



Bill Cross, W3TN, Presents FCC Forum at 2010 Dayton Hamvention®

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Bill Cross, W3TN, a staff member in the FCC's Mobility Division -- part of the [Wireless Telecommunications Bureau](#) -- spoke at the FCC Forum on Saturday morning at the [2010 Dayton Hamvention®](#). Billed by the Hamvention's Forum Committee as more of an emergency communications discussion, Cross discussed this and other matters -- such as FCC proceedings regarding vanity and club call signs, 60 meters and power limits for spread-spectrum users, -- as well as the FCC's *National Broadband Plan (NBP)*, RACES and [HR 2160](#), *The Amateur Radio Emergency Communications Enhancement Act of 2009*.

The Mobility Division handles the day-to-day administration of the Amateur Service, along with some of the rulemaking activities that affect Amateur Radio. The Division has staff members in Washington, DC and Gettysburg, Pennsylvania. The Gettysburg staff deals with most of the Amateur Radio applications and licensing matters, as well as the Universal Licensing System ([ULS](#)).

FCC Proposes Changes to 60 Meters

Cross said that there were what he called "an unusually large number of Amateur Radio proposed rule changes out for comment," as well as other open matters. He began his presentation by talking about a *Notice of Proposed Rule Making (NPRM)*, [ET Docket No 10-98](#), concerning the five channels that make up the 60 meter band for the Amateur Service. The NPRM was issued earlier this month in response to a [2006 Petition for Rulemaking filed by the ARRL](#). In its *NPRM*, the FCC is proposing the following three actions:

- Substitute 5358.5 kHz for 5368 kHz, as 5368 is usually occupied.
- Increase the allowed ERP from 50 to 100 W.

- Allow CW, PSK31 and PACTOR-III emissions with conditions to ensure that these operations are compatible with other users of the channel.

“The idea here is to make the 60 meter band more useful to you all, while making sure the primary users can also use the channels,” Cross explained. “The request for these changes, [from the ARRL](#), was coordinated and approved by National Telecommunications and Information Administration ([NTIA](#)) before we proposed it, so that eliminates a big hurdle. The proposal has not yet been published in the *Federal Register*, so I do not have the dates when comments and reply comments are due; I’m sure the ARRL will put this on its Web site when publication occurs, but as of Wednesday, May 12, there are already three comments in the docket.”

Spread Spectrum Emissions

Cross then discussed another *NPRM*, [WT Docket No 10-62](#), concerning power limits for stations transmitting a spread spectrum (SS) emission. Acting on a 2006 ARRL [Petition](#) regarding spread spectrum issues, the FCC is proposing to amend Part 97 to facilitate the use of spread spectrum communications technologies by eliminating the requirement that amateur stations use automatic power control (APC) to reduce transmitter power when the station transmits an SS emission and reducing the maximum transmitter power output when transmitting a SS emission. Cross said the FCC’s proposal is two-fold: To eliminate the automatic power control requirement in the rules now, and limit stations transmitting a SS emission to a maximum power of 10 W PEP.

Spread spectrum techniques are methods by which the information signal of a particular bandwidth is intentionally spread in the frequency domain. At any point of bandwidth the SS emission occupies, either the power spectral density of the transmitted signal is reduced to a comparatively low level or the duration of a transmission on any frequency in the frequency segment is very brief. Consequently, stations in the same area can transmit SS signals without causing harmful interference to or experiencing harmful interference from each other or a station transmitting a non-SS signal over the same spectrum segment.

Back in 1985, the FCC authorized Amateur Radio stations to transmit SS emissions with a maximum transmitter power limit of 100 W PEP. To emphasize the experimental nature of spread spectrum as well as some of the potential benefits associated with it, the Commission authorized such transmissions on a secondary basis to other amateur service communications. At that time, the Commission noted that “to reduce the likelihood that SS transmissions from an amateur station could be made for the purpose of obscuring the meaning of a message, the Commission permitted only frequency hopping and direct sequence spreading techniques.” Fourteen years later, the FCC eliminated restrictions on spreading techniques “to allow amateur stations greater flexibility and permit them to use the SS techniques used in other communications services.” The Commission also required stations transmitting SS communications with a transmitter power greater than 1 W to utilize APC to limit the transmitter power in accordance with a specific formula.

In 2006, the ARRL petitioned the FCC, requesting that the APC requirement be eliminated, asserting that the APC provision has proven to be “virtually impossible” as it requires the operators of the transmitting stations to determine the transmitter power received at distant receivers and that this requirement has proven to be “something of a barrier to SS experimentation.” The League further contended that the APC requirement could be eliminated without increasing the risk of harmful interference. The FCC is proposing to eliminate the APC requirement and reduce the maximum transmitter power output amateur stations may use when transmitting SS communications from 100 W to a peak of 10 W. “We believe that this approach is consistent with both the ARRL’s request that we eliminate a requirement that may be impossible to implement and the intent of the APC requirement to limit interference to other stations, the FCC stated in the *NPRM*.

