

npstc spectrum

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In-Building Coverage BDA Rule Changes Needed Today

Regardless of whether you love them or hate them, Bi-Directional Amplifiers (BDAs) or Signal Boosters as the Federal Communications Commission (FCC) calls them, have become the most practical way to provide public safety wireless coverage in most basements, subways, and parking garages.

Before the FCC established specific signal booster rules in 1996 (90.219), installations required licensing and waivers on an installation-by-installation basis. In 1996, there were only a few hundred signal booster installations and a very limited number of hardware sources. Since then signal boosters have become a crucial and widespread component of public safety wireless systems. Between 1996 and 2001, usage of broadband (FCC Class B signal boosters) grew rapidly, especially in the 800 MHz public safety bands, which was interleaved with Nextel's 800 MHz channels.

In the first 6 years, from 1996 to 2002, Class B signal boosters caused few cases of interference and those were remedied almost entirely without FCC intervention. But the level of interference to public safety systems in recent years has increased and will continue to do so if additional FCC action is not taken soon.

Why an Interference Problem Now?

In 1996, no one anticipated low-priced, marginal performance signal boosters would be marketed direct to the public as consumer devices readily available for sale on the Internet, cellular retail stores, and even at truck stops. It is ironic those who voiced the most concern about interference from Class B

signal boosters in 1996—cellular licensees and Nextel—would become today's largest users of Class B signal boosters. Starting about 4 years ago, consumer grade signal boosters originally designed for cellular customers were readily altered to cover the

whole 18 MHz-wide Part 90 800 MHz band.

Originally designed for an input from a single half-watt cellular-like handset, the "Nextel Boosters" have been misapplied into public safety systems where multiple 3 to 5 watt handsets may be present during an emergency, creating a high probability of signal booster malfunction or failure, including high levels of interference. Even when functioning under normal conditions, some consumer signal boosters are adjusted improperly and become unstable on hot days and intermittently oscillate, causing periods of high level RF signals to interfere with public safety receivers miles away. Consumers are not skilled in good signal booster installation practice nor



possess the test equipment necessary to check and adjust gain levels, which is critical to proper interference control.

The current FCC Rules have the mechanisms to reduce today's problems with consumer-installed signal boosters by limiting the authority to use signal boosters to licensees only but the Internet distributors and some manufacturers have openly told consumers there is no FCC rule over consumer signal booster usage. The sales of consumer grade signal boosters are increasing greatly and into unpredicted areas. For example, one manufacturer of mobile signal boosters in autos, RVs, and 16 wheelers said they were selling over 1,000 signal boosters a week in truck stops.

By providing free signal booster applications assistance, detailed installation and testing instructions, and even classroom training, several responsible public safety signal booster manufacturers have struggled for years to

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executive director



From the Director

I hope you had some time at home with your families to enjoy the holiday season! I know how much some of you are away from home, and this year has been worse for public safety due to the rescue efforts around the country. We have so many wonderful stories to share of the giving and opening of homes to those in need. We need them to balance the horror of the destruction that has

occurred over the past months. Coming from Florida, I thought I saw the worst Mother Nature could throw at us, until this year! A special thanks to all who have responded, by going or sending relief to the areas destroyed.

For public safety people, the communications issues “discovered” during rescue efforts are nothing new. We have been predicating this and working to obtain frequencies, funding, and cooperation to improve systems. However, as we focus on interoperability, we need to consider a phrase I heard at a recent SAFECOM meeting that was so true, “ We have to have operability before we can have interoperability”!

When your equipment room is under 6 feet of water, it isn't going to work! How do we plan for this? Back ups to back ups to back ups are one way; however, redundancy costs money and how will we afford the assurance that we don't get “wet” again?

One way to work on these issues and contribute to the discussions is to become a NPSTC participant. We tackle tough issues and influence regulators. That is critical to your every day job and we need people “in the battlefield” working with us. Please consider NPSTC as a forum worthy of a little of your precious time. We are working on critical issues that could help you do your job better. We are looking forward to hearing from you. Enjoy this issue of our *npstc spectrum* newsletter and feel free to pass it on.

Marilyn Ward

BDA Rule Changes, continued

(Continued from page 1) reduce the interference potential. However, the flood of consumer grade product is undermining their efforts unless the FCC takes action against mass marketing to consumers.

Petition Filed To Modify and Expand FCC Rules on Signal Boosters

On August 18, 2005, Bird Technologies (the parent of TX RX Systems) filed a petition to modify and expand 90.219 rules to meet today's signal booster usage realities in an attempt to provide additional interference protection within public safety bands. The petition asks specifically to do the following:

⊙Modify 90.219(e) to allow “ONLY FCC authorized licensees to operate Part 90 signal boosters, not consumers;”

⊙Modify 90.219(e). The licensee is given the authority to operate signal boosters without separate authorization from the Commission. Non-licensee customers of commercial mobile radio service providers (CMRS) may only deploy signal boosters with the express written permission of the licensee. Such permission shall include the specific location(s) of the signal booster equipment. Certified equipment must be employed and the licensee must ensure that all applicable rule

requirements are met.

⊙Add more stringent bandpass requirements to reduce the misuse of excessively wide radio frequency (RF) filters to reduce noise and interference;

⊙Modify 90.219(g). The passband of Class B signal boosters shall be reduced to the minimum necessary to amplify the frequencies that of the authorized licensee. In no case shall the 3 dB passband bandwidth exceed the minimum passband of such channels by 1 MHz.

⊙Add labeling to each signal booster product that informs installers they must comply with FCC rules, regardless of what a distributor, manufacturer, or salesperson may say.

(New) 90.219(h). All signal boosters shall have a warning label affixed in a location on the signal booster that will be readily obvious to the purchaser and installer similar to that in 90.219(e) and a warning about RF exposure (recommended example follows).

WARNINGS: Non-licensees may only deploy signal boosters with the express written permission of the licensee. Such permission shall include the specific location(s) of the signal booster equipment. Certified equipment must be employed and the licensee must ensure that all applicable rule requirements have been met. Antennas, power levels, and antenna locations must comply with RF exposure limits as specified by the FCC's

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Impact of Changes in National Historic Preservation Law for Public Safety— A Guide to the Changes

Like all FCC licensees, public safety communications agencies have for the past 7 months been subject to the requirements of the Nationwide Programmatic Agreement (NPA). The NPA was executed by the FCC, Advisory Council on Historic Preservation (ACHP) and National Conference of State Historic Preservation Officers (NCSHPO), and became effective on March 7, 2005. The NPA now governs the procedures required of all newly licensed or modified radio facilities for the review of impacts from those facilities to historic properties. All federal agencies are responsible for considering the impacts to historic properties from their actions, or those that they fund or license, under Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. § 4709(f)).

In the months since the NPA became effective, most public

safety agencies should have become familiar with its provisions. This article is intended as a review and a refresher, covering the major changes that we have seen under the new law compared to what was required previously, under the FCC's environmental regulations (47 C.F.R. Part 1, Subpart I) and the regulations of the ACHP (36 C.F.R. Part 800).

