RCA AMATEUR RADIO CLUB

JUNE, 2009 MONTHLY NEWSLETTER INDIANAPOLIS, IN

THE NEXT MEETING OF THE **RCA AMATEUR RADIO CLUB** WILL BE TUESDAY, JUNE 9th, 6:30 PM AT THE <u>G.T. SOUTH'S</u>, 5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS -- At the May meeting... Field Day planning is coming together. The setup will be similar to last year, 2A class with a GOTA (Get On The Air) and VHF station. The location will be the Marion County Fairgrounds. They have already checked it for power line noise and will check it again before FD. We will use AF9A's Honda generator to power the HF station again this year. The FD call will be W9JP and W9RCA for the GOTA station.

AF9A reported on the repeater, a fiber optic link was added to the Echo Link Internet connection in hopes this will cure the lighting problem taking out the card in the computer. Jim, AF9A wanted K9RU to appoint someone to do the repeater shack door re-enforcement. No one volunteered. The replacement UPS batteries still need ordered.

N9KZJ undated us on the progress on the USS Indianapolis radio room display and the WW2IND operation in June.

There was a discussion about the Dayton Hamvention and the location of different flea market spaces for, Jon, Les and Bob and Mike Koss.

ANY INTEREST IN A RCA HF BAND NET? -- I met several hams that used to work at RCA Meadowlands in the two-way radio division. They were interested in our club and expressed an interest in a RCA net for former employees.

There was a RCA/NBC net on 15 meters in the late 60s and early 70s, but don't know what became of it. – K9RU

W9RCA SPECIAL EVENT OPERATION – June 12^{th} is the transition date for TV to switch from analog to digital. Regular analog TV transmission and the sale of TV sets began in April 1939, so this is the 70th anniversary of Analog TV and the digital transition marks the end of an era. Several of us have discussed operating W9RCA as a special event station on June 12^{th} (Friday) from 6 PM to 11PM. We will discuss this at the June meeting. – K9RU

USS INDIANAPOLIS MEMORIAL OPERATION -- The WW2IND USS Indianapolis Memorial station will participate in the world wide Museum Ships Event on Friday through Sunday June 5th-7th (48 hours). The station will be near the USS Indianapolis Memorial in downtown Indianapolis.

Setup starts at 6pm Friday night with operations beginning at 8pm with 3 HF stations on the air and concluding Sunday evening at 8 PM EDT.

Visitors and operators are more than welcome as we honor the USS Indianapolis, the survivors and crew during this Ham radio event. (CW ops bring your own key or paddle.)

The Amateur radio on the air operations will be located at 700 N Senate St., Indianapolis ,IN at the Indiana University EDU & Research Building, South Lobby. Parking is available north of the building.

More information and the sign up sheet is on the Indianapolis Radio Club website, <u>http://www.indyradioclub.org</u>.

INDIANAPOLIS VE TESTING SCHEDULE -- Calling in advance to ensure testing availability is suggested but not mandatory. Walk-ins are accepted.

SPONSOR: Indianapolis Radio Club (W9JP)

LOCATION: Indianapolis Training Center (ITC), 2820 N. Meridian Street.

TIME: All testing starts at 9:00 AM

CONTACTS: Gale Wuollet (317-849-8449), <u>mailto:indy33windy@comcast.net</u> or Dovid Ofstein (317-908-5125) <u>doctoro57@yahoo.com</u>

June 6, 2009	liaison is Gale Wuollet (AA9WU)
July 11, 2009	at the Indy Hamfest
August 8, 2009,	liaison is Dovid Ofstein (N9APE)
September 5, 2009	liaison is Gale Wuollet (AA9WU)
October 3, 2009	liaison is Gale Wuollet (AA9WU)
November 7, 2009	liaison is Dovid Ofstein (N9APE)
December 5, 2009	liaison is Gale Wuollet (AA9WU)

HAMFESTS & EVENTS

June 5-7 June 13-14	USS Indianapolis, WW2IND Memorial Station Operation ARRL VHF QSO Party
June 20-21	SMIRK Contest
June 27-28	ARRL Field Day
July 11	Indy Hamfest, Camp Sertoma http://www.indyhamfest.com
July 18-19	CQ VHF Contest
July 24-26	W9IMS Brickyard 400 Special Event Station Operation
Aug 1	Broadripple Hamfest
Aug 28-30	W9IMS MotoGP Special Event Station Operation
Sept 11	Indianapolis Radio Club 3 rd Hill Top OTA Event
Sept 26	Greenfield Hamfest No fees, no prizes, just a free flea market!