“These changes are published in the Federal Register [on Friday, May 14], Cross pointed out. “Comments on the proposed rule changes are due June 20; reply comments are due on July 5. There also were three comments in this docket as of Wednesday, May 12.”

Proposed Changes to the Rules Applying to Vanity and Club Call Signs

On November 24, 2009, the Commission released a *NPRM* -- [WT Docket No 09-209](#) -- concerning the rules applicable to vanity and club station call signs. “This system has been available to you since 1996,” Cross explained, “and more than 80,000 of you have received vanity call signs. The comment period has closed for this docket. We have received 53 comments and reply comments. The proposal clarifies certain rules and codifies existing procedures that apply to the vanity call sign system. The idea in this docket is to make the vanity call sign system more equitable and efficient.”

The FCC is proposing the following changes to the vanity call sign program:

- Putting an exception in the rules regarding the two year hold period for former call sign holders.
- Codifying the procedures the FCC uses when cancelling an Amateur Radio license when a licensee
- dies.
- Proposing that the call sign shown on a license canceled due to the death of a licensee more than two years earlier remains unavailable to the vanity call sign system for 30 days after the staff cancels the license. “This would allow the assignability of a desirable call sign to become known, and would provide an opportunity for other licensees to apply for the call sign,” Cross explained.
- Specifying who is an “in-law” for purposes of the relative of a former-holder-now-deceased exception to the two year hold period.
- Limiting clubs to holding only one call sign. Clubs that currently hold more than one call sign would not be allowed to obtain any more call signs, but could renew or modify their existing station license grants.

The proposal regarding limiting clubs to only on call sign generated a lot of comments, both pro and con, Cross said.

Emergency Communications

Amateur Service Communications During Government Disaster Drills

“As you are probably aware, there have been a number of items out of the Commission over the past few months that expand what you can do to help out with emergency communication tests and drills,” Cross said. “There has been a proposed rule change and two *Public Notices*. I want to mention these so you all know where we are on this topic.”

On October 20, 2009 the [Commission released a Public Notice concerning Amateur Service communications during government disaster drills](#), noting that transmissions by amateur stations participating in government sponsored disaster drills must comply with all applicable Amateur Service rules and clarifying that the Amateur Service is not an emergency radio service.

“This *Public Notice* also noted that the Commission’s Rules specifically prohibit amateur stations from transmitting communications ‘in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer,’” Cross maintained. “You may recall that I said the same thing [at this forum last May](#). Contrary to what some licensees claimed in letters to their congressional representative and in other forums, my statement was not ‘a new interpretation:’ it is what the rule says and has said since 1993.”

Cross went on to say that the *Public Notice* also set up a process that allowed the government entity conducting the drill to request a waiver so that employees could transmit messages on behalf of an employer if certain information was provided: “We have received about 25 requests for a waiver since October 20. Most have been granted. Many of the requests have been for weekend-type events; a few have been for only a few hours. There is no requirement that the grantee report back to us whether they used the waiver, so we have no idea as to whether the waiver was needed, used or what happened during the event.”

The FCC is still using this waiver process for Amateur Radio involvement in government-sponsored emergency drills, “but it seems that most government entities, when they look at their communications needs, find they can satisfy them without needing employees to transmit messages on behalf of their employer,” Cross said. “Note that this process is available only to the government entity conducting the drill and only for government-sponsored emergency preparedness and disaster drills.”

WP Docket No 10-72

On March 24, [the FCC released a Notice of Proposed Rule Making \(NPRM\) -- WP Docket No 10-72](#) --proposing to amend the Commission’s Amateur Radio Service rules “with respect to Amateur Radio operations during government-sponsored emergency preparedness and disaster readiness drills and tests.” While current rules provide for Amateur Radio use during emergencies, the rules prohibit communications

where the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer.

“The proposal is to allow a station control operator to participate on behalf of an employer in a government sponsored emergency preparedness or disaster readiness test or drill,” Cross said. “The proposal was [published in the *Federal Register* on April 22](#). Comments are due May 24 and reply comments June 7. We have received 182 comments on the proposal so far. To say the views expressed are miles apart would be an understatement. The staff of the Public Safety Bureau will be handling this docket.”

