

BEFORE THE  
**Federal Communications Commission**  
WASHINGTON, DC 20554

In the Matter of )  
 )  
Report on the Feasibility of Allowing ) GN Docket No. 18-122  
Commercial Wireless Services, Licensed )  
Or Unlicensed, to Use or Share the Frequencies )  
Between 3.7-4.2 GHz )  
 )

To: The Commission

**COMMENTS OF THE  
CRAWFORD BROADCASTING COMPANY**

Crawford Broadcasting Company (“Crawford”) and its affiliates are licensees of 15 AM and 9 FM commercial broadcast stations<sup>1</sup>, most of which utilize C-band satellite reception equipment for delivery of program content for broadcast. As such, Crawford has a great interest in preserving interference-free reception of such satellite signals.

Through the 30-plus years that Crawford has been utilizing C-band satellite platforms for program reception, it has dealt with terrestrial interference on a number of occasions. In working through such interference, we have learned that it is often difficult to eliminate so that a useful signal can be recovered.

Satellite reception deals with low-power-density signals coming from space, signals that are often just a few dB above the noise floor. Large-aperture, high-gain antennas are required to resolve and recover these signals.

Desense from strong terrestrial signal sources can overwhelm LNB front ends to the point where reception of desired signals is impossible. We have experienced this kind of desense from nearby terrestrial microwave installations operating on adjacent frequencies. If these kinds of signals, which originate from aperture antennas with tightly-controlled beams, can produce destructive desense in C-band satellite reception equipment, it is a certainty that other signals in the same band that originate from omnidirectional sources will do the same.

Crawford would encourage the Commission to carefully consider the possible adverse effects that terrestrial sharing of C-band satellite signals in the 3.7-4.2 GHz band would have. The existing C-band satellite system has been in place for many years. Users have a considerable investment in the infrastructure. It is reliable, provides nationwide coverage, and employs the very-cost-effective one-to-many broadcast model. This system is invaluable and must be protected. As such, we believe that shared use of the C-band satellite spectrum is ill-advised and would result in destructive interference to satellite communications.

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<sup>1</sup> Crawford AM affiliates include KBRT, Costa Mesa, CA; KNSN, San Diego, CA; KCBC, Manteca, CA; KKPZ, Portland, OR; KLZ/KLDC, Denver, CO; KLTT, Commerce City, CO; KLVZ, Brighton, CO; WDCX-FM/WDCZ, Buffalo, NY; WDCX, Rochester, NY; WDJC-FM/WYDE/WXJC/WXJC-FM, Birmingham, AL; WXJC-FM, Cordova, AL; WMUZ-FM, Detroit, MI; WMUZ, Taylor, MI; WEXL, Royal Oak, MI; WRDT, Monroe, MI, WPWX, Hammond, IN; WYCA, Crete, IL; WSRB, Lansing, IL; and WYRB, Genoa, IL.

Because of the number of C-band earth stations, registered and unregistered, that are in use by radio and television stations in every part of the U.S., we do not believe that moving existing C-band satellite operations to a different frequency would be practical or even possible. Such a move would be very disruptive and costly to implement. A much better option would be to locate the proposed commercial wireless services on alternative frequencies.

Crawford thus believes that the Commission should fully protect the incumbent use of the 3.7-4.2 GHz C-band satellite spectrum and seek other options for commercial wireless services.

Respectfully submitted,  
CRAWFORD BROADCASTING COMPANY



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