

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of:)
)
Petition for Rulemaking to Amend the) RM-11527
Land Mobile-TV Sharing Rules in the)
470-512 MHz Band)

Reply Comments of Town of Durham, Connecticut

1. INTRODUCTION

The Town of Durham submits to the Commission its support of the Petition filed by the National Public Safety Telecommunications Council (NPSTC) as amended by the Revised Comments of RadioSoft.

2. BACKGROUND

The Town currently uses UHF spectrum to meet the needs of its citizens. Unfortunately, significant interference is present on each channel used, thus diminishing its effectiveness. As the Reply Comments submitted jointly by the MSTV and NAB point out, Connecticut has “unique reception and terrain problems” which adversely affect public safety land mobile systems. We disagree with the MSTV/NAB view that this issue should be set aside to be examined at a later time. RadioSoft, in their Reply Comments, correctly points out that Connecticut’s unique geographical position between New York and Boston makes the use of “T-Band” channels in the greater Hartford area a logical extension of existing practice.

In fact, there has been significant “informal” discussion of applying for a waiver under Section 337(c) of the Communications Act among several parties in the state. Media reports suggest that some municipalities are already examining this option to solve their communications needs. We suggest that the approach proposed by the RadioSoft Reply Comments is less cumbersome and thus considerably more efficient to both the Commission and the municipalities seeking spectral relief.

Since the tragic events of 9-11-2001, there has been significant movement in the public safety communications field toward “interoperable” communications. In order to have “interoperable” communications, you must first have “operable” communications. As our fellow public safety professionals in the City of Manchester point

out, their “operable” communications have been significantly adversely affected by the lack of immediately available spectrum.

3. EXAMINATION OF NEED

A logical question that must be answered is: “why is this spectrum needed?” As the MSTV/NAB comments point out, Connecticut suffers from some unique geographical challenges. This is especially evident in the public safety land mobile area. Public Safety is allocated relatively little spectrum in the conventional 450-470 UHF band, approximating 3 MHz (453-454/458-459, 460-460.6125/465-465.6125, and 462/467.9375-463/468.1875). It must be remembered that a significant portion of this spectrum is allocated for use on a low power basis, thus further restricting the amount of spectrum available for use. Business entities, on the other hand, are allocated approximately 8 MHz of spectrum – a major difference. Yet, within the limited spectrum allocated to Public Safety, approximately half of the municipalities (out of 169) make primary use of the UHF spectrum while many others make use of the limited “low power” channels for a variety of purposes. Some of the state’s largest regional dispatch centers, for instance, use the low power frequencies extensively. All users have to contend with significant interference from Massachusetts and New York. It’s not anyone’s fault – it’s the “magic” that is radio. The terrain (valley’s and large water masses) do wonders with radio waves. With what spectrum there is frequency coordinators are forced to recommend power levels and antenna patterns that do not provide coverage in the intended coverage areas so as to limit potential interference with incumbent users. The net effect is an ineffectual system.

New regional systems are impossible: spectrum just isn’t available. Several regional dispatch centers have looked at constructing regional systems – thus making efficient use of spectrum and enabling both operability and interoperability. What is found is that frequencies can’t be found. Those that “might” work in one area can’t be used in another – even on a low power basis. Town and City based systems are similarly affected.

A review of Subsection (c)(1) of Section 337 of the Act helps to demonstrate the need. This Subsection, in its relevant part, states:

Use of Unused Channels for Public Safety Services – upon application by an entity seeking to provide public safety services, the Commission shall waive any requirement of this Act or its regulations implementing this Act (other than its regulations regarding harmful interference) to the extent necessary to permit the use of unassigned frequencies for the provision of public safety services by such entity. An application shall be granted under this subsection if the Commission finds that -

1. No other spectrum allocated to public safety is immediately available to satisfy the requested public safety service use;
2. The request is technically feasible without causing harmful interference...to other spectrum users entitled to protection from such interference under the Commission's regulations;
3. The use of the unassigned frequency for the provision of public safety services is consistent with other allocations for the provision of such services in the geographic area for which the application is made;
4. The unassigned frequency was allocated for its present use not less than two years prior to the date on which the application is granted; and
5. Granting such application is consistent with the public interest

1. No other spectrum allocated to public safety is immediately available to satisfy the requested public safety service use.

The issue of 700 MHz and the concept of "immediately available" must be addressed. On one level, yes the spectrum will be "theoretically" available short order. But is it truly available? Each of the counties in Connecticut received relatively few 700 MHz channels to use. In order to even use this spectrum, wholesale changes of technology need to take place: Considerable infrastructure needs to be built at substantial cost, subscriber units (many just recently purchased) will have to be discarded and significantly more expensive units purchased in their place. In the meantime, we – most probably – will lose one of the benefits that we derive from sharing a common band among many users – interoperability. Building such a system would be daunting financially at any time, never mind during a recessionary time that unequalled in history. For many users, we believe utilizing the proposed channels will entail little more than retuning and/or reprogramming existing equipment.

2. The request is technically feasible without causing harmful interference...to other spectrum users entitled to protection from such interference under the Commission's regulations.

