

RCA AMATEUR RADIO CLUB

JANUARY, 2011 MONTHLY NEWSLETTER INDIANAPOLIS, IN

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

RCA ARC NEWS

SUMMARY OF THE DECEMBER MEETING – K9RU announced the Club still has stuff to sell at this years hamfests. Not that much, but enough. In the coming year, there will be license testing at the W9IMS Comm Center and the Indy Radio Club on alternate months. It's not too early to start thinking about Dayton. The Indy Radio Club will again charter a bus.

DAVE BROWN, W9CGI still has some equipment for sale, now at reduced prices. Dave would like to get rid of it now so he doesn't have to drag the stuff to hamfests. The list is on the last page of this newsletter.

<p>SNOW? Meeting? If we're having snow on the Tuesday afternoon before the scheduled Club meeting, check your email to make sure the meeting has not been cancelled. We'll try and make that decision by mid afternoon and send an email. –K9RU</p>
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HAMFESTS, OPERATING EVENTS & TESTING

Jan 8-9	RTTY Roundup
Jan 22-24	January VHF Sweepstakes
Mar 5	Dugger Hamfest, Dugger IN.
July 9	Indy Hamfest, Camp Sertoma, Indianapolis.

See the ARRL Contest Branch page, <http://www.arrl.org/contest-update-issues>, the WA7BNM Contest Calendar, <http://www.hornucopia.com/contestcal/> and the ARRL Special Event Stations page, <http://www.arrl.org/special-event-stations> for more info.

INDY ARES NET AND NEWS LINE MOVE TO W9ICE 146.97 MHz REPEATER

Effective January 5, 2011, the weekly ARES net will move to the W9ICE 146.970 (PL 107.2) repeater. Thanks to the W9IRA Repeater Association for its many years of service and support for ARES. It is hoped that all concerned will react with enthusiasm and support the new format of training at its new location. The many hams that use the 146.700 will have this repeater for regular use during prime time and those interested in ARES training will have a place to meet and train as well. This is the primary reason for the change and I would like to thank all who belong to and support the ARRL and its ARES program. --Ken Sullivan / N1HQB and the ARES / RACES TEAM

AMATEUR ALLOCATION AT LOWER MF GAINS FORMAL SUPPORT IN THE AMERICAS

A secondary allocation to the Amateur Radio Service at 461-469 and 471-478 kHz gained inter-American support in meetings held earlier this month in Bogota, Colombia, with the Permanent Consultative Committee II (PCC.II) of the Inter-American Telecommunication Commission (CITEL) adopting the US position for the MF allocation. World Radiocommunication Conference 2012 (WRC-12) Agenda Item 1.23 calls on participants “to consider an allocation of about 15 kHz in parts of the band 415-526.5 kHz to the Amateur Service on a secondary basis, taking into account the need to protect existing services.”

Canada -- which had previously supported a secondary allocation at 472-487 kHz -- withdrew that support and aligned itself with the US at the meeting in Bogota. Over the course of the meeting, Argentina, Brazil, Colombia, the Dominican Republic, Uruguay and Venezuela signed on to have CITEL present the agenda item at WRC-12 as an Inter-American Proposal (IAP). The support of six countries is required for a proposal to gain IAP status. The US agreed to support the allocation earlier this year, despite initial opposition by maritime interests.

As a member of the US delegation, ARRL Technical Relations Specialist Jon Siverling, WB3ERA, attended the meeting, serving as Rapporteur for the agenda item. IARU Region 2 President Reinaldo Leandro, YV5AMH, was also in attendance on behalf of the IARU. The adoption of an affirmative IAP on Agenda Item 1.23 represents an important milestone in the ARRL's and the IARU's international advocacy efforts.

ARRL Chief Executive Officer David Sumner, K1ZZ, explained that while the milestone is important, there is still work to be done on the agenda item to maximize success at WRC-12: “While we still face an uphill battle internationally, gaining the support of one of the major regional telecommunications organizations this early in the process improves our chances for achieving an allocation at WRC-12.”