In fact, the NPA introduced quite a few new procedures to the process of historic preservation review, including in the requirements for use of professional experts, archeological field surveys, documentation, tribal participation, and other procedures.

Here is an outline of the most significant changes from previous Section 106 law that are now required by the new NPA.

A. Major Changes in the NPA from Previous Law or Procedure	
Under Prior Law	Under the FCC NPA
<p>1. Archeological Surveys Not Usually Required. Archeological field surveys were not required in every case. ACHP rules required the agency to "make a reasonable and good faith effort to carry out appropriate identification efforts," considering many factors, including the nature of the undertaking, degree of federal involvement, the nature and extent of potential effects, and the likelihood of historic properties in the Area of Potential Effects (APE).</p>	<p>1. Archeological Surveys Usually Required. Archeological field surveys by Secretary Qualified archeologists are required for most sites, except where a qualified archeologist can report that: (1) all excavation will be on ground previously disturbed to a depth of 2 feet below the proposed construction depth (excluding footings and other anchoring mechanisms); or (2) geomorphological evidence indicates that cultural resource-bearing soils do not occur in the project area, or may occur but deeper than 2 feet below proposed construction depth. Because these exceptions are so narrow, and because a qualified archeologist must certify when a field survey is not required, it seems that than a field survey is required in virtually every case.</p>
<p>2. Discretionary Documentation Standards. The general standard was that all findings must be supported by documentation sufficient to enable any reviewing parties to understand its basis. As an example, for findings of "no historic properties affected," the rules require "a description of the undertaking specifying the federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary," and a description of identification efforts taken and the basis for the finding.</p>	<p>2. Mandatory Documentation Standards. Very detailed and specific information is now required in Forms NT (620) and CO (621). These forms are now a part of the FCC's rules. New information not previously specifically required includes:</p> <ul style="list-style-type: none"> A. Consultant's resume and Secretary qualifications in the relevant area(s). B. All Consultant staff resumes and Secretary qualifications in the relevant area(s). C. Specific information on all aspects of project besides the tower. D. Bases for determining both APEs. E. Two separate categories of historic properties for direct effects and two for visual effects. F. Archeological field survey, or a report why one was not done. G. Comprehensive photos of entire area, keyed to maps, including to and from tower site, and to and from all historic properties in the APE. H. Maps showing both APEs, site roads and easements and the location of every historic property in the APE. I. Professional Bibliography.
<p>3. Professional Qualifications Not Required for Consultants. Previously, there were no clear requirements that identification, assessment, or findings regarding properties not on federal lands be made by persons with particular qualifications.</p>	<p>3. Professional Qualifications Required for Consultants. All of the following actions: (1) identification of properties potentially directly affected; (2) determinations that archeological field survey is not required; (3) assessments of effects; and (4) findings, must now be made by a professional who meets the Secretary of the Interior's Standards (usually a graduate degree plus training and experience) in the relevant area of the action, including: (1) History; (2) Archeology; (3) Architectural History; (4) Architecture; and/or (5) Historic Architecture.</p>

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Changes, continued

B. Major Changes in the Procedures for Participation by Indian Tribes

Under Prior Law	Under the FCC NPA
<p>4. Applicants May Make Initial Tribal Contact. Under ACHP guidance, applicants were authorized to contact State Historic Preservation Officers (SHPOs) and Tribal Historic Preservation Officers (THPOs) on behalf of the FCC. Applicants were also allowed to contact Indian tribes directly, unless the tribe determined that it preferred to consult directly with the FCC.</p>	<p>4. FCC Must Make Initial Tribal Contact. Unless the applicant has a pre-existing relationship with an interested Indian tribe, or the Indian tribe has made known a different preference, thorough participation in the Tower Construction Notification System (TCNS) or otherwise, the FCC must make the first contact with all potentially interested Indian tribes.</p>
<p>5. Implied Waiver of Tribal Rights to Consultation for No Response. Indian tribes have a right to be consulted under Sections 106 and 101(d)(6), but if they failed or refused to participate, after being provided a reasonable opportunity to present their views, and after the 30-day SHPO review period has passed, tribes were deemed to have waived their right to consultation.</p>	<p>5. No Implied Waiver of Tribal Rights to Consultation for Applicants. Under the NPA, the FCC will not allow applicants to imply tribal waiver for applicants. After the initial contact, further contact from an applicant must be expressly accepted by the tribe. The recent Declaratory Ruling released by the FCC provides that after an initial contact, through TCNS or otherwise, an applicant should make an effort to follow up when a tribe does not respond within 30 days to the first attempt. After a second attempt at contact, if the tribe fails to respond within 10 days, the applicant can ask the FCC to attempt to get the tribe to participate, for which task the FCC has 20 days, and will notify the applicant of the results within 5 days thereafter. Thus the time required to complete the process with a tribe that refuses to respond is at least 60 days.</p>
<p>6. Limited Tribal Role in Section 106. Under ACHP rules, the tribal role was one of a consulting party with special rights to consult on identification efforts, and a greater role if historic properties are identified that have religious and cultural significance to that tribe.</p>	<p>6. More Expansive Tribal Role in Section 106. Under the NPA and BPA, tribal right to request special identification efforts does not depend on identification of a historic property of significance to that tribe.</p>
<p>7. Limited Confidential Treatment Available for All Properties. Applicable to all historic properties, after consultation with the Secretary, the agency could withhold from public disclosure information about the location, character, or ownership of a historic property when disclosure may: (1) cause a significant invasion of privacy; (2) risk harm to the historic property; (3) or impede the use of a traditional religious site by practitioners.</p>	<p>7. Broad Confidentiality for Tribal Properties Only. Applicable only to tribal properties, if an Indian tribe requests confidential treatment of information regarding historic properties, the applicant shall honor this request, and in turn ask the Commission to afford confidential treatment under its rules and Section 304 of the NHPA. The Commission shall provide such confidential treatment consistent with its rules and applicable federal law.</p>
<p>8. Documentation Not Required for Indian Tribes that are Not Consulting Parties. There was no specific requirement that Indian tribes that were not consulting parties be provided with documentation. Identification efforts were to be conducted “in consultation with any Indian tribe or NHO that might attach religious and cultural significance to properties within the APE.” If no such property is identified, the tribe’s rights in the Section 106 review were limited.</p>	<p>8. Full Documentation Required for All Indian Tribes that have Not Disclaimed Interest. Unless an identified Indian tribe affirmatively disclaims an interest, the applicant must provide that tribe with complete information “necessary for the Indian tribe to evaluate whether historic properties of religious and cultural significance may be affected.”</p>
<p>9. Section 106 Consultations are Open. The ACHP rules provide that Section 106 consultations are to be an open process.</p>	<p>9. Section 106 Government-to-Government Consultations with Tribes are Closed. Under FCC procedure, government-to-government consultations with Indian tribes are conducted confidentially between the FCC and the tribe, and applicants are not allowed to participate unless the tribe agrees that they can.</p>