We believe that RadioSoft has adequately demonstrated that the spectrum is generally available in the greater Hartford area. We believe that the frequency coordination process will adequately address any potential problems with any incumbent users.

3. The use of the unassigned frequency for the provision of public safety services is consistent with other allocations for the provision of such services in the geographic area for which the application is made.

Public Safety is already granted the use of certain frequencies between 450-470 MHz and the Commission's rules permit Public Safety operation on the proposed frequencies in states immediately adjacent to Connecticut. As such, we believe that the allocation of 470-476/476-

482 MHz is entirely consistent with allocations for the provision of such services in the geographic area.

4. *The unassigned frequency was allocated for its present use not less than two years prior to the date on which the application is granted.*

As was discussed in the NPSTC Petition, the Commission has permitted sharing the 470-512 MHz spectrum since 1971 under Docket 18261. The original allocation for the spectrum obviously pre-dates that decision. Thus, the requirements for this section are met.

5. *Granting such application is consistent with the public interest*

We believe that the granting of this Petition, including the greater Hartford, CT area, is very much consistent with public interest. It is in the public interest to have public safety responders effectively communicate. The public is served best when coordination can take place among public safety responders. Systems that have been built cannot be expanded to meet new and growing needs due to the lack of spectrum compatible with existing equipment. Similarly, the taxpayer is served when relatively new existing equipment can continue to be used into the foreseeable future. While we believe we understand the concerns raised by MSTV/NAB in their Reply Comments, we believe there must be a practical balance achieved: emergency responders need to have the ability to adequately communicate at the incidents that the media want to report from. These needs need not be mutually exclusive – we need to work together. Certainly, if the needs of the media can be met in the New York City area (where Channels 14, 15, and 16 can be used by land mobile services) then the needs in Greater Hartford can be met as well.

4. PUBLIC SAFETY v B/ILT ALLOCATION

We note that some Reply Comments call for the spectrum to be entirely allocated to Public Safety while others call for a sharing between Public Safety and the Business/Industrial services. As a practical matter, we note that an examination of existing allocations on these proposed frequencies reveals that some frequencies are already in use by Business/Industrial users under existing regulation. As we previously noted, the Business/Industrial service already has significantly more spectrum allocated to that service in the existing UHF band (450-470 MHz) than does Public Safety. As a practical matter, we believe that the existing Business/Industrial incumbents will have to be accommodated under any potential modification of the regulations. Furthermore, we propose somewhat of a compromise between the two extremes: a reasonable period of time (measured in multiples of years – we are working with municipalities with long planning cycles) in which Public Safety services will have exclusive access to these “new” frequencies after which certain B/ILT services can apply

utilizing the existing practices of frequency coordination. As NPSTC points out in their Reply Comments, at times B/ILT services work in concert with Public Safety services to provide essential services to the Public Safety community. We propose that any such B/ILT service that wishes to utilize this spectrum undergo review by the appropriate Public Safety authority having jurisdiction for authentication and confirmation of need and their relationship to Public Safety.

5. THE FIRST 300

We note the number of Public Safety services that have applied for and been granted waivers to use what is currently Part 22 spectrum in the first 300 KHz of each channel allocation. We propose that under this Petition the first 300 KHz of spectrum be allocated exclusively for Public Safety services. We further propose that these first 300 KHz of spectrum be allocated, specifically in the Hartford, CT area and perhaps other areas as can be accommodated, for the purposes of interoperability. We propose that these channels be limited to low power (5 or less watts) mobile only operations and be licensed by rule, thus alleviating individual licensees of the undue burden of having to individually apply for these interoperability channels - with one caveat. We believe the appropriate authority having jurisdiction may license one or more of these channels for large area interoperability using mobile relay/repeater stations, with such use being included and delineated in the particular areas Statewide Communications Interoperability Plan. Such licensing would, of course, be subject to frequency coordination.

6. HOW BIG THE CIRCLE?

The Petitioners call for the land mobile base station area of operation to be extended from 50 miles (or 80 kilometers) to 80 miles (or 128 kilometers). We agree with Reply Comments that this is a reasonable request, provided that protections are in place for existing broadcast users.

7. TILE v CONTOUR

We believe that the Commission should require the use of the TSB-88 analysis during frequency coordination. Although contour studies can be helpful, our experience has shown that a properly completed TSB-88 study can demonstrate the ability to re-use frequencies where a simple contour study would seem to preclude such a re-use.

7. CONCLUSION

We appreciate the work that NPSTC, RadioSoft, the LMCC, and MSTV/NAB have put into this Petition and the Reply Comments that they have submitted. Particularly, we appreciate that RadioSoft has made a proposal and argument to add the Hartford, Connecticut area as a metropolitan area that can utilize the resource known as “T-Band” channels. A quick scan of the Reply Comments submitted by users overwhelmingly demonstrates a compelling need for such resources in this area. The Reply Comments submitted by users in the Hartford, Connecticut area are a plea for help, in this case spectral relief, which can only be accomplished through the granting of the proposal. We urge that the Commission issue a Notice of Proposed Rule Making in short order.

Respectfully Submitted,

/s/ _____
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