CITEL is one of six regional telecommunications organizations whose formal positions carry significant weight during deliberations at a WRC. The WRC-12 is scheduled for January 23-February 17, 2012 in Geneva. –ARRL Letter

NCVEC RELEASES NEW GENERAL CLASS QUESTION POOL

The Question Pool Committee (QPC) of the National Conference of Volunteer Examiner Coordinators (NCVEC) released the new General class (Element 3) question pool on Tuesday, December 7. This new question pool -- including graphics and diagrams -- will become effective for all General class examinations administered on or after July 1, 2011; it will remain valid until June 30, 2015. The current General question pool that became effective July 1, 2007 will expire June 30, 2011. The new General pool contains 457 questions, from which 35 are selected for an Element 3 examination. The current Technician class question pool that was effective July 1, 2010 is valid through June 30, 2014. The current Amateur Extra class pool that was effective July 1, 2008 is valid until June 30, 2012.

ARRL SHOWS IBEC BPL SYSTEMS ARE INTERFERING, VIOLATING FCC RULES

The ARRL has filed a complaint with the Federal Communications Commission documenting ongoing harmful interference and egregious rules violations by Broadband over Power Lines (BPL) systems installed by IBEC, Inc. in Virginia, Pennsylvania, and Indiana. The ARRL has requested that the FCC

“initiate immediately an enforcement proceeding regarding these BPL systems, and cause them to cease operation until such time as they are each in full compliance with the Commission’s Rules.”

Contrary to earlier representations to the ARRL and to statements in the online BPL database, IBEC’s systems in these locations are not universally notching the Amateur bands as is necessary in order to avoid emissions at levels that are likely to cause harmful interference to licensed Amateur Radio stations. In fact, measurements by ARRL staff and confirmed independently show that IBEC systems are not even notching the aeronautical bands that the FCC rules require BPL systems to avoid and are operating at power levels that cause radiation well in excess of the FCC limits.

The ARRL even discovered IBEC BPL systems in operation that are not listed in the online BPL database – another clear violation of the FCC rules, which require listing 30 days prior to initiation of service.

For months, amateur operator Kevin Ward, K4BDR of Afton, Virginia has experienced harmful interference at his home as well as during mobile operation during his regular commutes to work. The BPL system in his area uses power lines owned by the Central Virginia Electric Cooperative. Complaints to IBEC have been fruitless. Measurements taken in the area of Lovingson and Arrington, Virginia show that the system is operating well in excess of maximum radiated emission limits and without necessary notching. Measurements of radiated emissions from an IBEC system in Martinsville, Indiana using power lines owned by the South Central Indiana Rural Electric Membership Cooperative (SCI REMC) gave similar results.

IBEC systems were observed operating in Somerset, Pennsylvania and Fairfield, Virginia well above permitted radiated emission levels, despite there being no listing in the online BPL database anywhere in the vicinity of these locations.

ARRL General Counsel Christopher D. Imlay, W3KD observed, “The information supplied to the FCC in support of this complaint amply justifies the modifications of the BPL rules urged by ARRL in ET Docket No. 04-37, including the mandatory, full-time notching of all Amateur Radio allocations by BPL systems, to a notch depth of at least 30 to 35dB.” This rulemaking proceeding was reopened by the FCC as a belated response to an April 2008 order by the United States Court of Appeals for the District of Columbia Circuit, which ruled in favor of the ARRL in finding that the FCC had failed to comply with the Administrative Procedure Act and had not provided a reasoned justification for some of its decisions in adopting rules for BPL systems. --ARRL

GENERAL MOTORS TURNS TO HAM RADIO TO SOLVE ANTENNA PROBLEM

When General Motors -- the world’s second largest auto maker -- encountered a problem with the AM/FM antenna on its 2011 Chevrolet Camaro convertible, it was at a loss as to what to do. Spy photographs showed a pre-production version of the car with a long whip-style antenna on its rear fender. After what GM called “an outcry among Camaro enthusiasts,” the company decided to rethink the antenna. But how?