C. Changes with Streamlining Effect for Applicants

Under Prior Law	Under the FCC NPA
<p>10. New Rules for Objections from SHPO, ACHP or Public to Findings of “No Effect” or “No Adverse Effect.” The new ACHP rules adopted in 2004 provided elaborate commenting procedures where a SHPO or the ACHP objects to a finding of no effect, or where anyone including a member of the public objects to a finding of no adverse effect.</p>	<p>10. New Rules for Objection to Findings of No Effect or No Adverse Effect Do Not Apply to the NPA. The NPA does not adopt the new provisions of the ACHP rules and therefore they do not apply to communications projects.</p>

Under Prior Law	Under the FCC NPA
<p>11. No 30-Day Review Period for Applicants. Under ACHP interpretation, the 30-day automatic approval for failure of SHPO to respond does not automatically apply to consultations involving applicants. The “30-days and out” rule was held only to apply where a federal agency was dealing directly with the SHPO.</p>	<p>11. 30-Day Review Period Applies to Applicants. Where a SHPO does not respond within 30 days to a finding of “no effect” the undertaking is automatically approved and the process is concluded. Findings of “no adverse effect” must go to the FCC for an additional 15-day period, with automatic approval if the FCC does not notify the applicant otherwise.</p>
<p>12. Identification Required for Historic Properties only Visually Affected. All listed and eligible properties in the APE had to be identified, including those that were unlisted but that met the National Register eligibility criteria.</p>	<p>12. No Identification Required for Historic Properties only Visually Affected. Properties only visually affected may be identified by researching SHPO records, and no professional consultant or evaluation of significance is required. BUT – The applicant must still gather information from identified tribes to assist in identifying historic properties of religious and cultural significance to them. This “information gathering” may include a field survey where appropriate.</p>
<p>13. No Exclusion for Replacement Towers. Under the Collocation Agreement, all replacement towers had to undergo Section 106 review</p>	<p>13. Replacement Towers Excluded From Review. Replacement towers that do not substantially increase the size of the existing tower are excluded from Section 106 review – may expand the tower site by 30 feet in any direction.</p>
<p>14. Unlimited Area of Potential Effect (APE) for Visual Effects. No practical limit.</p>	<p>14. APE for Visual Effects is presumed to be Limited. Presumed APE is limited according to height of tower:</p> <ul style="list-style-type: none"> <200 ft. - ½ mile 200 - 400 ft. - ¾ mile >400 ft. - 1 ¾ miles

D. Three changes that have a positive or streamlining effect, but that effect was diminished because Indian tribes were exempted:

- (1) No identification required for potentially eligible properties only visually affected. (See Item No. 12, above).
- (2) Exclusion from review for towers under 200-feet tall in non-historic, 100,000 square foot industrial parks, shopping centers, or strip malls. Towers in these areas are excluded from review, even from review for effects to archeology.
- (3) Exclusion from review for towers in or within 50 feet of a public right-of-way, designated and in active use for utility transmission or distribution lines or communications towers, not within a SHPO-identified historic property, and not substantially larger than nearby existing structures in the right-of-way. All such towers, however, must undergo full tribal consultation, and even a full Section 106 review if tribal consultation results in identification of a historic property of cultural and religious significance to an Indian tribe.

Conclusion

The changes outlined above are but a few of those that are imposed on the process of Section 106 review of proposed new or modified public safety communications towers and facilities. Familiarity with these changes will help all public safety applicants comply with the FCC’s environmental regulations, and will help minimize unwanted and unnecessary impacts to historic properties.

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Interoperability. It's All In The Cards!



Osceola County Fire Rescue called Orange County Fire Rescue requesting Mutual Aid for a hazmat incident. The Osceola County dispatcher told Orange County Fire to have their units come up on Osceola County TAC4. As the Orange County hazardous materials team entered Osceola County, they realized that they didn't have Osceola County TAC4 in their radios.

Brevard County Fire Rescue was assisting Orange County Fire Rescue at the scene of a tour bus crash. The Brevard County field supervisor met with the Orange County incident commander and agreed to switch his units to a common channel. The Orange County incident commander showed the Brevard County supervisor his portable radio, and said that he was on talk group "MA1." The Brevard County supervisor could not find any channel in his radio that matched "MA1." He would later learn that this channel was labeled "MA1" in Orange County radios, but was called "NAT TAC1" in the Brevard County system.

True public safety interoperability involves much more than technology. It also requires policy, procedure, and training. The central Florida region is very fortunate to have a full range of interoperability technology, including conventional 800 MHz channels, console-based patching, incident patching systems, and cross programming for direct access to other agencies. However, these systems cannot be fully utilized without proper procedures and systems.

The Central Florida public safety community came together last year to develop standardized procedures and protocols to ensure that units could always communicate, without regard to their radio system platform or geography. Work was also underway to build out six separate 800 MHz conventional repeaters in the area. During the early meetings, the agency managers realized that they needed to document the current situation, in advance of the new resources, which would be brought online the following year.

Barriers to effective interoperability were identified. They included lack of awareness by dispatchers and field units on how to communicate across agency boundaries, lack of common channel labels which result in many different "names" being assigned to the same talk group, and no standardized list of which agencies had which channels.

A simple solution to these problems was identified during a meeting in which the agency managers were discussing EMS Communications and Emergency Medical Dispatch. It was decided that each agency would create a set of "Mutual Aid" radio interoperability cards. The cards would be laid out in a similar fashion to the Emergency Medical Dispatch or EMD cards. Each card would represent a different county or agency that might be called to assist. It would list the preferred channel for units to use, both if they were coming into the county, or going to that county to assist. The card would also identify the channel "label" in that agency's radio. When possible, an alternate channel is also identified. The cards also include the 24-hour dispatch center phone number for each county.

For example, if an Orange County Fire dispatcher needed to call the Tangerine Fire Department for assistance, they would go to the card set and slip open the "Brevard County/Tangerine Fire" card. The card would list the following information.

BREVARD COUNTY TANGERINE FIRE DEPARTMENT INFORMATION

- 3 Stations, Provide BLS Non-Transport Service.
- Engines, 2 Woods Trucks, and 1 Tanker.
- All Woods Trucks and Tankers have VHF radios that can communicate on DOF RED.
- Engines and Rescues have M/A-COM 800 MHz Radios.
- Tangerine FD is dispatched by Brevard County Fire Rescue.

ALTERNATE INTER-OP CHANNELS INCLUDE:

1. Mutual Aid 2.
2. DOF (DOF RED).
3. Mutual Aid 1.
4. Mutual Aid Calling.

DO NOT USE:

1. Mutual Aid 3 (geographic coverage limitation).
2. Mutual Aid 4 (geographic coverage limitation).
3. Florida Mutual Aid (not in unit radios).

CALL BREVARD COUNTY FIRE DISPATCH

321-555-1212

PRIMARY INTER-OP CHANNEL

Mutual Aid 2

1. Request Tangerine Fire units to come up on Mutual Aid 2.
2. This talk group is labeled "NAT MUT AID 2" in their radio. This talk group is in ZONE 4, CHANNEL 2 in their mobile. This talk group is in ZONE 4, CHANNEL 2 in their portable.
3. Call FDLE Dispatch Center at 407-737-2255. Request FDLE dispatcher activate NAT TAC2 repeater. Activate Repeater for Orange County only, not cluster, not region.
4. Console Patch "MA2" to OCFRD tactical talk group.
5. NOTE: OCFRD units can access MA2 in ZONE 10, CH 5.
6. Call FDLE to disable repeater when operation is completed.

