

RCA AMATEUR RADIO CLUB

JUNE, 2008 MONTHLY NEWSLETTER INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, JUNE 3rd, 6:30 PM AT THE [G.T. SOUTH'S](#),
5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE MAY MEETING -- At the 6 May meeting, Details for Field Day were discussed. Our Club and the Indianapolis Radio Club will combine efforts for a 2A station at the location will be at the Marion County Fair Grounds. The date is June 28-29. Mark your calendars and come help setup and operate. The Indiana QSO Party which occurred 3 May was discussed. Also, the plans for the Indy Hamfest, 12 July, were discussed. We'll need help loading and unloading Friday afternoon July 11 as usual. AF9A will try and arrange for the big yellow truck and driver as we did last year. The RCAARC will sponsor the Home Brew Contest and award a gift certificate to R&L Electronics to the winner. Dick, W9ZB, will try to acquire some World Radio subscriptions for other prizes.

DAYTON HAMVENTION – It looked like it was going to be a bad weekend and maybe rain out the hamfest on Thursday, but the weekend turned out nice. The ARRL had a real nice setup inside, expanded from last year. The Flea Market had some gaps Friday but many of the open spots were filled up on Saturday. Inside the buildings was pretty busy with the dealers and manufacturers that we would expect to see.

We did have the noon get together on Friday and Saturday several of the regulars were missing, but we still had a good turn out.

The Friday evening dinner also had a good turn out. We did hang out at Les and Bob's when we needed a break.

For as bad as the weather looked going into the weekend and the high gas prices, it was a really good hamfest. –K9RU

ARRL FIELD DAY JUNE 28-29 -- Everything looks like it is coming together for the joint Field Day effort with the Indianapolis Radio Club and the RCA ARC. Operators from the W9IMS group will also be joining in with the operation.

The location is the Marion County Fair Grounds on the southeast side of Indianapolis. Stop by and see (i.e. help with) the setup even if you don't have time to stick around and operate. Guest and visitors are welcome. We plan to have a cook out Saturday evening like the RCAARC has done in the past.

This will be a 2A operation, with a GOTA and VHF station. Rigs will be the IC-756 Pro with exception of the VHF station which will be an IC-746 Pro to get the 100 watts on 2 meters.

Tom Chance, K9XV has checking out the antennas and other equipment to see that everything is working. We will have another meeting to go over everything, cover the details,

and put together a check list for everything that is needed for the operation. –K9RU

JUNE IS A VHF CONTEST MONTH – June is probably the best month for 6 meters and there are several contests that can be interesting. The ARRL VHF contest, June 13-14 is the best VHF contest of the year. It starts at 1800 UTC Saturday and ends at 0300 UTC Monday. Check the May QST for rules. The SMIRK Contest will be June 21- 22, check SMIRK for rules: <http://www.smirk.org/rules.htm>

WW2IND -- USS INDIANAPOLIS SPECIAL EVENT -- This year the operation will have a shorter operating schedule on Saturday, June 07th starting at 1400Z, that is SAT 10AM EDT, until 2200Z, 6PM EDT.

This will be the 3rd time for the USS Indianapolis as an official participating Museum ship. We will be operating from the USS Indianapolis Memorial on the Canal located on the near north side of Indianapolis, at 700 N Senate St. This is in the Indiana University Education & Research Building, south lobby. Parking is available north of the building. Visitors are welcome.

USS Indianapolis approx. frequencies (+/-10 kHz) :
SSB.3.860; 7.260; 14.260; 18.160; 21.360; 28.360 MHz
CW.3.539, 7.039, 10.109, 14.039, 18.079; 21.039; 28.039 MHz

For the Special USS Indianapolis OTA event, QSL to WW2IND. See QRZ.com for the address or via the Bureau for DX contacts. Please include SASE or envelope & postage.

Hams wishing to operate from the USS INDY memorial site during this event should contact Chuck, W9IH to RSVP ops times. E-mail W9IH

This special event operation is part of International Museum Ship Radio Event (see below).

USS Indianapolis OTA sponsors are Indiana War Memorial, Indiana University, REI Management, IHETS, Prime Distribution Services, [Thomson \(RCA\) Ham club](#), [Indianapolis Radio Club\(main page\)](#), [Maxim Crane](#)., Indianapolis Radio League & [I.C.E. Filters](#)

INTERNATIONAL MUSEUM SHIP RADIO EVENT -- The 2008 Museum Ships Event will be sponsored by 'The Battleship New Jersey Amateur Radio Station' (BNJARS) and will take place during the period of 0001UTC, June 7th to 2359UTC, June 8th. During this event every year there are participation of naval ships, lightships, steamships, research vessel and merchant ships. Interesting international ships such as the British cruiser HMS Belfast (GB2RN) will take part.

A certificate is available for all stations that work at least 15 different ships listed as officially participating by sending a copy of their log entries showing these contacts. Working the same ship on different frequencies DOES NOT count as 2 ships.