2009 DAYTON HAMVENTION: THREE DAYS OF FUN, FELLOWSHIP AND FESTIVITIES

When Hara Arena closed its doors on Sunday, May 17 after three days as the 57th annual Dayton Hamvention came to an end, many agreed that this was one of the best Hamventions in recent memory. With so much to do -- including close to 50 hours of forums and the world-renowned flea market, as well as vendor tables that seemed to stretch for miles -- the arena floor was filled with excitement.

One of the highlights of both the Hamvention was private astronaut Richard Garriott, W5KWQ, son of Owen Garriott, W5LFL. In 1983, Owen Garriott was the first ham to make QSOs from space while aboard the space shuttle Columbia. Richard, a guest of the ARRL and AMSAT at Dayton, told convention crowds about his journey to the International Space Station (ISS). Ever gracious, he spent time with ARRL Youth Editor Duncan MacLachlan, KU0DM, in addition to speaking and signing autographs at the ARRL EXPO area, the ARRL Youth Lounge, and ARRL and AMSAT forums. Garriott also spoke at a Saturday afternoon forum, telling how he fulfilled his lifelong dream of experiencing space travel. Combining Amateur Radio and spaceflight, he had QSOs with more than 200 hams while on the ISS.

The busiest place in the ARRL EXPO was definitely the kit building area. Led by ARRL Test Engineer Bob Allison, WB1GCM, with assistance from QEX Editor Larry Wolfgang, WR1B, and ARRL Instructors, hams (and non-hams, too!) sat down in front of a circuit board and soldering iron to build either a 24 hour clock or electronic keyer. "We saw a lot of people of all ages -- including a large number of kids -- coming over to build," Allison said. "A large majority had never built a kit before. They were so excited to be able to build something that they can use immediately."

He pointed out that ham parents brought in their non-licensed children to build kits: "The little ones had a blast, and the parents were so proud that their kids are getting interested in Amateur Radio through the kit building projects."

"It's certainly well known that hams from all over the world come to Dayton for the Hamvention," said ARRL International Vice President Rod Stafford, W6ROD. "We truly had an international flavor in the ARRL EXPO, though, as this was the first time that we had representatives from all three IARU regions in the IARU booth. We were glad to see many hams stop by and visit with IARU representatives from all corners of the globe.

For more on the 2009 ARRL National Convention and Dayton Hamvention -- including a look at some of the new and exciting products -- check out the July issue of QST. The 2010 Dayton Hamvention is scheduled for May 14-16. –ARRL Letter

FCC'S BILL CROSS: "BEHAVE YOURSELVES!"

Bill Cross, W3TN, a staff member in the FCC's Mobility Division, and Laura Smith, FCC Special Counsel for Amateur Enforcement, spoke at the FCC Forum on Saturday, May 16 at the 2009 Dayton Hamvention. Cross opened by explaining just where Amateur Radio falls in the FCC's bureaucracy: "In the Mobility Division [part of the Wireless Telecommunications Bureau we handle the day-to-day administration of the Amateur Service and some of the rulemaking activities that affect Amateur Radio. The Division also has staff members in our Gettysburg, Pennsylvania office. Our Gettysburg staff handles most of your applications and the licensing matters and deals with the Universal Licensing System, or ULS".

Cross offered some general comments on the Commission and its priorities, then went on to discuss topics that he said "keep coming up in questions we receive in articles that appear on Web sites and in columns in newsletters and the like. I'm not going to spend a lot of time talking about Commission decisions that have been issued, because most of these have been reported on the ARRL or other Web sites."

RACES -- Cross said that he has been getting questions concerning RACES, asking what plans the FCC has to rejuvenate the organization. "The questions have been from a couple of FEMA guys who also happen to be hams," he said. "Now, in RACES, stations are certified by a civil defense organization and persons who hold an FCC-issued Amateur Radio operators license are certified by that civil defense organization as enrolled in it. I know that the term 'civil defense organization' is way out-of-date -- 'emergency management agencies' is probably a more current term. But the terminology used in the rules reflects that RACES was created in the Cold War era when there was a concern that everyone would be ordered off the air."