SECONDARY INTER-OP CHANNEL

DOF

1. Request Tangerine Fire units to come up on DOF-RED.
2. This talk group is labeled "DOF MUT AID RED" in their radio. This talk group is on CHANNEL 12 on mobile VHF radio only.
3. Call Orlando DOF Dispatch at 407-576-2233 and advise this channel will be in use for a mutual aid emergency.
4. Console Patch "DOF" to OCFRD tactical talk group.
5. NOTE: OCFRD field supervisors have DOF portables, CH6 is DOF RED.

It is quite simple to develop a set of cards that documents how your agency communicates with other agencies. This information should always be reviewed by a technical team member who has knowledge of your radio system and the radio system of the agency you are working with. The cards should be laid out to provide the dispatcher with all of the information and procedures necessary to ensure successful communications.

In summary, effective interoperability involves many steps. Make sure that your agency is putting sufficient focus on policy, procedure, and training.

Barry Luke, is the Division Chief of Fire Communications for Orange County (Florida) Fire Rescue and is the Chair of the Communications Operations Committee for the Region 5 Domestic Security Task Force in Central Florida.



HOT TOPICS ON THE NPSTC LISTSERVS

This posting to the NPSTC Interoperability Listserv generated a storm of responses on a number of issues including establishing standard interoperable nomenclature, regional interoperability, and operability.

“Having spent about a week in the New Orleans area after the storm passed, communications became a major problem. The New Orleans EDACS system had major problems due to flooding and power outages.

Jefferson Parish Sheriff radio system suffered a major blow with their 340-foot self-supported tower in Gretna laying on the ground. They are currently using their main site on the Galleria building at the intersection of I-10 and Causeway Blvd. Very little radio interoperability was being used in the aftermath of the storm. This could be from a number of issues. One of the main ones is that not all 800 MHz radio systems have the “National Interoperability” channels programmed into the radios. If they are, the chances are good that they are called or labeled something other than the “ICALL, ITAC1, ITAC2, ITAC3, and ITAC4.”

There are also interoperability channels at UHF and VHF. These channels need to be in any radio that could possibly be used for mutual aid or interoperability. The programming in the simplex as well as the repeater channels on 800 and the UHF channels needs to be done. At VHF, there are only simplex channels.”

The predominant response? The importance of achieving operability.

As one respondent to the listserv noted, “Interoperability has been over emphasized to the point that the ability to talk to our neighbors has become more important than the ability to talk amongst our own public safety agency ALL the time. We need to start emphasizing the “hardening” of infrastructure, developing, installing and training communication center and field personnel on multiple-layer backup systems, and building out deployable cache systems to include portable radios (with battery clamshells) and repeaters.”

Another response stated, “Interoperability channel nomenclature standardization, along with tone squelch standardization, is a basic and relatively simple step that should have been taken long ago. If the FCC won’t require it, the least we can do in the public safety communications community is agree on standardization and propagate this information to every agency, along with the need to include the interoperability channels in every radio. If this had been accomplished, most any agency that responded to Louisiana and Mississippi, particularly those on VHF and 800, should have been able to access some interoperability channels with their

own radios as normally programmed.”

“A few of us having been saying for several years now—interoperability begins with operability. Our public safety agencies need to have good day-to-day communications that allow them to talk with people (both internal and in other agencies) that they routinely need to talk to. It can only be from that point that we add interoperability with other “ad hoc” agencies that may respond to an emergent event,” said another email.

“The point that we really need to be promoting—communications is a vital part of “command and control.” You cannot manage an event or the response to it without good communications. We need to be thinking about the communications resource (both what is there and what we need to bring in) from the very beginning of an event. We need to institutionalize that—develop the resources that allow it happen.”

Regarding day-to-day interoperability, a respondent stated, “It used to be C3 [Command, Control, Communications], then it went to C4, and now it is C4ISR, but the key to it all is the 3rd “C”—communications—none of the other “letters” work without it. We have always promoted operability first, and after much discussion among local/state practitioners, the SAFECOM SoR rolled what we used to call “day-to-day interoperability,” that being our daily talking with our neighbors for all kinds of incidents (data and voice), into the operability side of the SoR as part of our daily operations. Automatic aid is already widely entrenched in the fire service and starting to rise within the other first responder services as well (rural law enforcement would argue they’ve operated that way for decades); that concept can only work if all of the local/neighborhood communications are working properly, too. Next, regional requirements, based upon interoperability goals/requirements established by the executives of a region’s many agencies, need to be addressed through local MOAs, MOUs, SOPs, and technical engineering to meet those needs. Technology is not the key here, governance followed by SOPs, training/exercises, and routine use is! For regions to implement interoperability solutions in isolation of their neighboring regions, their state strategic plan(s), and the rest of the country is foolhardy in my opinion. Discounting terrorist incidents for now, no area of the country is immune from disasters.”



NTIA, the White House's Telecommunications Advisor

The National Telecommunications and Information Administration (NTIA) is the President's principal adviser on telecommunications and information policy issues. In addition to representing the Executive Branch in both domestic and international telecommunications and information policy activities, NTIA also manages the federal use of spectrum; performs cutting edge telecommunications research and engineering, including resolving technical telecommunications issues for the federal government and private sector; and administers infrastructure and public telecommunications facilities grants. NTIA has been a long-time informal partner with NPSTC. At NPSTC's November Governing Board meeting, in Los Angeles, California, NPSTC formally welcomed NTIA as a non-voting liaison member. "NTIA has participated in our meetings and discussions and provided critical input into our decisionmaking since 1997," says Executive Director Marilyn Ward. "NPSTC is pleased to formalize our relationship with NTIA as a liaison member."

"NTIA represents the Executive Branch in both domestic and international telecommunications and information policy activities," says Charles Hoffman, Telecommunications Specialist, and long-time representative to NPSTC and other public safety liaison groups including the Association of Public Safety Communications Officials-International (APCO), Project 25, Project MESA, SAFECOM Advisory Group, and the Intelligent Transportation Society of America's (ITSA) Public Safety Advisory Group.

NTIA Comprises Five Line Offices

The Office of Spectrum Management (OSM) develops plans and policies that ensure the effective, efficient, and equitable use of the spectrum both nationally and internationally. Through the development of long-range spectrum plans, the OSM is working to address future federal government spectrum requirements, including public safety operations and the coordination and registration of federal government satellite networks. The OSM also assigns federal frequencies and provides spectrum certification for new federal agency radio communication systems. The Office of Policy Analysis and Development (OPAD) is the domestic policy division of the NTIA, conducting research and analysis and preparing policy recommendations. The Office of International Affairs (OIA) develops and implements policies to enhance U.S. companies'

ability to compete globally in the information technology and communications (ICT) sectors. The Institute for Telecommunications Sciences (ITS) is the research and

Basic Elements of Spectrum Management: Who Regulates the Spectrum

In 1906, the year when speech and music were first broadcast using radio, the first international radio conference was held because of the widely recognized need to coordinate and control the use of the spectrum between 500 and 1500 kHz. In the United States, the clamor for regulation resulting from widespread interference caused by unchecked transmission resulted in the Radio Act of 1912. The 1912 Act required the registration of transmitters with the Department of Commerce but did not provide for the control of their frequencies, operating times, and station output powers. Thus, there was no real regulatory power, and the 1912 Act was largely unsuccessful.