To receive a certificate, please send either \$3 to cover costs or send a large enough envelope with enough postage (certificates should not be folded) to: Margaret Burgess, KB2BRR, 150 Schooner Ave., Barnegat, NJ 08005, USA. All certificate requests must be received by September 30th, 2008.

A list of participating ships is available on the USS "NEW JERSEY" web site at: <http://www.nj2bb.org>

W9IMS 500 RACE SPECIAL EVENT OPERATION – This was another success with more than 4300 Q's made, beating last years total. 13-year-old Emily Bishop, WE4MB and 11-year-old Amanda Feriante, AF6YL, did a lot of operating on 20 and 40 meters and were very popular. The Saturday evening before was "Chick Factor Night" with YLs doing all the operating of all the stations. Operators from the RCA ARC were: Mike, NE9O; Dave, N9KZJ & Jim, K9RU.

THE DIGIAL TELEVISION TRANSITION – Some of our members have asked for technical details on the transition to digital TV (DTV) that is scheduled to occur on February 17, 2009.

If you receive the local TV stations now by cable or satellite and you will not need to do anything at the transition to continue to receive them.

If you receive or want to receive the local TV stations off air after the transition, then the information below will be helpful. Remember, cable and satellite providers are only required to carry the primary channels (Must Carry Law). An example is would be Indianapolis channel 8, the primary program channel (CBS) would be carried, but the weather channel and WX radar would not. Channel 20 would be the same, only their primary channel is required to be carried. So, you will be able to receive additional channels off air that you won't be able to get on cable or satellite.

Only the high power TV stations are required to change to digital in 2009. No date has been set for the Class A, low power and translators.

The government has a program that offers a \$40 coupon for the purchase of an approved DTV converter box. The converter box will convert the DTV signal to a NTCS format to connect to older sets without digital tuners. Walmart, Best Buy and Circuit City offer these converters. The converter have an RF modulator for channel 3 and 4 output and composite video, some offer S-Video. The only one that I know of being sold with an antenna bypass like VCRs is the Philco sold on Yahoo.com. The cost of the converters ranges from \$39 to \$79. Check <http://www.dtv.gov/> as a place to start for additional information.

Technical stuff... For the past several years, all full power analog (NTSC) stations have been operating a digital transmitter on another channel. For example in Indianapolis, Channel 8 has also been operating on channel 9, Channel 13 is on channel 46, etc. The channels are the same 6 MHz wide channels at the same frequencies TV stations have always used.

Analog TV stations, when they were originally licensed, were given channel assignments to minimize interference between stations. For several reasons, including advances in the RF tuner front end design, and the characteristics of the energy distribution of the digital TV channel, it is possible to utilize the spectrum more efficiently. This is why it has been possible to assign an additional channel to each of the existing analog stations. Most digital channels are in the UHF portion of the spectrum. After the transition, there will be no stations operating above channel 51, freeing up that section of spectrum for other services. Also, there will be very few stations operating in the low VHF (ch. 2-6) portion of the spectrum.

Pretty straight forward right? There's only one more thing. When analog transmissions cease, stations have an option of returning to their original frequency assignment. For example channel 13 will broadcast their digital signal on channel 13 rather than 46 after the change-over. So who really cares? Doing a channel search will allow your converter box or digital TV to locate the channels you can receive. You may want to know, however, as you may have change your antenna arrangement to receive the additional UHF stations.

BTW, you don't necessarily need a new or different antenna for digital. RF is RF and only the type of modulation is changing. If you get a good picture currently, changes are you can get good reception on the digital channel but watch out about the possible change from VHF to UHF. There are a couple of issues with digital that makes it different. One is ghosts, this is the same signal arriving at the antenna by different paths, on a NTSC TV this shows up as a second picture slightly delayed. With digital you don't see it in the picture, but it is still there and can cause a loss of some data and poor reception or a loss of signal. There is the Cliff Affect with a digital TV signal, much like the capture effect with FM, you will get a good picture down to a certain signal level and then nothing. Manufacturers can set the level that you see a picture and most have them set so receivers won't display a picture with macro blocking, this is when you are on the edge and start seeing green blocks in the picture.

The chart below shows the Indianapolis market area stations and their current analog NTSC, current DTV (2008) and future DTV (2009) channel assignments. Red and yellow indicate low and high VHF stations. This is part of an Excel spread sheet with all US high power stations listed. If you want to check other areas of the country, or get more information than you ever wanted to know on stations, a copy of the full spread sheet can be found at http://www.w9rca.org/DTV/DTV_Transition.xls This was up to date as of May 1, 2008.