Cross pointed out that RACES "seems to be used for local, state and regional events and it is administered by FEMA. The rules require that communications transmitted in RACES be approved by the organization that certified people and that they're enrolled with. Fundamentally, RACES is there to serve whatever purpose that the emergency management agency has for it. Because the emergency management agency decides whether it has a use for a RACES group, the rejuvenation, if it is even necessary, will have to come from the local or state organizations. They will have to get people interested in joining their groups if they have a use for them. Some of the people I have talked to in different government agencies wonder why we still have this service, given the way that emergency communications are run and managed today."

AMATEUR RADIO AND PECUNIARY INTERESTS -- A topic that keeps popping up, Cross said, is business use of Amateur Radio, specifically transmitting messages on behalf of an employer. "Section 97.113 answers this question straight on: 'No amateur station shall transmit communications for hire or for material compensation, direct or indirect, paid or promised, except as otherwise provided in these rules.' There are two exceptions. There are exceptions for teachers who are using Amateur Radio as the control operator of a station in an educational institution as part of a classroom thing and control operators of club stations in certain cases. A station is also not allowed to transmit

communication in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer. There is an exception to that rule that allows you to transmit communications that are commonly referred to as "swap nets," but eBay seems to have reduced the need for these nets. And you're not allowed to transmit communications on a regular basis which could reasonably be furnished through other radio services."

Cross said that Section 97.113 is in the rules for two reasons: It meets a statutory requirement and it is there to protect your frequencies from becoming the business radio alternative voice overflow, or "BRAVO Service.' Because your spectrum is so valuable, if you let users such as businesses, TV stations, the National Weather Service or other users -- be they for-profit or non-profit -- use your frequencies to meet their communications needs, your frequencies will become their frequencies. All it takes is an allocation proceeding with the FCC, and your spectrum is gone. And you will be left whining about it in Internet chat rooms."

Cross pointed out the ARRL Chief Executive Officer David Sumner, K1ZZ, "had an editorial on this on April 1, 2009 [on the ARRL Web site and in the April 2009 edition of QST] ["It Seems to Us: Keeping the 'Amateur' in Amateur Radio," page 9]. That's probably not the best day to date something, but you should read it. And I have plagiarized from that greatly because it is very elegant and spot on" http://www.arrl.org/news/features/2009/04/01/10668/

The bottom line, Cross said, is "that when any of us are on the air as amateurs in the ham bands, we are not pursuing financial gain for ourselves or our employers. The 'no pecuniary principle' has been reflected in the FCC regulations since 1928. The Commission stated that any amateur-to-amateur communications is permitted unless specifically prohibited or unless transmitted for compensation or done for the pecuniary benefit for the station control operator or his or her employer."

Cross said that it does not matter if you use SSB, digital, SSTV or CW: "It boils down to a simple four part test that you, as the control operator of the station, must ask yourself before you cause the station to transmit a message. One, is the communications expressly prohibited in the rules? For instance, is it music, is it obscenity, something like that. Two, is the communications transmitted for compensation? Whether it's paid or compensation in some other way, such as, 'If you get this message to a friend of mine who's on a sailboat in the middle of nowhere, I'll pay your light bill.' Or, 'Get this message to someplace and I'll buy you a new radio.' That's indirect compensation. Three, does the control operator have a pecuniary interest in the communications? That is, could he or she benefit financially? Stock trades on ham radio benefit you financially. And four, does the control operator's employer have an interest in the communications? If the answer to each of these questions is 'no,' then the communications is acceptable with the caveat that it is not on a regular basis, one which could be furnished alternatively through other radio services."

"No communications on behalf of an employer' means just that," he said. "If it's your employer, you cannot transmit communications on their behalf. That is a commercial communications."

PUBLIC SERVICE COMMUNICATIONS -- The last topic Cross addressed concerned public service communications. "There's no rule about public service communications as such in Part 97, because most of the messages you transmit that you think of as public service communications are allowed by Section 97.111 Paragraph (a) authorizes an amateur station to transmit two-way communications including, among other things, exchanging messages with other stations in the Amateur Service and communications necessary to meet essential communications needs and to facilitate relief actions." Cross noted that most of these transmissions -- the essential communications needs and facilitating relief actions -- are two-way exchanges with messages with other amateur stations. "The rule also authorizes you to transmit one-way communications, such as transmissions necessary to make adjustments to the station -- check SWR, tones, modulation and brief transmissions necessary to establish two-way communications with other stations."