However, in 1922, U.S. government users of the spectrum banded together under the Secretary of Commerce to form the Interdepartment Radio Advisory Committee (IRAC) to coordinate their use of the spectrum. The government's use of the spectrum was more easily coordinated than the public's because the IRAC represented all of the federal users and they found that cooperation was mutually beneficial.

The Radio Act of 1927 established the Federal Radio Commission, and the Communications Act of 1934 established the Federal Communications Commission (FCC). The 1934 Act gave the FCC broad regulatory powers in both wire-line based communications, such as telephone and telegraph systems, and radio-based communications, and experiments that led to radar and television applications. The Act grants the President the authority to assign frequencies to all federal government-owned or -operated radio stations. In addition, the President retains the authority to assign frequencies to foreign embassies in the Washington, D.C., area and to regulate the characteristics and permissible uses of the Government's radio equipment.

The IRAC has continued to advise whoever has been responsible for exercising the powers of the President. These powers currently are delegated to the Assistant Secretary of Commerce for Communications and Information, who is also the Administrator of the National Telecommunications and Information Administration (NTIA).

Source: NTIA website

engineering laboratory of the NTIA. ITS also serves as a principal federal resource for investigating the telecommunications challenges of other federal agencies, state and local governments, private corporations and associations, and international organizations. The Office of Telecommunications and

Information Applications (OTIA) administers two programs, one that provides matching grants to non-profit organizations and state and local governments to demonstrate innovative applications of advanced telecommunications and information technology, and the other that awards grants to public broadcasting and other noncommercial entities.

“OSM has the most relevance to NPSTC,” says Hoffman, “because it is where the Emergency Planning & Public Safety Division (EPPSD), formerly the Public Safety Program Office, is located. The EPPSD was established to coordinate the various spectrum and telecommunications related activities and programs within the federal government as it relates to public safety.”

The EPPSD has been integrally involved in a wide range of public safety telecommunications issues. It has been active in the APCO Project 25 initiative since its inception in 1989 and continues to follow the ongoing efforts to finalize the process of establishing a non-proprietary standard. EPPSD works closely with all federal users in the identification of user needs. “The objective of this ongoing partnership between users and industry is to develop a suite of voluntary standards that manufacturers can build to, which will make the market place more competitive,” says Hoffman. “I also serve as NTIA’s public safety representative to Project MESA, which is an international group of industry and users working to develop specifications to establish an international broadband standard.”

This division continues to monitor and provide support for the earlier seminal work of the Federal Law Enforcement Wireless Users Group (FLEWUG) and Public Safety Wireless Network (PSWN) in their new incarnations as the Federal Partnership for Interoperable Communications (FPIC) and the Department of Homeland Security (DHS’s) Project SAFE-COM.

From Intelligent Transportation to Weather Radio to E-911

As a government representative on the Intelligent Transportation Society of America (ITSA) Public Safety Advisory Group, the EPPSD is part of a group that reports directly to the Secretary of Transportation with recommendations on how Intelligent Transportation Systems such as Dedicated Short Range Communications (DSRC), Telematics, Collision Avoidance Systems, and Automatic Vehicle Location (AVL) Systems, can be used by public safety organizations.

The EPPSD participates in both the All Hazard Warning Systems Inter-Agency Working Group (AHWS-IAWG) and the Partnership for Public Warning (PPW). The AHWS-

IAWG is an informal working group to expand the Weather Radio coverage to 100 percent of the continental United States. The group also explores ways to disseminate hazard warnings over telecommunications devices. EPPSD is a board member of PPW, which brings together representatives of all the many and diverse stakeholders to work toward a resolution of national standards, protocols, and priorities that will assure the right information is delivered in a timely manner to people at risk from disaster so that they are enabled to act knowledgeably to save lives, reduce losses, and speed recovery.

In the area of E911 deployment, EPPSD has worked with the FCC and industry and continues to monitor various ancillary issues stemming from the E911 regulations.

Interoperability Assistance

With the renewed focus on a nationwide public safety communications interoperability network, EPPSD is monitoring public safety efforts to bridge the communications gaps among public safety agencies. With ten disparate frequency bands used by public safety agencies, there is a clear need to improve communications among users. EPPSD tracks the status of existing state and local public safety communications networks and those being planned or under development. The utilization of dispatch console-to-console patching; use of fixed, mobile, and portable audio switching solutions; and the exchange of radios has shifted to emerging Voice over Internet Protocol (VoIP) network-based solutions. Software Defined Radio (SDR) and Cognitive Radio (CR) will likely someday replace outdated interoperability methods and will expand available modes to all public safety users. In addition, the EPPSD has identified federal radio spectrum that is available to public safety agencies for short duration interoperability on a limited basis to non-federal agencies that have federal sponsors.

Spectrum Policy for the 21st Century

Spectrum allocations and the proper management of that spectrum are critical to public safety,” says Hoffman. President Bush established the Spectrum Policy Initiative in May 2003 to promote the development and implementation of a United States spectrum policy for the 21st century that will foster economic growth; promote national and homeland security; maintain U.S. global leadership in communications technology; and satisfy other vital U.S. needs in areas such as public safety, scientific research, federal transportation infrastructure, and law enforcement.

At the direction of the President, the Department of Commerce, through NTIA, conducted outreach in the form of public meetings to help in the develop-

(Continued on page 10)

NTIA, continued

(Continued from page 9) ment of recommendations to improve the public safety spectrum management process. Two separate events were held to solicit input. The first, a roundtable discussion with state and local public safety frequency coordinators, national public safety organizations, and public safety agencies, was held in November 2003. The second meeting, held in February 2004, included a much broader participation from the public safety community, academia, manufacturers, and the general public. In June 2004, the Secretary of Commerce provided two reports to the President, *Spectrum Policy for the 21st Century - The Presidents Spectrum Policy Initiative (Report 1 & 2)*, which contained 24 recommendations. Last November, the President directed the federal agencies to plan the implementation of the 24 recommendations contained in the reports.

The guidelines contain 24 specific recommendations including encouraging Congress to enact legislation that provides the FCC with permanent authority to conduct spectrum auctions and to collect fees for spectrum use. The reports also call for the establishment of economic incentives such as FCC policies granting access to new bands of spectrum to users deploying “demonstrably non-interfering technology.” The NTIA, in conjunction with the FCC and DHS, will be conducting a spectrum needs assessment of both the federal and non-federal public safety users. These needs will be incorporated into a National Spectrum Plan.

