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BY HAND

EX PARTE OR LATE FILED

Mr. William F. Caton, Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Ex Parte Communication in PR Docket 92-235

Dear Mr. Caton:

On behalf of the Association of Public-Safety Communications Officials-International, Inc. ("APCO"), this is to notify the Commission that the undersigned and Mr. John Powell, APCO's immediate past president and member of its Regulatory Review Committee, met with the following Private Radio Bureau personnel today to discuss the Commission's "spectrum refarming" proceeding: Ed Jacobs, Joe Levin, Gene Thompson, and Doron Fertig. We discussed APCO's position regarding certain issues in this proceeding as outlined in the attached letter to Private Radio Bureau Chief Ralph Haller, which was also hand-delivered today. Two copies of the letter are attached for filing with the Commission.

Respectfully submitted,

WILKES, ARTIS, HEDRICK & LANE,
Chartered

By: Robert M. Gurss

Attorneys for APCO

Attachments

cc: Beverly Baker
Joe Levin
Ron Netro
Doron Fertig
Ed Jacobs
Gene Thompson

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Mr. Ralph Haller
Chief, Private Radio Bureau
Federal Communications Commission
2025 M Street, N.W. Room 5002
Washington, D.C. 20554

RE: Written Ex Parte Communication in PR Docket 92-235

Dear Mr. Haller:

I am writing on behalf of the Association of Public-Safety Communications Officials-International, Inc. ("APCO"), to modify APCO's recommendations for refarming land mobile frequencies in the VHF High Band (150-170 MHz). APCO's initial comments in the refarming proceeding strongly opposed the 5 kHz channel plan contained in the Notice of Proposed Rulemaking. Instead, APCO advocated a 12.5 kHz plan, with a subsequent split to 6.25 kHz if such "very narrow band" technology develops and is sufficient to meet the needs of public safety communications. A similar plan was contained in Option A of the comments submitted by the Land Mobile Communications Council ("LMCC"). The Association of American Railroads ("AAR") then submitted an alternative offset overlay plan. Initially, APCO found the AAR plan attractive as it would be easier to implement. Thus, APCO supported the AAR plan in its Reply Comments. APCO later submitted a letter to you urging that the Commission's refarming plan retain sufficient flexibility to ensure compatibility between its channel plans and those adopted by NTIA for the Federal Government.

APCO has continued to study the complex issues related to the VHF High Band, and now believes that, for public safety communications, its original 12.5 kHz plan would be a better alternative than the AAR plan. Attached is a memorandum discussing APCO reasons for its decision and providing more specific recommendations.

Please note that APCO continues to oppose the 5 kHz plan as well as the LMCC Option B (i.e., a one-step split to 6.25 kHz or 7.5 kHz). Those plans do not provide a smooth migration plan, are incompatible with the Federal channels, and would require premature adoption of very narrow band technology unable to meet the specialized needs of public safety.

Please call me if you have any questions. Two copies of this letter and the attachment have been filed with the Secretary.

Respectfully submitted,

WILKES, ARTIS, HEDRICK & LANE,
Chartered

By: Robert M. Gurss

Attorneys for APCO

Attachment

cc: Beverly Baker
Joe Levin
Ron Netro
Doron Fertig

APCO RECOMMENDATIONS FOR VHF HIGH BAND CHANNELIZATION
June 1994

APCO has carefully considered the various channel plans for the VHF High Band using the following criteria:

1. Migration path and cost
2. Spectrum efficiency
3. Emerging technology
4. Compatibility with other public safety users

This study has included the work being performed by APCO Project 25 relative to digital technology and demonstrations by those offering certain narrowband techniques. These studies have led to the conclusion that there is no perfect solution and that compromises must be made in any plan. However, APCO also feels that it should indicate a firm preference for the plan deemed best for public safety.

A first priority for public safety is a graceful migration path. Any channelization scheme must provide a means to keep existing systems intact and to add equipment that remains compatible, even though it incorporates new technology. Only in this way can systems be maintained and expanded to the degree necessary as the transition to narrower channels takes place.