Cross said that the rules cover everything we do as Amateur Radio operators: "Ragchewing, DX, contests, DXpeditions, county hunting, tuning up, everything. Ninety-nine percent of our

communications fall under the rules that are there."

Emergency communications, by their nature, involve an element of immediacy, immediate safety of property and life. "Reporting where damage is, what happened after a tornado goes through or where power lines are down, is certainly public service communications and it's allowed under 97.111, but it may not involve an immediate safety of life and property," Cross explained. "A bridge washed out, for example, may need a more immediate response than downed trees. A car with occupants floating down a river is clearly an emergency situation. In cases like that, the rules already provide that at all times and on all frequencies, each control operator must give priority to stations providing emergency communications.

LAURA SMITH -- The Dayton Hamvention was one of the first events Smith has attended in her role as Special Counsel. Cross introduced Smith, explaining that he used to work for her and that she was "one of the best people that we possibly could get for this job, because before she came to the Wireless Bureau, she had worked in mass media. After she had been in the Wireless Bureau, Laura had been the president of a trade association in Washington. Many of the issues that come up with other entities using amateur spectrum are entities that are either in mass media services or in land-mobile services and they are basically lusting after your bands. So we are fortunate now that when someone calls up, Laura has this breadth of knowledge of not only what the amateur stuff is, but where [land-mobile and mass media services] actually really should belong. And she can counsel them very gently that they need to get licensed here and not, you know, where they think they are. This is something you don't see. Believe it or not, this is a tremendous help to you."

He mentioned that Smith plans to stay in this position for the long haul: "So if you have any ideas about a short-timer or think you're going to get away with it, plan on about 15 years down the road. In the meantime, behave yourselves!"

Smith explained that when she took over the amateur enforcement position earlier this year, the job had changed a bit from when Hollingsworth was in the office. "This job used to be in the Spectrum Enforcement Division down in DC; it was a remote position in a DC office," she explained. "It is no longer in that Division. I am actually a Field Agent. I'm attached to the FCC Field Office, I'm in the Northeast Region and my supervisor is the Regional Director for the Northeast Region." She told the crowd that she has spent a large portion of her time going through all the files that had accumulated, about 430 cases, while the position was vacant.

She explained the different types of complaints her office receives, such as complaints dealing with criminal investigations, technical violations, harassment and language complaints, malicious interference complaints and unlicensed users.

Smith also handles RFI complaints. Saying that these complaints are "ultimately going to be the most troublesome," she explained that there are two kinds of RFI complaints. "The first type of RFI complaint I get are the ones where your neighbors are complaining about you. You guys are causing interference to their television or to their radios or their telephone. The Commission generally tells them if you are a licensed amateur operator operating in the parameters of your license, then the Part 15 device that you are causing interference to is subject to that interference, and the rules state that very clearly. We suggest that they either work with you or they get a filter; those are the two suggestions."

Smith, in cooperation with the ARRL Lab, also handles utility line interference complaints. "This one, you would think, would be easy to resolve -- the power line is causing interference, the utility will come out and fix it and everything will be fine. Not quite so easy," she explained. "Those of you that have been experiencing it for 3, 4, 5, 10, 12 years know that in fact, that is not what happens. What I am discovering is that the utilities quite simply don't know how to fix the problem. They can't identify the noise. What they will do is they will go out and will find 15 sources of noise. They will fix these 15 sources of noise and then they will come back to me with this detailed list of these 15 sources of noise that they have fixed. Yea! We're all done. No -- they haven't fixed your noise. So they don't quite

understand the concept of 'Don't just run out and fix everything you see, that's irrelevant to the amateur.' The amateur wants you to fix their noise."

Smith described that the first step the utilities need to do is to go to the amateur's house and listen to the noise and determine exactly what they're hearing. "This way, when they fix it, you can ultimately figure out if you have in fact fixed their noise. I'm trying to figure out a way with the Lab as to how we can best tell the utilities that they really need to think about how their processes work and what we can do to educate them so they can get out and fix this."