City	Call Sign	Netw.	NTSC CH	2008 DTV	2009 DTV
INDIANAPOLIS	WISH	CBS	8	9	9
INDIANAPOLIS	WTHR	NBC	13	46	13
BLOOMINGTON	WTIU	PBS	30	14	14
INDIANAPOLIS	WHMB	rlg	40	16	16
INDIANAPOLIS	WFYI	PBS	20	21	21
MUNCIE	WIPB	PBS	49	52	23
INDIANAPOLIS	WRTV	ABC	6	25	25
BLOOMINGTON	WIPX	ion	63	27	27
KOKOMO	WTTK	CW	29	54	29
MARION	WNDY	MyN	23	32	32
BLOOMINGTON	WCLJ	tbn	42	56	42
INDIANAPOLIS	WDTI	day	69	44	44
INDIANAPOLIS	WXIN	FOX	59	45	45
BLOOMINGTON	WTTV	CW	4	48	48

There are a couple of notes of interest on WTTV Ch. 4. The Ch. 4 DTV signal on channel 48 will originate from the present Ch. 4 transmitter site at Trafalger, IN. In order to prevent interruption of the Ch. 4 analog signal, WTTV has been given an additional six months to complete the transition. During that time, the top-mounted Ch. 4 antenna will be removed and replaced with a Ch. 48 antenna on the top of their tower.

Also following the transition date of Feb. 17, WXIN will remove it's channel 59 antenna from the top of the tower in northwest Indianapolis and replace it with a dual channel antenna for channel 45 (WXIN) and channel 29 (WTTK). WTTK, licensed in Kokomo, is the sister station to WTTV and carries identical programming. This is to be completed within six months as will provide the Indianapolis area a good WTTV signal. WXIN, WTTV, and WTTK are owned by Tribune.

The lower power Spanish language station, WIIH on channel 17, will move to channel 8 and begin digital operation on the transition date. Other low power Indianapolis stations have requested DTV licenses. -K9RU, AF9A

INDIANAPOLIS VE TESTING SCHEDULE -- Here is the Indianapolis Radio Club VE testing schedule for the rest of the year. Calling in advance to ensure testing availability is suggested but not mandatory.

June 7th

July 12th (At a separate location with the Indianapolis Hamfest)

August 16th

Sept 6th

October 4th

November 1st

December 6th

SPONSOR: Indianapolis Radio Club (W9JP)

LOCATION: Indianapolis Training Center 2820 N. Meridian Street.

CONTACTS: Gale Wuollet, AA9WU (h) 317-849-8449, or Jay Wright, KK9L 317-203-3335.

HAMFESTS; EVENTS

June 7 USS Indianapolis Special Event

June 28-29 Field Day [http:// www.arrl.org/FieldDay](http://www.arrl.org/FieldDay)

July 12 Indianapolis Hamfest, <http://www.indyhamfest.com/>

Aug 17 TARA Hamfest, Lafayette, IN <http://w9reg.org/hamfest/index.htm>

Nov 15-16 Fort Wayne Hamfest & Computer Expo. <http://www.fortwaynehamfest.com/>

FCC'S BILL CROSS CALLS HAM RADIO "BELOW THE RADAR"

William Cross, W3TN, a staff member in the FCC's Wireless Telecommunications Bureau, and Riley Hollingsworth, Special Counsel for the Spectrum Enforcement Division of the FCC's Enforcement Bureau, spoke at the FCC Forum on Saturday afternoon at the 2008 Dayton Hamvention. Cross opened by explaining just where Amateur Radio falls in the FCC's bureaucracy.

"The Mobility Division of Wireless Telecommunications Bureau has the oversight of the Amateur Radio Service," Cross said. "We handle the day-to-day administration of the Amateur Service and some of the rulemaking activities that affect the Amateur Radio Service. The Gettysburg office handles applications, licensing -- including vanity calls -- and the ULS. Within the Commission, other bureaus also make rules that affect you. The Office of Engineering and Technology handles spectrum allocations and equipment issues. Our Managing Director's Office is the office that handles matters relating to fees, such as the fees relating to vanity call signs, Debt Collection Improvement Act matters, the need for Federal Registration Numbers."

Cross divided comments into two areas: Proceedings where the Commission has issued a decision and rulemaking requests that have been filed with the FCC, but which are pending resolution by the Commission.

Calling the past year "interesting, because it has been a quiet year on the regulatory front," he said that no big rulemaking items were released. "This being an election year, there doesn't seem to be any legislation on Capitol Hill that is of direct interest or impact on the Amateur Service. This year is a good time for Amateur Radio to be flying 'below the radar,' and that's

where ham radio is right now in terms of the big picture -- below the radar," Cross said. "We wrapped up a couple of Petitions for Rulemaking [PRM] that were pending and it doesn't look like (at least in the near future) there will be anything else coming out."

One of the cases the FCC issued a decision on was what Cross referred to as the Miller Order. This Order, released May 7, dismissed a PRM from Mark Miller, N5RFX. Miller sought three points: To delete the FCC's 2006 addition to how it defines data, to amend the rules to prohibit automatically controlled stations from transmitting on frequency segments other than those specified in Section 97.221(b), and to replace the symbol rate limits in Section 97.307(f) with bandwidth limitations.

