Services & Equipment for the Entertainment Industry

August 23, 2009

To All of Our Wireless Mic Customers:

It has been over half a century since the FCC last reallocated television channel frequencies. Over the last decade or so, some of us may recall that our old fixed frequency UHF wireless mics that worked just fine suddenly had problems--intermittent functionality--drop outs and the like. New DTV stations coming on line transmitting where there were no transmissions before caused these problems. On February 17, 2009 all analog TV transmission will cease, and only the DTV stations will remain—unless the transition goes into overtime. The Senate recently passed a Bill to delay the transition until June 12, 2009. It still needs to pass the House, and be signed by the President before the delay will occur.

How will this transition affect our wireless microphone customers?

With analog TV transmissions ceasing, much of the UHF spectrum will be freed up. As such, the FCC is reallocating how those frequencies, or White Spaces, will be used. The following only applies to those TV channels that do not have DTV stations transmitting.

- TV channels 52-69 (698-806Mhz) are reserved for New Services and Public Safety Transmissions—no wireless mics will be allowed to operate in the entire 700Mhz band.
 - Should you own wireless mics in that operate in this band, there are a couple of mic manufacturers offering limited time factory direct rebates should you choose to buy new systems to replace the old.
- TV channels 21-51 (512-698MHz—excluding channel 37 608-614MHz) are available for use by unlicensed devices. These include both wireless mics and TV Band Devices (TVBD—formerly know as White Space Devices).
- TV Channels 7-13 (174-216MHz) and 14-20 (470-512MHz) are available for wireless mics and fixed TVBDs. Portable TVBDs are banned from channels 14-20.
- In 13 major markets where certain channels between 14-20 are used for municipal and public safety transmissions—two channels between 21 and 51 will be reserved for wireless microphone use. These will be the first available non-DTV channels above and below channel 37.

TVBDs are currently being developed. They are envisioned to bring broadband access to rural areas, and information/content to other personal portable devices such as laptops, cell phones, etc. There are two types of TVBDs—fixed and portable. The fixed devices will be like antenna or microwave towers for cell phones. TVBDs must not interfere with DTV stations, or wireless microphones in use. There are also transmission power limits placed on these devices, and other rules governing transmission near adjacent DTV channels. They are required to use spectrum-sensing technology to avoid interfering with DTV stations and wireless microphones. In addition, they must also access a Geolocation Database at least once per day to avoid stations and registered Entertainment and Sports Venues.

Wireless mic users may register the location, time, and TV channels used for an event in the Database. One-time, recurring, and permanent wireless mic use may all be registered. However, we are unclear on whether or not the wireless microphones must be licensed in order to be registered with the Database. As the ruling from the FCC was just published November 14, 2008, many of the details still need to be worked out. At this point, neither the Database, nor an organization to oversee it exists. The FCC also states that rules will be revisited as things develop.

More information is available at Shure's website, including a link to the full 130 page decision handed down by the FCC:

http://www.shure.com/ProAudio/PressRoom/WhiteSpaces/index.htm