Smith has also given utility companies time limits to fix the noise complaints. "I am telling them, 'If you go out and you can't fix it, every two weeks you have to report back to me in writing why you can't fix it.' Utilities are, generally speaking publicly traded companies, so what happens is that they have a Board of Directors that they answer to. Those people are not going to want them to waste time and energy writing this crazy woman in Gettysburg every two weeks a detailed report. And believe you me, if they miss their deadline, I call them and tell them 'You've missed your deadline. I need your report.' I have spoken to more heads of utilities in the last three weeks than I ever care to speak to again. They have no qualms about calling me, saying 'We can't meet the deadline.' And I explain to them that's fine, I'll just write up this nice little letter [saying] you can write your check to the federal government."

Smith suggested to the amateur community "that we as a collective -- you guys and me -- we can have a great relationship, we can do this the easy way. You guys can, in fact, follow the rules and remember that when you signed up to become an amateur, you actually committed to adhere to the Commission's rules. I'm going to strongly suggest that you hold to that. If you don't we can do this the difficult way, and I am more than willing to do that if it comes down to it."

QUESTIONS AND ANSWERS -- Cross and Smith then took questions from the audience. Questions concerned grandfathering Advanced class license holders to Extra class, enforcing Amateur Radio rules on stations originating outside the US, what type of internal review is required before a Notice of Apparent Liability is issued, keeping undesired hams off a repeater system, issues with D-STAR repeaters allowing Internet content to be carried on amateur frequencies and establishments that sell 10 meter radios disguised as 11 meter radios.

Smith also told the crowd why she has not yet become a licensed Amateur Radio operator: "My fatherin-law is Richard Smith. He is the former Chief of the Field Operations Bureau. The Field Operations Bureau was the precursor to the Enforcement Bureau. When Dick started his career at the FCC, he worked in the LA Field Office as an engineer; one of the duties that he had while he was out there was to administer the Amateur Radio tests. His expertise just so happened to be in the Code. He is an incredible operator. And so when I decided to take this job, I did not want to run out and get my license before I took the job for a lot of reasons. Not the least of which is I felt it would be a sham -- I wasn't an amateur before I took the job, I didn't want you to think that I was selling you so short that I was going to run out and get my license to try and validate myself for this industry. Instead, I said that I would wait and take the exam later and become an amateur as I got to know the community. When I told the story to Dick and I said I was thinking about getting my license, he said to me, 'You will not get your license until you can pass the code part of the test.' Unfortunately, he followed that up with a caveat, which was 'I will be there to oversee the administration of the test to determine whether or not you are competent and qualified to be an amateur.' So I have to learn code -- I obviously do not know it." Smith said she plans on learning CW this summer, along with her six year old daughter.

Cross closed the forum, quipping, "For those of you who are concerned, I made sure she went by the Vibroplex booth, and we also stopped by the Begali booth. So she got to see what the minimum requirements are for proper CW."

An audio feed of the FCC forum can be found on the ARRL Web site <u>http://www.arrl.org/news/files/FCC-Forum-2009.mp3</u>. --ARRL Letter

SCIENTISTS PREDICT SOLAR CYCLE 24 TO PEAK IN 2013

At the annual Space Weather Workshop held in Boulder, Colorado last April <u>http://www.swpc.noaa.gov/sww/index.html</u>, an international panel of experts led by NOAA's Space Weather Prediction Center (SWPC) predicted that Solar Cycle 24 will peak in May 2013 with 90 sunspots per day on average. If the prediction proves true, Solar Cycle 24 will be the weakest cycle since Solar Cycle 16, which peaked with 78 daily sunspots in 1928, and ninth weakest since the 1750s, when numbered cycles began.

The panel predicted that the lowest sunspot number between cycles – the solar minimum -- occurred in December 2008, marking the end of Solar Cycle 23 and the start of Solar Cycle 24. If December's prediction holds up <http://www.arrl.org/news/stories/2008/01/07/100/>, at 12 years and seven months Solar Cycle 23 will be the longest since 1823 and the third longest since 1755. Solar cycles span 11 years on average, from minimum to minimum.

An unusually long, deep lull in sunspots led the panel to revise its 2007 prediction that the next cycle of solar storms would start in March 2008 and peak in late 2011 or mid-2012. The persistence of a quiet sun also led the panel to a consensus that Solar Cycle 24 will be what they called "moderately weak."