"The effect of these changes," Cross explained, "when taken together, would have been, as [Miller] said, 'A small number of wider bandwidth modes, including Pactor III, would no longer be authorized.' Translating that into English, what he was asking for was 'bye-bye Winlink.' Don't get me wrong -- Winlink as a communications system seems to have become the 'Brussels sprouts of ham radio' -- you either love it or you hate it. And trying to bury it under ketchup or hollandaise sauce hasn't changed the basic like or dislike for Winlink. Most of the controversy here seems to swirl around how certain licensees use it. Some use it for a radio e-mail system. Others use it for getting weather maps while they are on sailboats in places the brave dare not go. Others use it for their personal business activities, such as buying and selling stocks. These uses are really a Section 97.113, a 'prohibited communications' question, not a technology question."

Cross mentioned that there are "some things coming down the pike that you want to keep track of. The ARRL has a pending petition -- RM 11325 -- that requests that we amend the rules that apply to the power stations may use when transmitting spread-spectrum emissions -- BPL. The DC Circuit Court of Appeals remanded the FCC's final BPL rules. The Court did not vacate the rules, so they are still in effect. There will be another proceeding to address what the Court told the Commission it had to address."

The Northern California Packet Association has filed a request for clarification that the FCC define what is meant by the term "simultaneously" as it is used when defining a repeater. "The issue here is that in California," Cross explained, "D-STAR repeaters have been coordinated on channels that are set aside for auxiliary stations, on the basis that, because there is a delay in retransmission of the signal, the retransmission is not simultaneous, and therefore the repeating station is not a repeater." Cross said others have advanced what he calls "the duck argument: If the station looks like a repeater, if it functions like a repeater, and it sounds like a repeater, it should be treated as a repeater -- and confined to the repeater subbands. A decision on this will be coming from the Commission shortly."

When Hollingsworth stepped up to the podium, he spoke about what he called "the magic of radio," saying, "we need to realize the debt we owe to those who work so hard to further the goals of Amateur Radio, whether it's the Emergency Communications participants, club members, teachers, VEs, the League. One of the richest rewards in doing something is to experience joy in doing it. And with so many people working so hard on their own time to further the goals of Amateur Radio, we're all a little more free to enjoy radio and to make it fun as well as a public service."

Saying that "things have calmed down a lot in the Amateur Radio Service," Hollingsworth explained, "[that] when it comes to the Amateur Radio Service, there's one enforcement tool we need very badly and we just don't have it -- and that's straitjackets," he deadpanned, eliciting guffaws from the crowd of more than 150 people. "Some days I want to ask, 'Why can't everybody just get along?'"

Hollingsworth noted that since the 75 and 80 meter phone band has been expanded, "a lot of these regular small groups, ragchews and some of the Nets should consider "spreading out,

because a lot of the regular operations every night are clumped together. Yes, there are still interference issues and interference allegations, but if everybody would spread out a little bit, now, it's going to take a real change of habit by a group that has used the same frequency for 40 years to talk across the state, but you really need to spread out and take advantage of the band expansion."

He also noted that interest in Morse code "seems to be higher than ever before." On the enforcement side, Hollingsworth said he has noticed "no difference in enforcement problems related to no-code, and I think I'm seeing more young people at events that I go to." He reminded audience that only 1 percent of Amateur Radio licensees filed comments in the Morse code Proceeding. "I see the new code keys for sale here, and I always see a big crowd of people around anything related to code or code keys. I think the interest has really peaked."

Hollingsworth pointed out a 12 year old boy who sat in the front row. When asked, the boy responded he received his license three years ago when he was 9. "The future President of the League might be sitting right there," Hollingsworth explained, pointing at the boy. "That's our future, right there, and we're depending on you. We need a lot more young people and I think that Morse code seems to interest young people -- hopefully they're getting tired of instant messengers and the Internet. Last night someone told me about a 14 year old Net Control Operator on a national Net."

Calling for "more courtesy" on the Amateur Radio bands, Hollingsworth said, "This fighting amongst yourselves is the worst thing that you can do. You have some rude operators and operators who don't care and who are hateful and bitter about life in general, but every group has that, whether it's doctors, electricians, lawyers, plumbers, whatever, every group has a certain percentage of people like that. What you have to do is to remind yourself every day to stay on the high road and report to us if you can't resolve a problem after you've given it a chance to go away. There are plenty of ugly situations in the world and you don't have to add to them. Now, there are a few idiots in your Service who know all the answers, only because they haven't thought of all the questions. They just want recognition and reaction. Don't give it to them. Don't be baited. Don't feel insulted -- they are their own worst punishment. Don't dignify them with a response."

Hollingsworth implored the audience to "never let the Commission get by again with handing you 10 to 12 years of neglect. You have to stay vigilant. Even though the bands may sound better to you, you have to be vigilant to protect your Service, and be part of the solution -- not the problem -- and operate as if the whole world is listening, because generally it is."