“The long-term association between the NPSTC and the NTIA EPPSD has resulted in a relationship of mutual respect and trust,” says Hoffman. “The formal designation of the NTIA as a liaison organization to the NPSTC shows the continued commitment the NPSTC and NTIA have in maintaining lines of communications between the public safety users and the federal government.”

Jackie Siegel is the editor of NPSTC spectrum.





Project 25 Update

Progress continues to be made in all the major subject areas of the Project 25 (P25) standards efforts. While the primary project focus this year has been on the completion of the basic Inter-Sub-System-Interface (ISSI), the basic Fixed Station Interface, and the basic Console Interface, work has also continued on the Phase 2 Time Division Multiple Access (TDMA) standards and other important interrelated public safety standard activities. In response to the standards-setting guidelines placed by Congress in the 2005 Omnibus Appropriations Act¹, the Project 25 Steering Committee raised the completion of the ISSI, Console Interface, and Fixed Station Interfaces to the highest level of priority ahead of the continuing work on the Phase 2 TDMA Standards.

Interim Standards

The Steering Committee—in cooperation with the National Institute of Standards and Technology (NIST), National Institute of Justice (NIJ's) CommTech Program, the Department of Homeland Security (DHS's) SAFECOM Program, and the Telecommunications Industry Association (TIA)—is working in a cooperative effort to establish a formal process to facilitate the creation of baseline and interim standards as may be necessary to meet the needs of the public safety community as more formalized standards progress through the established TIA-Project 25 processes. Some of these preliminary standards will be finalized between October 2005 and March of 2006 with the balance of the remaining standards scheduled for completion in the fall of 2006 and spring of 2007. This cooperative effort and a tandem effort to create a series of enhanced P25 conformance and interoperability testing platforms will not only accelerate the completion of the three priority standards, it will better ensure that the public safety community will be able to purchase competitive, interoperable, and compliant P25 equipment from multiple vendors and product providers.

As many new products and product providers have come into the marketplace, it has become apparent that additional attention also needs to be given to minimizing unforeseen interoperability issues created by the slightly different interpretation of the various standards by each of the product manufacturers. Both the Steering Committee and our partners in TIA have expanded our efforts to identify and correct these

potential deficiencies in both the products being offered and the existing standards.

Phase 2 — 2 Slot TDMA

While the P25, Phase 2 — 2 slot TDMA standards efforts have fallen to a lower priority, work has not stopped. In fact in addition to having 5 weeks of face-to-face working meetings a year, another 10 hours of conference calls are conducted almost weekly. These calls are used to work through ongoing technical problems and standards issues in preparation of completing formal standards documents. The proposed draft documents are created as a result of these calls and meetings are then forwarded on through the process for final consideration and balloting as a formal TIA-American National Standards Institute (ANSI) standard.

As a result of this aggressive effort, we have seen the successful completion of a Phase 2, Experiment 2, Mean Opinion Score (MoS) test which provides a subjective comparison of our original Phase 1 vocoder, to both the newly proposed Enhanced full rate vocoder and an Enhanced half rate vocoder. Since the vocoder or codec is at the heart of the P25 audio quality, it is critical that we have a clear understanding of how that equipment will operate in an over-the-air and in-motion environment. The experiment #2 vocoder MoS tests attempted to replicate those conditions. While the experiment 2 MoS test did an excellent job in comparing the various codec under simulated noise and RF fade conditions, it did not, in the opinion of the Steering Committee compare these vocoders under the extreme noise conditions associated with fire apparatus, helicopters, or conditions associated with high-speed marine transport systems. Nor do they feel these tests adequately deal with background noises such as gun shots and sirens. To compensate for those potential flaws, the TIA Vocoder Task Group, the Steering Committee, and the staff at the Institute of Telecommunications Standards (ITS) at Boulder, Colorado, have been working on a vocoder experiment #3, which artificially inserts some of these extraneous conditions into the next series of tests. That series of MoS tests will be completed in Boulder, Colorado, during the last week of August and the first week of September 2005.

Finally, the Vocoder Task Group is working on another vocoder MoS test to validate the quality of an Enhanced, almost full-rate vocoder. It is hoped that those tests will be completed prior to October of 2005. At the completion of those tests, the Project 25 Steering Committee will make a determination of which vocoder (s) to select to use in our Phase 2 — 2 slot TDMA standards.

The intensive work being done on our Phase 2 standards has also allowed all the participants to re-evaluate some of the potential features and functions that can be implemented in the next generation of our Phase 1 standards *(Continued on page 12)*

Project 25, continued

(Continued from page 11) and the first generation of our Phase 2 standards. These enhancements will benefit nearly all facets of our critical Phase 1 standards and provide a very robust Phase 2 platform. As all of this work is finalized, the Project 25 Steering Committee and our partners in TIA will be better able to begin our final technology evaluation process which will include a prototype evaluation process to ensure the products being proposed can meet, or in many cases exceed, our minimum user operational and performance requirements.

Finally, the Project 25 Steering Committee, in cooperation with our partners in TIA, have agreed to pursue the potential addition of a new family of 4 slot TDMA standards that will leverage the work performed in Phase 1 and Phase 2 and the documents created therein. Upon completion of that effort, public safety users will be able to operate four separate time slots (channels) in the same spectrum that is now used for one 25 kHz public safety channel.

Project 34

The progress we have made in our wireless, voice communications systems is being mirrored to a lesser degree in our Project 34 standards efforts, where we are currently working on a family of Very-High-Speed data specifications that include the transport of video and complex data. This work—known as Project MESA—is being done in cooperation with TIA and the European Telecommunications Standards Institute (ETSI) and numerous public safety and public protection agencies from throughout the world and their counterparts in industry. The objective of these specifications is to provide the basic platform for transporting wireless digital information at rates exceeding 2 megabits.

At the behest of the National Public Safety Telecommunications Council (NPSTC), we are also currently working on a series of 4.9 GHz data standards for use within the United States. In this standards effort, the Project 34 users and their partners in TIA are attempting to facilitate NPSTC's objective of leveraging traditional commercial off-the-shelf technology (COTS), while simultaneously meeting the stringent requirements of the public safety community. Once again DHS and ITS Boulder have supported this effort with outside consulting services and modeling tools.

The project is progressing, unforeseen problems are being defined, and standards and products are being produced.

Craig Jorgensen serves on the Project 25/35 Steering Committee.

¹108-344 Departments of Commerce, Justice, and State, The Judiciary, and Related Agencies Appropriation Bill, 2005.

BDA Rule Changes, continued

(Continued from page 2) regulations. Failure to comply with Section 90.219 of the FCC's Rules may result in a fine pursuant to U.S. Code, Title 18, Section 1001.

⊕ Adopt a FCC rule from Part 22 (cellular) to maintain centralized lists of signal booster installations. This will assist in identifying locations of improperly installed or operated signal boosters in the event of interference, but, more importantly, it reinforces having the permission of the licensee. Getting the agency's permission is an opportunity to demand compliance to best practices as well as local ordinance compliance.

(New) 90.219(i). Licensees shall maintain a list of all signal boosters in use by the provider, as well as signal boosters which the licensee has authorized by non-licensees. The list shall include the geographic location of all such signal boosters, and shall be readily available upon request by the Commission.