Although the peak is still four years away, a new active period of Earth-threatening solar storms will be the weakest since 1928. Despite the prediction, the scientists said that Earth is still vulnerable to a severe solar storm. Solar storms are eruptions of energy and matter that escape from the Sun and may head toward Earth, where even a weak storm can damage satellites and power grids, disrupting communications, the electric power supply and GPS. A single strong blast of "solar wind" can threaten national security, transportation, financial services and other essential functions.

The most common measure of a solar cycle's intensity is the number of sunspots -- Earth-sized blotches on the sun marking areas of heightened magnetic activity. The more sunspots there are, the more likely it is that solar storms will occur, but a major storm can occur at any time.

"As with hurricanes, whether a cycle is active or weak refers to the number of storms, but everyone needs to remember it only takes one powerful storm to cause huge problems," said NOAA scientist Doug Biesecker, who chaired the panel. "The strongest solar storm on record occurred in 1859 during another below-average cycle." The 1859 storm shorted out telegraph wires, causing fires in North America and Europe and sent readings of Earth's magnetic field soaring. It also produced northern lights so bright that people read newspapers by their light, he said.

Biesecker cited a recent report by the National Academy of Sciences thatfound if a storm that severe occurred today, it could cause \$1-2 trillion in damages the first year and require four to 10 years for recovery, compared to the \$80-125 billion of damage that resulted from Hurricane Katrina http://www.nap.edu/nap-cgi/report.cgi?record_id=12507&type=pdfxsum>.

The Space Weather Prediction Center is part of the National Weather Service and is one of the nine National Centers for Environmental Prediction. It is the nation's official source of space weather alerts, watches and warnings. SWPC provides real-time monitoring and forecasting of solar and geophysical events that impact satellites, power grids, communications, navigation and many other technological systems. – ARRL Letter

GPS SATELLITES COULD BEGIN TO FAIL NEXT YEAR

According to a new study from the U.S. government accountability office, some important GPS satellites could begin to fail as early as next year, and all sorts of GPS users — public safety, military and consumers — could begin to experience regular blackouts, failures and inaccurate readings.

The <u>GAO report</u>, which was presented to Congress, says that the Air Force, which has been in charge of overseeing the constellation of GPS satellites since 1990, has struggled to build new GPS satellites within cost and schedule goals and has faced some major technical problems — as well as contractor problems — that are delaying significant updates to the system.

The GAO says the Air Force hasn't executed the necessary actions to keep the constellation of satellites running smoothly. "As a result, the current IIF satellite program has overrun its original cost estimate by about \$870 million, and the launch of its first satellite has been delayed to November 2009 — almost three years late," the report stated.

The Air Force is structuring its new GPS IIIA program — a satellite system that will improve accuracy, provide better indoor coverage and improve anti-jam performance — to avoid mistakes made on the current IIF program. The Air Force is trying to deploy these next-generation satellites three years faster than the IIF satellites. The GAO called this schedule to optimistic, given the program's late start

Another problem, according to the GAO is that the contractor also is being asked to develop a larger satellite bus to accommodate "future GPS increments" and to increase the power of a new military signal "by a factor of ten."

If the Air Force doesn't meet proposed timelines, there is an increased possibility that in 2010, old satellites could stop working and not enough satellites will be working in the constellation to ensure adequate GPS service.

The Air Force has established an independent review team to examine the risks of using a smaller constellation of satellites to provide military and civilian GPS services, should a few satellites fail.

SHORTS

FCC LOOKS TO RAISE VANITY CALL SIGN FEES FOR SECOND CONSECUTIVE YEAR -- The FCC released a Notice of Proposed Rulemaking and Order (NPRM) on May 14 seeking to raise fees for Amateur Radio vanity call signs http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-126A1.pdf. Currently, a vanity call sign costs \$12.30 and is good for 10 years; the new fee, if the FCC plan goes through, will go up to \$13.40 for 10 years, an increase of \$1.10. The FCC is authorized by the Communications Act of 1934 (as amended) to collect vanity call sign fees to recover the costs associated with that program. The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new term. Instructions on how to comment on this NPRM are available on the FCC Web site

http://www.fcc.gov/cgb/consumerfacts/howtocomment.html.

THE WARTSILA-SULZER RTA96-C -- Not a radio but an interesting machine if you haven't seen this! <u>http://www.viperalley.com/forum/anything-goes/74738-wartsila-sulzer-rta96-c.html</u>

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