You can listen to the FCC Forum in its entirety on the ARRL Web site <http://www.arrl.org/news/images/nms/other/FCCForumMP3.mp3>. –ARRL Letter

FCC'S HOLLINGSWORTH SET TO RETIRE IN JULY

Special Counsel in the FCC Spectrum Enforcement Division Riley Hollingsworth has announced plans to retire from the FCC later this year. "My intention," Hollingsworth told the ARRL, "is to head out in July, assuming the results of the second round of the PAVE PAWS/440 repeater monitoring in California present no complications. It has been a privilege to work with and for the Amateur Radio licensees and the land mobile frequency coordinators. I am extremely fortunate to work for two wonderful groups of people: Those at headquarters in the Enforcement Bureau, and for the Amateur Radio operators." Hollingsworth had planned to retire earlier this year, but changed his mind, saying, "There

were several issues on the table that I want[ed] to continue to work through with the amateur community."

While his successor has not been named, he was quick to point out that the FCC's Amateur Radio enforcement program will continue.

Hollingsworth said he considered it an honor to have given something back to "the incredible enjoyment and benefits that Amateur Radio has given me since age 13. And to every one of the thousands of you that thanked us for our work, many of whom waited for long periods after a forum or radio meeting just to come up and express appreciation for what the FCC was doing in enforcement, you have no idea how much that was appreciated every single time. It sure wasn't a 9 to 5 job, but it was a gift and a daily joy to work for the best group of people on earth. The only bad day in nearly 10 years was September 21, 2001, when we lost Steve Linn, N4CAK. We still miss him." Linn, deputy chief of the Licensing and Technical Analysis Branch for private wireless within the Wireless Telecommunications Bureau, and his wife Lesley were killed in a car accident on their way to the Virginia Beach hamfest.

Hollingsworth told the ARRL he was "so very impressed" with the young people who are involved with Amateur Radio: "To the very young Amateur Radio operators I met at Dayton, who have dreams of being scientists and astronauts and communications engineers, we will be pulling for you; I have a strong feeling we won't be disappointed."

"The Amateur Radio Service is part of the American heritage, and I am going to stay as actively involved in it as I possibly can," Hollingsworth explained. "Thank you all for working tirelessly to provide the only fail safe communications system on Earth and for helping this country keep its lead in science and technology. What an incredible gift it has been to work with you every day, and how fortunate we are to love the magic of radio!"
-ARRL Letter

ARRL FILES COMMENTS IN TWO MATTERS BEFORE FCC

On Tuesday, May 27, ARRL filed electronic comments concerning two matters that the FCC has under consideration. The first set of comments concern a company that filed a request for a waiver of Part 90 of the FCC rules; [ReconRobotics](#), an electronics manufacturer, wishes to sell and for its public safety customers to use a robotic device that operates in the 430-448 MHz band. The primary allocation in that portion of the spectrum is United States government radiolocation (military radars). The Amateur Service has an allocation on a secondary basis. The second matter deals with [GE Healthcare](#) and their request for allocation of spectrum (as a secondary user) in the 2300 MHz band; the Amateur Radio Service has a primary allocation in a portion of the requested band.

ReconRobotics -- On January 11, 2008, ReconRobotics filed a request with the FCC for a waiver of Part 90 of the Commission's Rules with respect to the Recon Scout, a remote-controlled, maneuverable surveillance robot designed for use in areas that may be too hazardous for human entry. This device can be thrown, dropped or launched into hazardous areas and can provide an operator located a safe distance away with video and audio, along with infrared, biological, chemical, heat, radiation or other data. According to the FCC, ReconRobotics seeks a waiver to permit equipment authorization of the Recon Scout, and its use by state and local law enforcement and firefighting agencies and by security personnel in critical infrastructure industries.

The FCC said a waiver is required to permit licensing of the Recon Scout because "the device operates in the 430-448 MHz band, which is allocated to the Federal Government Radiolocation service on a primary basis, and to the amateur service and certain Non-Federal

radiolocation systems on a secondary basis." ReconRobotics asserts that because the Recon Scout operates with 1 W peak power, it is "unlikely to cause interference to these services."

The ARRL contends that "Because [this device] operates on a channelized basis, each of the three channels being six megahertz wide, the necessary bandwidth of the device is apparently close to 6 MHz. [ReconRobotics] asks that it be granted an unspecified series of permanent waivers to allow the marketing and sale to, and use of this device by law enforcement and fire department personnel for public safety applications. The Amateur Service, which has a heavily occupied, secondary allocation in the 420-450 MHz band...would be potentially substantially impacted by grant of these waivers."