On hardtop Camaros, the antenna is integrated into the rear windshield, but given the disappearing nature of this car’s roof, that wasn’t possible on the convertible. So GM turned to two antenna engineers -- Don Hibbard, W8DBH, and Gregg Kittinger -- who were tasked with doing what some thought was impossible: concealing the AM/FM antenna without sacrificing radio reception, while not putting it inside the Camaro’s windows.

Hibbard and Kittinger managed to find a way to bury the AM/FM antenna inside the svelte spoiler perched on the car’s rear deck lid. All that is visible is a shark fin antenna (used for satellite radio, OnStar and cellular signals), while the separate whip antenna -- built into the spoiler -- is used to

receive AM and FM radio signals. He and Kittinger knew they had to find a way to preserve the vertical polarization of an AM/FM antenna, so they tried a few possibilities before coming up with the idea of placing the half-wavelength horizontal antenna in the spoiler. According to GM, this is a first.

A ham since 1977, Hibbard -- the holder of an Advanced class license -- is a self-described antenna nut, crediting his Amateur Radio background as a precursor for his love for antennas. He was first licensed when he attended Lansing Community College where he was studying electrical engineering. "One of my professors asked us in class if we would be interested in getting licensed," he told the ARRL. "We already knew the technical stuff from our college courses, but we settled in to learn Morse code, the FCC regulations and everything else you needed to know to become a ham."

After graduating, Hibbard went to work for General Motors in the electromagnetic compatibility (EMC) lab. A few years ago when a position in the antenna validation department opened, he jumped at the chance. "Through ham radio, I've always loved playing with antennas," he said. "As hams, we are always building and experimenting. Sometimes at work, when I'm confronted with a problem, I say, 'I did such-and-such on an antenna for a ham band. I wonder if it will work here.' So my amateur experience with antennas has definitely come into play here at work."

The spoiler AM/FM antenna is an active antenna module that does all its impedance matching and amplification before sending back to the receiver. But when asked about the possibility of an amateur antenna in the spoiler, Hibbard just chuckled. "This antenna just receives, it doesn't transmit," he told the ARRL. "We can get away with a receive-only antenna in the spoiler. I'm not so sure about a ham antenna."

Hibbard said that the unorthodox placement of the antenna within the body of the vehicle created a number of technical challenges, such as balancing form by preserving the car's styling and maintaining unimpeded audio reception. "Where other automakers have tried and failed, Chevy succeeded," said Hibbard. "We hope to take what we've learned with the Camaro convertible, build on it and apply it to future vehicles."

Hibbard said that with work and kids in college, he has not found as much time as he would like to be active once again on the air; he counts 15 meters as his favorite band and SSB his mode of choice. "I really enjoy contesting, ARRL Field Day and the ARRL Sweepstakes," he said. "I also love experimenting and seeing what I can do. After all, I'm a ham."

For more information on the spoiler antenna, check out this video of Hibbard and Kittinger. The 2011 Chevrolet Camaro goes on the market in February 2011. --ARRL

AMSAT-UK FUNcube SDR VIDEO

Henk, PA3GUO, has produced a HD video showing the AMSAT-UK FUNcube SDR dongle receiving signals from Amateur Radio satellites. He describes the results as amazing.

The FUNcube Software Defined Radio dongle covers 64 to 1700 MHz. and sells for around £125. It was developed to support the educational outreach aspect of the AMSAT-UK FUNcube satellite that will hopefully be launched towards the end of 2011. On the FUNcube Yahoo Group Henk writes: YouTube video featuring the first results; - HO68 CW - HO68 FM - AO51 FM - VO52 SSB - OOREOS 1k2 AX25 (packet radio with MixW)

Results are amazing. The FUNcubeDongle gives results similar to the Kenwood TS2000x. Tests are done with the dongle straight out of the box, no tweaking. Note: satellite signals are very weak and Henk used a Mast Head pre-amp for the 2m and 70cm bands.

