Correspondence Reference Number: 18267

Explanation of why Broadcast TV spectrum was chosen for this demonstration.

Background

The radio system that is being demonstrated is capable of operating from 30 – 88 MHz. This frequency band has historically been used for communication by the army. The demonstrations are typically done in frequency hopping mode. An optimal hopset would consist of approximately 400 frequencies. Such a hopset helps to minimize interference in both directions.

Reasons this particular frequency band where chosen.

1. Because of the short time frame involved the request is for frequencies that the FCC could grant without coordination with the NTIA.
2. Looked in the FCC databases in the following frequency bands 30 - 50 MHz, 72 – 73 MHz, and 75.4 – 76 MHz that meet reason 1 given above. The Washington DC metro area is quite crowded in these bands. Did not initially identify any significant unlicensed frequencies in these frequency bands that could be utilized. This is complicated by the fact that the system to be demonstrated tunes in 25 kHz increments and the users in these bands are at 20 kHz increments.
3. It is recognized that CBS TELEVISION LICENSES LLC (WQDA545) and TELEFUTURA D.C. LLC (WQOH555) have broadcast auxiliary licenses in this geographic location. The necessary bandwidth authorized for these licensees is 180 or 200 kHz. It is believed that with coordination that the chances of causing interference to these licenses can be minimized.
4. It is recognized that WDCN-LP is licensed for channel 6 (82 – 88 MHz) in Fairfax, VA, therefore this frequency band was not requested.
5. It is also recognized that WIAV-LP has a construction permit for channel 4 (66 – 72 MHz) in Washington, DC. Their representative has indicated that the proposed operation will not be a problem.

From: DC-MD Frequency Coordinator
To: Sherman, Doug - ES;
Subject: Re: Pre-Coordination of Low VHF Frequencies in the Washington DC Metro Area
Date: Wednesday, October 24, 2012 10:43:06 AM

Doug,

As you may be aware, frequency coordination is a volunteer function. My work, which has nothing to do with frequency coordination or RF engineering, takes me outside of the area at times to locations where cell service may not be available (I frequently work in underground bunkers) and that is why we encourage everyone to BOTH call and email their specifics from the moment they know they need a coordination. Email is always a better way to reach me. I would also encourage folks to get in touch as far ahead of time as possible since, as you have witnessed, sometimes it takes time for me to respond if you only leave a voice mail while I am travelling.

To do a coordination I need the specifics on what frequencies you wish to use, the dates of planned operation, the specific locations you wish to use them (as in addresses and whether operations will be inside or outside the buildings involved), the transmit powers and equipment involved, and a person to contact during the period of operation should interference need to be mitigated. Please be aware that you are planning to operate in one of the most congested RF environments in the United States. There are over 1500 media organizations operating in the greater Washington area. The chances you will step on someone, regardless of the frequencies you operate on are high. Keep in mind that VHF frequencies are used for more than television broadcasting in our market.

You have already forwarded me the bulk of the above information, and I don't see any issues. Please forward a day-of-air contact name and phone number in case I get any calls.

Good luck and have a good show,

James

James Snyder
Frequency Coordinator - National Capital area
Acting frequency coordinator - Baltimore & greater Maryland
A service of the Washington Executive Broadcast Engineers (WEBE) since 1957.

coordinator @ webe.org

>James Snyder,
>
>On behalf of Exelis Inc. I have applied for a STA for the Washington
>DC and Alexandria, VA area (see the attachment). The particular
>areas of interest that are within the requested area of operation
>are the Walter E. Washington Convention Center and the National
>Guard Bureau. The area of operation covers both of them and goes
>somewhat beyond them.
>
>The FCC has requested that I precoordinate with the SBE before the
>STA is granted. I am attempting to do that coordination.
>
>Since I was not able to get a hold of you last week I discussed my
>options with John Poray at the SBE. He suggested that I contact
>each of the affected licensees since I was unable to contact you.
>In the FCC databases I have found three licensees that are
>potentially affected.
>
>1. CBS TELEVISION LICENSES LLC (WQDA545) a broadcast
>auxiliary license. I contacted Mr. Benedict and he indicated that
>he didn't initially see a problem because of the frequencies in
>question. I am still waiting on an email to that effect.
>2. TELEFUTURA D.C. LLC (WQOH555) a broadcast auxiliary
>license. Contacted Fred Willard and he indicated that it was not a
>problem as far as he was concerned since we were requesting to use
>low band VHF television frequencies.
>3. WIAV-LP has a construction permit for channel 4. I
>contacted Dan Alpert and he indicated that WIAV-LP was not to the
>point of doing any over the air testing, so we are good to go.
>
>The STA is for this week. The real focus is preparing for and
>performing a customer demonstration Wednesday the 24th and Thursday
>the 25th, so I need to be able to go forward with this ASAP.
>
>Doug Sherman
>Frequency Authorization Manager
>Exelis, Inc./Communications and Force Protection Systems
>260-451-5782
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>

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>
>Email addresses of ITT Exelis employees have changed from itt.com to
>exelisinc.com. Please update your favorites and contact information
>to reflect these changes.
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