The ARRL points out in its comments that there are differing amateur operations throughout the 420-450 MHz band. One of the channels ReconRobotics is requesting use of -- 442-448 MHz -- is used by amateur repeaters (with band plans varying by locality) and also for Amateur television repeater inputs. "These repeater inputs, both for voice and video, are at high locations where line-of-sight to [ReconRobotics] devices should be expected anywhere in the United States. Repeaters in this band are routinely used for emergency communications via Amateur Radio for numerous served agencies including FEMA, and so at times when [ReconRobotics] device may be expected to be used, the repeaters may be expected to be in operation in the same areas," ARRL comments state.

The ARRL maintains that interference *to* [the Recon Scout] device may be expected on a regular basis from Amateur Radio operations: "While it is all well and good for [ReconRobotics], a manufacturer, to suggest that it understands that operation of the device would be subject to interference received from licensed users in the band, such interference is not a comforting thought for licensed radio amateurs who could very easily be perceived to be, or held responsible for the failure or malfunction of these analog devices in a given application and the danger to public safety officers who are relying on them.

The ARRL urges the FCC to deny the waiver request, "either permanently or even temporarily," and calls on the Commission to require ReconRobotics to "initiate a rulemaking proceeding if it feels that the Part 90 or Part 15 rules governing analog devices are not sufficiently accommodating and should be changed, and could be changed consistent with interference avoidance. Repeatedly granting waivers for analog devices which do not meet the fundamental interference avoidance requirements of the existing rules is bad spectrum management and ill-serves the Amateur Service."

GE Healthcare -- In December 2007, GE Healthcare filed ex parte comments in response to a *Notice of Inquiry (NOI)* in the pending "MedRadio" proceeding, proposing that the band 2360-2400 MHz be allocated on a secondary basis for "Body Sensor Networks" (BSNs). These systems are apparently to be used for wireless patient monitoring. They are very short-range networks consisting of multiple body-worn sensors and nodes, connected via wireless to nearby hub stations at medical facilities and in homes. The Amateur Radio Service is currently allocated 2390-2400 MHz on a primary basis.

In its comments, the ARRL states that it does not expect a "significant amount of harmful interference to Amateur operations at 2390-2400 MHz from BSNs." GE Healthcare's proposal, however, makes "erroneous assumptions about Amateur uses in these bands, and the interference potential of the devices *to* Amateur Radio stations in residential areas is not known."

According to GE Healthcare, they are proposing for allocation of the entire 2360-2400 MHz band for use of the BSN devices, but the ARRL contends that "in any given area, only 20 MHz of that band would be used. [GE Healthcare's] proposal specifically mentions Amateur Radio and claims that, because the band 2390-2400 MHz is 'designed (sic) for fast scan video, high rate data, packet, control and auxiliary applications' and not weak signal

communications, it is well-suited for sharing with the BSN systems."

The ARRL argued that this is a misconception on GE Healthcare's part: "The fact is that there are no limitations on the type of Amateur uses to be made in these bands. The band may in fact be used in some areas for weak signal communications, on a completely unpredictable basis. The uses of this band by radio amateurs, though guided overall by a national band plan, are very much subject to local variation dictated by custom and usage. Weak signal Amateur communications utilize long propagation paths, very low received signal levels, and very high transmitted signal levels. The band is also used for long distance data, voice and television communications using relatively weak received signal levels."

The ARRL, in its comments, said it "is far more concerned" about potential interference to BSNs *from* licensed Amateur Radio operation in the 2390-2400 MHz band: "The ramifications of radiofrequency interference (RFI) to these systems in terms of danger to medical patients are obvious, and potentially severe." The ARRL contends "that the potential for interference from Amateur Radio operations, which are in this band occasionally itinerant and mobile, but most often fixed in residential areas, to BSNs operated at a patient's residence would be...a problem."

GE Healthcare asserts that BSNs will "become ubiquitous" and must "be capable of reliably conveying unprocessed life-critical monitoring data to devices that are responsible for processing and primary alarming. In these scenarios, if the link were lost, a serious event such as arrhythmia or hypoxia could go unalarmed." If GE Healthcare does indeed require an "extremely reliable" communications link with a predictable quality of service," the ARRL advises that "they will not find that in the 2390-2400 MHz band and should look elsewhere. Amateur Radio operation is unpredictable, and at the substantial transmitted power levels and exceptionally high antenna gain figures used by radio amateurs in this band, there will be no reliability of BSNs in this segment, and the results of such interference would be potentially disastrous, as GE itself notes."

In light of the possibilities of harmful interference, the ARRL requested that the FCC "not proceed with the proposal of GE Healthcare as proposed in the 2390-2400 MHz band."