⊕ Add rules to reinforce the Commission's intent that signal boosters must be fixed installations.

(New) 90.219(g). The sale, manufacture, or use of mobile signal boosters to be operated routinely in consumer vehicles, such as autos, trucks, and recreational vehicles is prohibited.

A Call for Action

Regardless of whether you agree or disagree with the specifics of the Bird Technologies petition, it will open the whole Part 90 signal booster rules to debate and improvement. This will be your opportunity to reduce interference.

The consumer signal booster sellers would prefer this petition to die so they can continue their unimpeded poor practices. I sincerely believe it is in the best interests of the public safety community to immediately contact their FCC liaison and their associations (NPSTC, APCO, IACP, IAFC, etc.) and request that the Bird Technologies petition be fast tracked by the FCC or submit your own petition. Otherwise the FCC could dismiss the petition or delay many months before acting because they don't understand the importance of the issues. The manner in which signal boosters will impact your agency's communications capabilities in the future is in your hands.

Jack Daniel is the owner of the Jack Daniel Company, which specializes in in-building RF distribution of public safety wireless signals. Involved in public safety communications systems for over 30 years, he actively supports local in-building coverage codes for first responders. He is a life member of APCO and a member of LAPC. You may visit his website www.RFSolutions.com or contact him direct at 800-NON-TOLL (800-666-8655).



An Open Invitation for Your Voice To Be Heard

Your voice can be heard by the National Public Safety Telecommunication Council when you become an active participant in its on-going dialogue on national public safety telecommunication issues that affect you and your organization daily. By becoming active or by participating in any of NPSTC's four Committees and 15 Working Groups, you can have a voice in the community and the future of our profession.

NPSTC is a federation of 13 public safety member organizations listed on the front page of this newsletter. These Member Organizations are represented by a Governing Board, which is made up of representatives of each of these organizations. NPSTC also maintains relationships with a number of Liaison Organizations, which consist of officially participating federal agencies and industry associations. Finally, the NPSTC community involves individuals like you who are At-Large Participants—any individuals or organizations that have an interest in public safety communications.

NPSTC actively seeks out the participation, expertise, and feedback of public safety and other individuals to be included among the many voices clamoring to be heard in ongoing discussions of communications technology, interoperability, spectrum, planning, and legislative issues. At-Large Participants can share their points of view in numerous ways. If your schedule or cost constraints preclude you from attending our quarterly meetings, you may participate in the meeting via an open toll-free teleconference line. Additionally, the majority of our dialogue occurs throughout the year on our active listservs and through teleconferences so that your voice is always heard.

Anyone who is interested is welcome to become a NPSTC At-Large Participant.

NPSTC develops and makes recommendations to appropriate governmental bodies regarding public safety com-

munications issues and policies that promote greater interoperability and cooperation between local, state, tribal, and federal public safety agencies, and to serve as a standing forum for the exchange of ideas and information regarding public safety communications. When NPSTC takes a formal stand on an issue, it does so by obtaining a consensus from its voting Governing Board members. Governing Board representatives are individuals who have been given the authority to vote on behalf of their organization. Any official NPSTC recommendation or policy position requires a consensus among the 13 Governing Board organizations. Depending on the

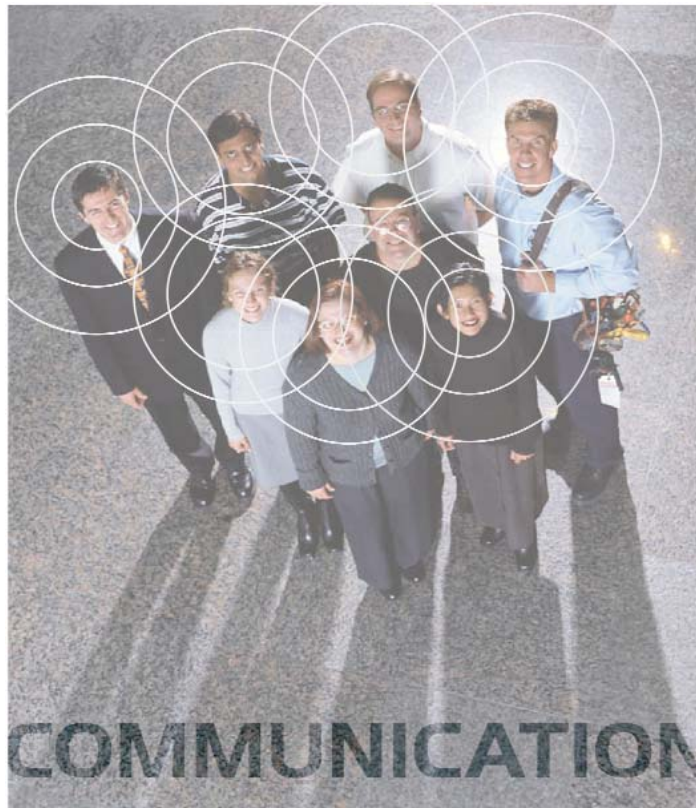
specific issue, Governing Board representatives often have to get formal approval from their respective organizations. A consensus does not necessarily require unanimity.

Get your voice heard and become active in NPSTC today!

NPSTC At-Large Participants are critical to its consensus process. As NPSTC seeks to understand the complex technical and policy issues surrounding many of the public safety telecommunications issues that the Council faces, the Governing Board needs to hear from a wide variety of operational users, engineers, and representatives of industry and government. The

viewpoints expressed and lively debate of issues from the NPSTC community at its quarterly meetings and listserv discussions are very important in providing as broad a base of informed input possible.

For more information, please contact us at NPSTC@highlands-group.com or calling 866.807.4755. Subscribe to our Yahoo groups listserv at NPSTC-PARTICIPANTS-subscribe@yahoogroups.com.





The Regional Planning Committee (RPC) Committee has been busy since the last newsletter was released in September. We are just now recovering from our week-long Committee and Governing Board meetings in Los Angeles, California, held November 7 to 11th. Let me tell you about some of the exciting activities and action items that came out of the meetings in LA.

On Monday November 7th, we held our first NPSTC West Coast RPC Committee meeting. We had several RPC Chairs present in person and several on the conference call. Just to mention a couple of those who called in for the meeting, we had RPC Chair, Jerry Wilson from Region 2, Alaska, as well as RPC Chair, Robert Hlivak from Region 11, Hawaii. I greatly appreciated these RPC representatives taking time out of their busy schedules, given the time zone changes, to participate in our meeting. Several action items came out of the West Coast RPC meeting. One of the more difficult tasks that the NPSTC RPC Committee has been struggling to do is trying to confirm the accuracy of the RPC email list. As an action item, I was able to solicit four RPC participants to help with this screening effort to improve the accuracy of the RPC email list. The following members have stepped up to help — from the West Coast, Kevin Kearns from Region 43; from the Gulf Coast, Ron Mayworm from Region 49; from North-Central, Richard Nowakowski from Raytheon; and from the East Coast, George Carbonell from Region 19.

