to receive and decipher his message. He said he built his radio in three months “out of an alarm clock, copper wire and a teaspoon.” When the others tell him that they should get on the radio and call for help, the grandfather says that would be a good thing, but “**you have to wait for the communications satellite to come around into the proper position.**” When asked when the next time would be, the grandfather says “Oh, about two weeks.” After this scene, radio is never mentioned again.

Eventually, the five get off the island in a most unique way, with Sean and Hank returning to Dayton. Kailani also ends up at Dayton as a student at the University of Dayton. Thanks to the remarkable way the group escapes the island, Gabato's fortune is made and he expands his tour business. And the grandfather? He's ready to set off on another adventure.

"We appreciate being asked to be a part of *Journey 2: The Mysterious Island*," Conklin told the ARRL. "It is always thrilling to see Amateur Radio in popular culture, and hopefully young people will feel the excitement and want to explore the magic of radio." –**ARRL Letter**

SHORTS

REPUBLIC OF SOUTH SUDAN ASSIGNED Z8 PREFIX -- After a wait of more than seven months after being [accepted as a member of the United Nations](#), the Republic of South Sudan [received its prefix block from the International Telecommunication Union \(ITU\): Z8](#). On July 14, 2011 -- after South Sudan's admittance to the UN -- the new country became a DXCC entity by way of Section II, 1(a) of the [DXCC rules](#). -- *Thanks to The Daily DX*

NASA SELECTS AMSAT FOX SATELLITE TO JOIN PROGRAM - Project ELaNa -- NASA's "Educational Launch of NanoSat" managed by the Launch Services Program at the Kennedy Space Center -- announced on February 10 that the AMSAT Fox-1 CubeSat has been selected to join the program. NASA will work with AMSAT in a collaborative agreement for NASA to cover the integration and launch costs of satellites deemed to have merit in support of their strategic and educational goals. Read more <http://www.arrl.org/news/nasa-selects-amsat-fox-satellite-to-join-program>

NEW SATELLITES REACH ORBIT -- On February 13, a European Space Agency *Vega* rocket lifted off from Kourou, French Guiana on its inaugural flight. It carried the Laser Relativity Spacecraft to orbit along with eight student-built MicroSats and CubeSats. The student satellites will transmit telemetry in the VHF, UHF and microwave amateur bands, with one satellite also including a voice repeater. Read more [here](#). –ARRL Letter

HSMM-MESH (High Speed MultiMedia) – A great new technology that we as amateur radio Operators can take full advantage of. It's Wi-Fi on steroids! We don't have to be hobbled by part 15 limitations, we can also use OUR frequency allocations, and avoid a majority of interference by part 15 devices.

Common, inexpensive off the shelf equipment is used and or simply modified for this application and enable Hams to have a robust mesh network for uses such as VOIP, callbook lookups, communication, SAR, mapping, EM-Comm, etc. The applications are endless! More information at <http://hsmm-mesh.org/>

HAMS IN SENEGAL TO GET 6 METERS - its national ham radio society that following its application to the Regulatory Agency for Telecommunications and Posts, the band 50 to 51 MHz has been officially allocated to that nations amateur service on a primary basis. This allocation becomes effective when the new ITU Radio Regulations come into force. Therefore any contacts made on 6 meters before that date have to be considered as unauthorized. (6W7RT)

RAC TO SPLIT ONTARIO INTO FOUR SECTIONS - On February 6, Radio Amateurs of Canada (RAC) issued a statement on their website that the Ontario Section would be split into four new RAC Administrative Sections, effective September 1, 2012. The reason given for there structure was "...to create a management model that better communicates with, and represents the interests of, the overall Ontario amateur population."The Ontario Section will be dissolved and be replaced with four new RAC Sections: Ontario North, Ontario South, Ontario East and the Greater Toronto Area. The new section abbreviations will be announced when final. Read more [here](#).

BILL SIMONS, W9BB (ex-W9YXJ) SK –Developer of Shure Microphones passed away in Minnesota on January 2. He was 84. He earned his Class B ticket in 1941 at the age of 14 and converted a cathedral radio into his first transmitter. Later, Simons earned DXCC using homebrew gear of his own design. Eventually, he earned a top spot on the ARRL DXCC Honor Roll,

"We don't like their sound, and guitar music is on the way out,"

-- Decca Recording Co. rejecting the Beatles, 1962.

THE *RCA ARC MONTHLY NEWSLETTER* IS COMPILED AND EDITED BY JIM RINEHART, AND JIM KEETH. ALL MATERIAL CONTAINED HEREIN IS OBTAINED FROM THE SOURCES CREDITED AND EDITED FOR THIS NEWSLETTER. EMAIL TO <mailto:WebMaster@w9rca.org>. Check our web site at <http://www.w9rca.org/>