Read the entire article on the [ARRL Web site](#). --ARRL

NEWSPAPER REPORTS "BPL PLAN IS DEAD IN DALLAS"

The Dallas Morning News has reported that "an ambitious plan for using power lines to deliver fast Internet service to 2 million Dallas-area homes collapsed Thursday." Current Group, LLC has announced plans to sell its Dallas BPL network to Oncor, a regulated electric distribution and transmission business, for \$90 million. Oncor reportedly has no plans to offer Internet service but will use the network to detect distribution network issues http://www.dallasnews.com/sharedcontent/dws/bus/stories/DN-current_02bus.ART.State.Edition1.460d413.html While Current originally touted the network as a way to offer Internet service to consumers and had entered into a marketing arrangement with DirecTV, the Houston Chronicle quotes Oncor spokesman Chris Schein as confirming that Oncor will use the network only for monitoring the power grid: "Our business is delivering electricity, not being an Internet provider or a television provider." <http://www.chron.com/disp/story.mpl/ap/business/5747397.html>

ARRL Chief Executive Officer David Sumner, K1ZZ, observed that "This announcement underscores yet again that the Bush Administration made a fundamental error in judgment when it erroneously identified BPL as a potential 'third wire' delivering broadband to

consumers. As the Court of Appeals for the DC Circuit determined last week <http://www.arrl.org/news/stories/2008/04/25/10064?nc> , the FCC then compounded the error by 'cherry-picking' from its staff studies and ignoring other studies that proved the FCC was underestimating the interference potential of BPL systems.

ARRL Laboratory Manager Ed Hare, WIRFI, was quick to point out that BPL was not going away in Dallas. According to Oncor Vice President Jim Greer, Oncor will use the BPL network to spot grid problems to detect large power outages before they affect customers. Oncor will not offer Internet service through the system as Current had originally planned when they built it.

The ARRL has no issues with BPL as long as it does not cause harmful interference to the amateur bands. Current's Dallas system is a good example of that, Hare said, as it is "notched" so as not to interfere with the Amateur Radio Service: "The Current system in Dallas is probably not causing interference to ham radio. Their equipment doesn't use the ham bands. It is also quiet except when in use. For meter reading and other utility applications, nearby modems may make the occasional short burst of noise, but not the cacophony of sound we hear with some other systems. You would probably be able to tell that BPL is there if you tune outside the ham bands. From an EMC perspective, what is needed now to complete this progress are regulations and standards that match BPL's most successful models." –ARRL Letter

FCC DENIES TWO AMATEUR PETITIONS FOR RULEMAKING

On May 7, the FCC denied two separate Petitions for Rule Making (PRM) dealing with digital issues.

Mark Miller, N5RFX, of Arlington, Texas, sought to delete the FCC's 2006 addition to how it defines data, amend the rules to prohibit automatically controlled stations from transmitting on frequency segments other than those specified in Section 97.221(b), and replace the symbol rate limits in Section 97.307(f) with bandwidth limitations.

The FCC denied all three parts of Miller's PRM, saying he "did not set forth sufficient reasons for the Commission" to approve his petition and that "should future experience substantiate Miller's concerns, he may file a new, factually supported petition for rulemaking." The complete copy of the FCC's reply to Miller is on the FCC Web site http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-08-1082A1.pdf.

Ken Chafin, W6CPA, of La Crescenta, California, and Leon Brown, KC6JAR, of Los Angeles, California, also filed a PRM concerning additional spectrum for more repeaters, including digital systems, requesting that the FCC "propose to expand the frequencies on which an amateur station operating as a repeater (repeater station) may operate."

Chafin and Brown argued that additional spectrum is needed for repeater stations because some amateur repeater stations have begun using digital communications protocols" and "digital voice operation is incompatible with existing analog operations because digital voice users are unable to determine if the desired frequency is in use by analog users and can inadvertently cause harmful interference to those users." The men pointed out that coordinating groups have been unable to separate analog and digital voice repeater operations to avoid harmful interference because the available repeater spectrum in the 2 meter band is "fully occupied by existing analog users in most metropolitan areas."

The FCC, after considering Chafin and Brown's PRM, concluded that the PRM did not present grounds for the Commission to amend its rules: "Repeater stations are authorized to

transmit on any frequency in the 2 meter band except the 144.0-144.5 MHz and 145.5-146.0 MHz frequency segments. These two segments were excluded to minimize the possibility of harmful interference to other amateur service stations and operating activities, including 'weak signal' operations. Allocating an additional three hundred kilohertz of the 2 meter band to repeater operation would not be consistent with that concern. Rather, it would likely result in increased interference to non-repeater stations." The complete copy of the FCC's reply to Chafin and Brown is on the FCC Web site http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-08-1083A1.pdf. --ARRL Letter

SHORTS

WEBSDR NOW INCLUDES 20M BAND -- Back in April, we told you about a new web-based software defined radio system called **WebSDR**. Run by the University of Twente's amateur radio club in the Netherlands, the system initially allowed users to tune over either the 40 or 80 meter bands. At the time it was launched, the team behind the project promised that additional bands were planned for the future. Well, good to their word, they have just added the 20m band to WebSDR.