Watch - FUNcube Dongle: Out Of The Box test of this highly innovative SDR

http://www.southgatearc.org/news/december2010/funcube_sdr_video.htm

The second batch of AMSAT-UK FUNcube SDR dongles went on sale on Jan 2 at 20:00UT and completely sold out in under a minute.

You can join the FUNcube Yahoo Group at <http://groups.yahoo.com/group/FUNcube/>
FUNcube SDR Dongle <http://www.funcubedongle.com/>
FUNcube website <http://www.FUNcube.org.uk/> --Southgate ARC

NEW RULES GOVERNING VANITY, CLUB STATION CALL SIGNS TO TAKE EFFECT FEBRUARY 14, 2011

On Wednesday, December 15, new rules affecting vanity and club station call signs within the Amateur Radio Service were [published in the *Federal Register*](#). These new rules will go into effect on February 14, 2011. Thirteen months ago, the [FCC announced its intention to modify Part 97](#) as it applies to the vanity call sign system and club station call signs, aligning the rules to prior Commission decisions. Last month, the [Commission released a *Report and Order* \(R&O\)](#), outlining its decision.

Along with the changes to the call sign rules, the FCC made "certain minor, non-substantive amendments" to portions of Part 97. --ARRL Letter

YASME FOUNDATION ANNOUNCES 2010 YASME EXCELLENCE AWARD RECIPIENTS

The Yasme Excellence Awards are given to individuals who through their own service, creativity, effort and dedication, have made a significant contribution to Amateur Radio. Their contribution may be in recognition of technical, operating or organizational achievement. The [Yasme Foundation](#) has recognized the following individuals "in order to inspire them and others on behalf of Amateur Radio now and in the future."

Ramón Santoyo V, XE1KK: Santoyo is recognized for his work in advancing Mexican ham radio and representation within the international radio community. In addition, he serves as IARU Region 2 Secretary. Santoyo has been an advocate of Amateur Radio in Central America and a proponent of radiosport and the World Radiosport Team Championships (WRTC).

Makoto (Mako) Mori, JE3HHT: Mori deserves much credit for popularizing RTTY by writing the [MMTTY](#) software modem and making it available for integration into logging software. He also wrote, [MMVARI](#) which implements other popular digital modes, and several other digital mode software products.

Bruce Horn, WA7BNM: Horn continues to generate useful and innovative Web sites, including a complete upgrade of his excellent [contest calendar Web site](#). He supports contesting with a Web site that enables contesters to convert paper and other forms of contest logs to Cabrillo format.

Rick Meuthing, KN6KB: Meuthing developed the new [WINMOR](#) soundcard digital mode software, now gaining wide use in the [Winlink 2000](#) system.

Mikael Styrefors, SM2O: Styrefors developed the Remote Radio Interface. The ability to connect radios and operators transparently and robustly over the Internet is a key technological element of putting top-grade remote HF stations on the air -- something more common every day.

Alex Shovkoplyas, VE3NEA: Shovkoplyas developed [DX Atlas](#), [Morse Runner](#), [Ham-CAP](#), [CW Skimmer](#), [Rocky](#) and other innovative software.

Pepe Ardid, EA5KB: As a QSL manager, Ardid makes it possible for many Latin American DXers to confirm contacts with QSL cards. Confirmations are rapid, and he confirms not only direct, but via the bureau as well. -- Thanks to the Yasme Foundation for the information, ARRL

SHORTS

REMOTE CONTROL RADIO -- A video shows how the Internet enables you to control your home transceiver no matter where you are in the world. The YouTube description by **SA4AER** reads: "Controlling my Kenwood TS-480sat in Sweden remote with the front panel located in Taiwan." http://www.southgatearc.org/news/december2010/remote_control_radio.htm