If the channelization plan requires a total and instantaneous replacement of all equipment with that which is incompatible with older equipment, regardless of the time frame, it would result in an insurmountable hardship. The migration plan must provide a potential for incorporating new equipment with old and maintaining the interoperability which is so vital to public safety. The countless mutual aid systems and plans now in existence must not be compromised by lack of a workable migration path.

A channel plan for public safety must also be compatible with the Federal government's 12.5 kHz plan so as to promote interoperability in the field and to increase the potential customer base for common public safety radios. This will improve equipment availability and reduce cost. Furthermore, public safety services are in serious need of a paired channel scheme in VHF High Band to facilitate increasingly important mobile relay operations. We understand that NTIA is in the process of identifying VHF channels that might be available for shared or coordinated use with State and local public safety agencies. These frequencies could be used to create additional channel pairs. Therefore, it is critical that the Federal and non-Federal channel plans be compatible.

Spectrum refarming must also provide spectrum relief as soon as possible. Public safety cannot wait ten years for relief in spectrum congested areas. However, the countervailing concern is

that there must be a smooth migration path and channel bandwidths capable of satisfying public safety communications needs. Very narrow band technology (5 kHz, 6.25 kHz and 7.5 kHz) has not advanced to the degree necessary to satisfy the specialized voice and data needs of public safety. Until that occurs, public safety cannot commit to future channel splits beyond 12.5 kHz.

In light of these concerns, APCO's compares the various VHF channel plans as follows:

Original 5 kHz Plan proposed by FCC in NPRM

- Disrupts every existing assignment
- Cost of migration very high
- Spectrum efficiency: 5 kHz ultimate result after many years and adoption of a single type technique
- Incompatible with federal channel schemes
- Forced premature adoption of very narrow band technology
- No interoperability absent simultaneous conversion by all users

One-Step split to 6.25 or 7.5

- Abrupt migration with no smooth transition to allow for equipment to be phased in while retaining old equipment
- Based upon dangerous assumption regarding viability of very narrow band equipment for public safety applications
- Not compatible with Federal channel use
- No immediate spectrum relief

AAR Offset Overlay Plan

- Present channel assignments basically unchanged
- Cost of migration lower for this reason
- Spectrum efficiency: 7.5 kHz channel or equivalent the probable ultimate result
- Incompatible with Federal channel schemes and with those of many other countries, including Mexico and Canada
- Lower consumer base due to above

12.5/6.25 kHz Plan proposed by APCO and LMCC (option A)

- Majority of existing channel assignments will require change
- Smooth migration providing for equipment interoperability
- Spectrum efficiency: 6.25 kHz or equivalent probable ultimate result
- Compatible with Federal channel plan and with numerous other countries
- Greatly increased consumer base due to above
- Immediate spectrum relief as soon as 12.5 kHz is implemented
- Further advantages:

    - APCO has been advised by manufacturers that they could provide, at little increase in cost, a synthesizer

capable of accommodating either 12.5, 6.25, or 7.5 kHz channel spacing. This would facilitate different channel spacing for service other than public safety if so desired and create a broad market base.

- Narrow band techniques could be readily accommodated in 6.25 kHz channels with little loss of efficiency, while at the same time providing better isolation from other systems.

- Provides standardization with channel spacing and digital formats used in higher frequency bands.

These considerations favor the 12.5 kHz plan over all other plans, including the AAR offset overlay plan. Consequently, APCO is now requesting that the Commission adopt a 12.5 kHz channel plan for all existing public safety frequencies. APCO further requests that these channels be arranged to conform to Federal channel plans and that to the degree possible, the edges of bands allocated to other services be shifted as necessary to provide the fullest possible utilization.

Recognizing the resultant migration problems, APCO further requests that a minimum of one year be granted before finalizing this band into individual public safety service blocks. This period would be used by APCO and all other public safety services presently assigned blocks of channels in the VHF High Band region to develop a specific channel plan by consensus. Such a plan could be of a regional nature, similar to the 800 MHz NPSPAC Plans. This would also provide the time required to work with the Federal government to effect a channel sharing scheme.

As previously stated, APCO reiterates the need for grandfathering existing public safety radio systems for a period of time sufficient to amortize existing equipment.