The web page also features a log book, a list of connected users and a chat facility. All in all, a very impressive system, and well-worth a look. <http://websdr.ewi.utwente.nl:8901/>
--ARRL Letter

CHINESE OLYMPIC STATIONS ARE ON-THE-AIR -- Special Event stations for the 2008 Beijing Olympic Games began operating May 18, running through Wednesday, September 17. Five special calls, representing the five rings of the Olympic flag, will be on the air: BT1OB, BT1OJ, BT1OH, BT1OY and BT1ON. The last letter of the call sign corresponds to the color of each of the rings of the Olympic flag -- Beibei (Blue), Jingjing (Black), Huanhuan (Red), Yingying (Yellow) and Nini (Green). Zheng Feng, BA4EG, will be the QSL manager for all stations. QSLs can be sent either direct or via the bureau and will begin to be answered in October. A Web site supporting the Special Event stations will include an on line log search, QSL card received and sent status, as well as other information <http://www.bj2008ses.com.cn/> Award criteria will soon be posted on the site. -- Thanks to "The Daily DX" for this information

RUSSIA LAUNCHES NEW AMATEUR RADIO SATELLITE --A new satellite carrying Amateur Radio 'Yubileiny' (RS-30) was successfully launched from Plesetsk on 23rd May.

Radio Amateurs around the world reported receiving the CW beacon signals on 435.315 MHz with reports also of signals on 435.215 MHz At the time of writing it is still not clear exactly which type of transponder, Linear or FM, is onboard the satellite. It appears to be in a 1500 km orbit which would give a pass time of up to 20 minutes and enable stations over 7000 km away to be worked.

Work on the satellite started in December 2004 with the intention of launching it in 2007 to commemorate the 50th anniversary of the first satellite Sputnik-1.

A full report on the satellite with pictures can be seen at Yubileiny is a next generation small satellite <http://www.npopm.com/?cid=242>

The Russian Federal Space Agency launch announcement is at <http://www.npopm.com/?cid=news&nid=60>

Reports on Yubileiny (RS-30) continue to appear on the AMSAT Bulletin Board which you can join at <http://www.amsat.org/amsat-new/tools...t/maillist.php> –ARRL Letter

CHINA PLANS AMATEUR RADIO SATELLITE LAUNCH -- A report has been received via Michael Chen, BD5RV/4 that a new amateur radio satellite to be launched by China, CAS-1, has completed its IARU frequency coordination and the hardware has been finished. The payload is planned to include a CW Telemetry Beacon, Linear Transponder, FM repeater and a Digital Store-forward Transponder. The operations will use 70cms downlinks and 2 meter uplinks at 500mW output power. The satellite is expected to have a mass of 30kgs and be launched from China into a sun synchronous orbit with a 670km apogee. The CAS-1 team is waiting for another payload to be finished before launch which at this point is predicted to happen in early 2009. –ARRL Letter

JAPANESE AMATEURS RECEIVE MORE PRIVILEGES ON 75/80 METERS -- Japan's Ministry of Internal Affairs and Communications (MIC) announced that Japan's Table of Frequency Allocations and the Japanese Amateur Bandplan http://www.jarl.or.jp/English/6_Band_Plan/JABandplan.pdf have been amended, giving amateurs in that country more privileges on certain frequency blocks in the 75/80 meter band. Japanese amateurs are now allowed to operate the following additional frequencies on the 75/80 meters and Phone).

This makes it a bit easier for US amateurs to make contacts with Japanese amateurs, especially in contests, since Japan does not have phone privileges on the 160 meter band. These new privileges will also make it easier for DXpeditions to work Japan." – ARRL

FCC DENIES UTAH MOTORSPORT PARK USE OF AMATEUR RADIO FREQUENCIES -- On Thursday, April 24, ARRL General Counsel Chris Imlay, W3KD, filed an Informal Objection with the FCC regarding a pending application for a Special Temporary Authority (STA) filed by Miller Motorsports Park in Tooele, Utah. One day after filing the Objection, the FCC agreed with the ARRL, saying, "Due to the possibility of interference to Amateur operators and also the race teams utilizing the proposed frequencies, we feel that it is not in the public interest to grant [Miller Motorsports Park's] request."

The FCC also advised Miller Motorsports that if they "wished to pursue other frequencies, [they] should coordinate with the ARRL and National Telecommunications and Information Administration (NTIA)."

Miller Motorsports requested the use of frequencies 448.525, 448.650, 448.060, 448.290 and 448.610 MHz at 4 W ERP. They proposed to use 100 mobile units on each of these and other channels at or above 450 MHz for a race event scheduled May 26-June 1, 2008. The application filed by Miller Motorsports stated that the radios would be used for "security, medical and maintenance for the entire event" and that communications service is "vital to the life and safety of the spectators and drivers of this race event." Miller Motorsports also implied that the NTIA had approved the use of the 448 MHz channels.

The ARRL called the Miller Motorsports Park choice of channels "completely inappropriate. The radio amateurs who are licensed to use these frequencies are under no obligation to either tolerate interference or to cease their own operation, regardless of the interference that might be suffered at any time" by Miller Motorsports. –ARRL Letter

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