There is a "slight" lag with a ping of 380-400mS to the computer in Sweden. Using a homebrew interface to send the serial data to the computer and software from SM7LCB to send the data to the server in Sweden. Works like an extended serial port. IP-Sound is used to send the sound with minimal lag, and it has a couple of codecs that you can choose too depending on your bandwidth. Watch Kenwood TS-480 in Sweden remote from Taiwan

SM7LCB Remote Radio Control <http://sm7lcb.shacknet.nu/remote/index.htm>
Remote Control Yahoo Group http://groups.yahoo.com/group/Remote_AR_UK/ --Southgate ARC

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Dave Brown, W9CGI, is offering the following items for sale:								
Item	Brand	Model	Type	Description	New Deals in RED ASKING\$	New\$	Asking\$	
TNC	MFJ	1270	Packet	Set to 1200 baud for packet cluster use		\$130.00	\$30.00	
TNC	MFJ	1270	Packet	Set to 9600 baud for packet satellite use		\$130.00	\$40.00	
Xcvr	Alinco	DR110	Mobile	12 Vdc- FM - but never run mobile Xmit = 45 Watts		\$289.00	\$100.00	
Monitor	Connect	SMR14A	LCD	Used less than one month with HP netbook - 14.1" screen diag		\$119.00	\$50.00	
Tuner	MFJ	949E	Deluxe	Like new - rarely used - 1/2 coax sw + open wire - lite - ps - 300W		\$180.00	\$100.00	
PC	Intel P4 #2	Floor	full tower	WIN-XP_SP3 /KB/mouse/monitor/tons of ham other s/w- ask details		\$480.00	\$50.00	
Z	X-10	items	security	wireless/X10 security system. 2 remote cameras with coded x10 to				
Z				house wiring. 1 remote camera with battery case. All (3) connect to				
Z				receiver at tv/video monitor by WIFI wireless. Ultrasonic motion det.				
Z				hand remote/wall reciever (RF) to control whole house X10 system.				
Z				Instructions plus see www.x10.com . NEW never installed - OVER		\$200.00	\$100.00	
Antenna	YAESU	ATAS-25	Mob/Port	Loaded 160M to 450 MHZ portable (small/packs easy) Brand New		\$210.00	\$150.00	
Antenna	TONNA	F9FT	2 Meter	Yagi for serious user - HI gain -DX antenna In two pcs for easy haul			offer ??	
Antenna				needs new hdwe to join -inst manual -				
Antenna	Cushcraft		V/U	Log Aperiodic - yagi - cover 6M-2M-450 and more			offer ??	
PC Cam	PlayStn2	Eye Toy	USB	PC cams I bought qty for price - these are spares/excess NEW in pkg		\$35.00	\$8.00	
XCVR	Yaesu	FT-726	VHF/UHF	Excellent base station radio for Vhf-Uhf-Satellite work (R&L)		\$750.00		
				With 6M / 2M / 432MHz / and satellite duplex modules - installed				
				2 Meter module - included at purchase with radio				
				6 Meter module - R&L Electronics - not for sale separately		\$175.00		
				432 MHz module - Delaware Elect. - not for sale separately		\$259.00		
				Sat Duplex module - R&L Electronics - not for sale separately		\$105.00		
				with all accessories and original Ops AND Service/Tech manual				
NEW DEAL				and all original boxes etc where possible. Total =		\$1,289.00	\$550.00	
NEW DEAL	Mirage	A1015G	6M	Solid state - 100Wout - all mode - 10W input - with rcv preamp		\$390.00	\$175.00	
NEW DEAL	Mirage	B108	2M	Solid state - 80Wout - all mode - 10W input -with rcv preamp		\$289.00	\$185.00	
NEW DEAL	Mirage	D1010	432 MHz	Solid state - 100Wout - all mode - 10W input - no rf rcv preamp		\$419.00	\$200.00	
Antenna	Diamond	CR8900	10/6/2/450	49" vert mobile UHF mtg reqd - wrks grt - I only mobile on 2M FM now		\$99.95	\$50.00	
				NEW OFFER				
				as always - contact me at W9CGI@ARRL.net				