We are still looking for one RPC Chair from each of these four U.S. regions as shown on the map in the RPC article in the September newsletter. The next couple of months, I will be coordinating a conference all within each of the U.S. regions to discuss local and regional issues as well as soliciting a willing RPC Chair who can carry the support of their fellow Regional Chairs to join the NPSTC RPC Core Committee. I would like to hear from any of the RPC Chairs who feel they have the desire to be part of the NPSTC RPC Committee and have the time to devote to being a Core Committee member. We are looking for representatives to work on one or more of the many Working Groups and to provide input into the other issues impacting the planning committees. If you are that person, please give me a call or send me an email to let me know that you are interested in being on the NPSTC RPC team. These four representative positions will be funded to attend the quarterly NPSTC meetings to ensure input on

your regional issues in the national arena.

Some other action items that we came away with include the following:

The formation of the **RPC Funding Working Group** Chaired by Vice Chair, Ron Mayworm from Region 49. Ron will work with the NPSTC Support Office and National Institute of Justice (NIJ) through the Texas Sheriff's Association to develop funding procedures for fiscal support of the RPCs through a formal grant process and he will explore the Association of Public Safety Communications Officials – International (APCO) Foundation and other resources as potential sources of funding support for the future work of the 55 RPC Committees. Today funding for NPSTC RPCs committee work is available and we want to get to work!

The formation of the **RPC Common Nomenclature Working Group**, also chaired by Mr. Mayworm, will work with the 55 RPC regions to develop and promote support for the mutual adoption of the common nomenclature concepts on a national level.

The formation of the **RPC Rebanding Support Working Group** chaired by Ron Haraseth, Director of APCO AFC, working hand-in-hand with myself, Mr. Mayworm from Region 49, Central Texas, Mr. Wilson from Region 2, Alaska, and Mr. Hlivak from Region 11, Hawaii. The purpose of this Working Group is to create and develop a mechanism to bring together users within the same 800 MHz Rebanding Wave and Phase level to promote an open forum for the constructive exchange of information and to also investigate the possibility of hosting a common database of contacts to be used as an information resource.

On the regulatory front, the RPC Committee has been actively engaged in providing a data stream of information to the RPCs through News Flash Emails about such things as the recent ex parte filing by NPSTC on *Improving Public Safety in the 800 MHz Band - WT Docket 02-55 - Assignment of New Channels*. The RPC Committee worked with the NPSTC Committees and Governing Board to develop meaningful solutions and put them into appropriate ex parte documents and file them with the FCC for consideration. This ex parte is a good example of the work that is undertaken by all of the NPSTC members, as it contained the following assignment process as a solution to the equitable distribution of the surplus spectrum that will be available from Nextel when rebanding is completed. Here is the process that was proposed in this recent ex parte:

- Once the Commission has determined channels are available for reassignment, a 90-day freeze would be established for applications falling within the category. During the freeze period, agencies would submit requests for channels to a certified frequency coordinator, who will open a filing window for the 90 days. The requests would be submitted consistent with the Commission's application process.

- ⦿ A frequency coordinator receiving an application will process an application consistent with the Commission's rules and its own processes. It will exchange information among coordinators and identify conflicting applications. Coordinators may discuss adjustments with applicants to foster resolution among agencies.
- ⦿ At the expiration of the 90-day filing freeze, the frequency coordinators, within 15 days, shall submit all non-conflicting applications to the Commission. Conflicting applications shall be forwarded to the RPCs. There may be circumstances where more than one RPC will review the applications.
- ⦿ Following the 90-day freeze period, applications shall be accepted and processed under regular order.
- ⦿ The RPCs reviewing competing applications shall, within 30 days, examine each competing application and make a recommendation to the coordinators with regard to the priorities of the applications. The RPC shall use its existing evaluation matrix in the review.
- ⦿ Failure of an RPC, who had earlier opted to evaluate/score mutually exclusive application, to respond within the designated 30-day period will result in the applications reverting back to the coordinators; the applications will be treated on a first-come, first-served basis.
- ⦿ For applications where no RPC has opted to review, applications will be treated on a first-come, first-served basis. The competing applicants may pursue negotiations with each other.
- ⦿ In cases where mutually exclusive applications reflect cross-region conflicts, such applications may require joint RPC deliberations between the two impacted RPCs in order to determine a resolution. Where only one of the RPCs has opted to evaluate applications, that RPC shall evaluate both applications on an equal and unbiased basis using its normal scoring/evaluation process.

It is through these types of regulatory activities that the 13 organizations that make up the NPSTC organization strive to include a variety of input into the "Collective Voice of Public Safety." NPSTC RPC Committee will continue to work closely with the other Committees and the Governing Board to enhance the RPC's position within the nation by providing them the opportunity to be heard and to provide positive input to spectrum issues.

In closing I would like to thank all of the RPC representatives who have volunteered for these various tasks. I also would like to offer the opportunity to all RPC Chairs and their members to become an active member of NPSTC by joining their RPC team. If you are interested, please call me or email me today.

Contact: Richard R. Reynolds, State of Delaware, Department of Technology & Information, 801 Silver Lake Blvd, Dover, DE 19904-2407, Ph: 302-739-9648 Fax: 302-739-7243, Cell: 302-242-5398, Email: richard.reynolds@state.de.us



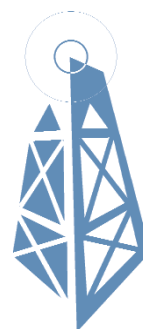
Over the next 2 months, NPSTC's Support Office will be collecting contact information from each Statewide Interoperability Committee (SIEC). We have established a Working Group to support the states in their interoperability communications planning efforts. To assist in this effort, we are in the process of developing a comprehensive listing of all SIECs or SIEC-like entities, and the areas of the spectrum the SIECs are coordinating.

Please help us by identifying the SIEC or SIEC-like entity and the point(s) of contact for each state. This information will be collected and stored in the NPSTC database to be used later by the SIEC Working Group. It is our intention to bring these groups together for discussions as a function of nationwide interoperability. We plan to create a forum for sharing activities from state to state and work together with SAFECOM to develop a national plan.

**Please enter the requested information
using the following link:**

<http://www.npstc.org/siec/SIEC.html>

If you are unable to complete the form but know of someone who can help, please provide as much information as possible, then feel free to forward this email onto others who may also help. Currently, there is no other project working to this extent except SAFECOM and NPSTC. We need your help to collect as many contacts as possible. Please participate or send the message to those who are appropriate in your state.



Important Dates - 2006

Date	Event	Location
January 23-25	NPSTC Governing Board Meetings	Nashville, TN
January 26-27	SAFECOM Meetings	Nashville, TN
January 28 – February 1	APCO Winter Summit	Orlando, FL
February 7	AASHTO Washington Briefing	Washington, DC
March 8-10	IAFC Wildland Fire Conference	Phoenix, AZ
March 12-15	APCO Western Regional Meeting	Portland, OR
March 13-15	Symposium on Justice and PS Sharing	Washington, DC
March 21-22	NPSTC Governing Board Meetings	Washington, DC
March 23	SAFECOM Industry Summit	Washington, DC
March 27-31	Project 25 Meetings	San Diego, CO

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