Cross mentioned that some amateurs attending the forum might be aware that a *Petition* on this topic was filed in October 2009 by three hams: former ARRL North Texas Section Manager Tom Blackwell, N5GAR; David Coursey, N5FDL, and Gordon West, WB6NOA. “Their petition sought to amend the rules to permit amateur transmissions ‘necessary for disaster relief or emergency response, including training exercises, planning, drills or tests, without regard to whether the amateur operator has related employment, where the transmissions are for the exclusive use of Amateur Radio operators for noncommercial purposes,’” Cross explained. “The Commission incorporated the Blackwell, Coursey and West *Petition* into this proceeding. It did not give the proposal a rulemaking number, propose what Blackwell, Coursey and West asked be proposed or seek comment on their proposal, but rather proposed a much simpler rule change.”

American Hospital Association’s Request for Blanket Waiver Regarding Amateur Radio and Drills

After the October *Public Notice* was released and people had a chance to see how it applied to their situation, certain groups noticed that they are not eligible for waivers. Cross said that some of these groups were not government entities, and some wanted to conduct emergency preparedness and disaster drills which were not part of a government-sponsored test or drill: “Yet they, too, want their employees to be allowed to transmit business messages for them on Amateur Service frequencies. One of those groups is hospitals, and on February 17, 2010, the American Hospital Association ([AHA](#)) [filed a request for a blanket waiver of Section 97.113\(a\)\(3\)](#). It wants us to permit hospitals seeking accreditation to use Amateur Radio operators who are hospital employees to transmit communications on behalf of the hospital they work for. Hospitals need to have backup communications systems to meet certification requirements.”

On April 19, the [FCC requested comments on the waiver request](#). As of May 4, Cross said that the FCC had received 364 comments in response to the Public Notice: “The comments are from Amateur Radio operators who oppose and support the waiver request, and hospitals supporting the waiver request. The waiver request will be addressed in a future *Order* or other Commission decision. Stay tuned for further developments. As of now, Amateur Radio operators who are employees of a hospital may be included in the waiver request from a government entity conducting a government-sponsored emergency preparedness and disaster drill.”

The National Broadband Plan

In March 2011, FCC Chairman Julius Genachowski [*introduced the Commission's National Broadband Plan \(NBP\)*](#) to the American public. Congress and the White House have expressed support for this plan, although many details are still to be worked out. The *NBP* calls for re-allocating 500 MHz of spectrum to mobile broadband over the next 10 years. Cross said that this means moving spectrum from one service to another. "As part of this process, an inventory of spectrum, both federal and non-federal, appears to be in the works," he said [*Editor's Note: [It was released May 19, 2010](#)*]. "Bills mandating this inventory have been introduced in Congress. The goal is to find spectrum that can be used for the *NBP*. 300 MHz is sought in the next 5 years. What is being looked for is primarily under 3 GHz and in large blocks. The plan is to auction it off and it would be used for a commercial service, probably something similar to the cellular service today, but at greater bandwidths. Broadcasters have already said, 'Not us.' Federal agencies are examining their spectrum to see if it is being used as efficiently as possible."

Cross pointed out that the amateur bands below 225 MHz do not appear to be of much interest for the *NBP* "because they are narrow -- 4 MHz or less -- and the propagation is 'too long.' 902-928 has a lot of consumer devices in it that may cause interference to mobile devices, particularly hand-held devices. But you have other bands that may be of use for the *NBP*: The 9 cm band is 200 MHz wide. The 13 cm band, although split, covers 150 MHz. The 5 cm band is 275 MHz wide. These bands are possibilities, especially if paired with other spectrum."

Amateurs also have commercial interests, particularly the land mobile community, looking for an additional 30 MHz of spectrum, Cross explained. "Land mobile already is allocated 450-470 MHz," he said. "You have 420-450 MHz on a secondary basis -- 30 MHz right next to an existing land mobile band. Although not 'pure' due to government radars like the PAVE PAWS systems and other uses, I would not be surprised if the land mobile community says we can make more efficient use of that spectrum than the hams do, and our use will create jobs. Stay tuned."

RACES

RACES is managed by FEMA -- not the FCC. "We have the rules for RACES in Part 97 because it uses amateur stations," Cross explained. "All FCC-issued RACES station licenses have now expired. The service, however, continues to exist and it is used by some emergency management agencies in some places for whatever purpose they have for it. In other places, hams seem to organize themselves under the ARES® program to provide communications during emergencies. There are a lot of clubs with RACES in the name. If a club wants to call itself a RACES club, there is no rule against that. But the license we issue is a club station license. And the rules that apply to club stations are the same for all clubs."

HR 2160

The last topic Cross discussed the “bill on the Hill” that the ARRL had introduced -- [HR 2160](#), *The AmateurRadio Emergency Communications Enhancement Act of 2009*. “This is the bill that would direct the Department of Homeland Security (DHS) to undertake a study to identify unreasonable or unnecessary impediments to enhanced Amateur Radio communications, such as the effects of private land use regulations on residential antenna installations, among other things. The bill presently is assigned to a House committee. It has a [number of co-sponsors](#). A [similar bill has already passed the Senate](#).”