

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

In the Matter of	)	
	)	
Petition for Rulemaking to Allow the MA3 All-Digital Mode of HD Radio for AM Stations	)	MB RM-11836
	)	
Revitalization of the AM Radio Service	)	
	)	
	)	
	)	

To: The Commission

**COMMENTS OF THE  
CRAWFORD BROADCASTING COMPANY**

Crawford Broadcasting Company (“Crawford”) and its affiliates are licensees of 15 AM commercial broadcast stations<sup>1</sup>, all but two of which operate in the hybrid analog/digital mode. As such, we have great interest in the Petition for Rulemaking filed by the Bryan Broadcasting Corporation (“BBC”) to allow the MA3 all-digital mode of HD Radio for AM stations (“Petition”), and we offer the following comments in support of this petition.

In its Petition, BBC states that the AM band has become so overwhelmed by interference and impulse noise that the resultant audio product is rendered unacceptable to modern listeners. Our own experience mirrors this observation, and we agree with this assertion. In recent years, the noise floor has indeed been on the rise. Oftentimes the source of local noise is not immediately apparent, and the noise is so ubiquitous that even direction-finding techniques many times fail to locate a point source. Virtually every device or appliance contributes to the noise, and the root-sum-square result is a greatly increased noise floor. In agreement with BBC’s assertion, our observation is that it is very difficult to get clear, noise-free reception of any but the strongest AM stations indoors, and this indeed demonstrates the magnitude of the problem.

Today’s radio listeners have many more choices than in years past. In addition to AM and FM broadcast radio, internet streams, podcasts, satellite radio and personal audio players, many of which are convenient, integrated functions within smartphones, offer listeners other sources of programming, most of which are noise- and interference-free. Listeners don’t have to put up with noisy, interference-laden audio, and many times they simply won’t.

BBC points out in its petition that, in effect, the Part 15 noise train has left the station and there is no way to undo what has been done. The noise floor at medium-wave frequencies is what it is, and the only way to get around it is to either increase signal levels or go the all-digital route. While the

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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/WDCZ, Buffalo, NY; WYDE/WXJC, Birmingham, AL; WCHB, Royal Oak, MI; WMUZ, Taylor, MI; and WRDT, Monroe, MI

Commission's AM Revitalization initiative holds some possibilities for increasing signal levels<sup>2</sup>, not all AM licensees will be in a position to take advantage of whatever relief eventually becomes available.

Since 2003, Crawford has been operating most of its AM stations in the MA1 hybrid digital mode, and we continue to transmit in this mode on all but two stations that are multiplexed with other stations and have bandwidth challenges<sup>3</sup>. We are well familiar with the performance of our stations in this mode. The sound quality is certainly acceptable, head and shoulders above the bandwidth-limited analog audio. In addition to increased frequency response and stereo separation, the recovered audio is noise-free. It is not uncommon when tuning one of our stations that the listener will observe noise on the analog signal before the digital lock occurs, and the transition to digital is nothing less than amazing – the noise disappears, the high frequencies come through and the image opens up to fill the listening space. As such, we know what digital AM can sound like with all the limitations of the hybrid mode; we would very much like to have the opportunity to explore the all-digital mode with all the analog compatibility challenges removed.

All-digital AM broadcast represents a tool that we already have at our disposal. It has been tested and studied in a limited way, in particular and most recently at WWFD in Frederick, Maryland. The results indicate a general parity with analog coverage, and all-digital operation offers many benefits for listeners with compatible receivers. As BBC stated, the MA3 all-digital AM mode provides a robust, noise-free listening experience that will be attractive to listeners. It will put AM stations transmitting in that mode on a par with other media for those with HD Radio equipped receivers.

At one point some years ago, Ann Gallagher, who was then at the Media Bureau, asked if Crawford would, if given the opportunity, take any of its AM stations to all-digital. We responded that we almost certainly would in some key locations. In the years since that conversation took place, the circumstances have only solidified both the need and the desire for the all-digital option for AM stations. The noise floor is now higher, incident and localized noise sources are more pervasive, and there are many more HD Radio equipped receivers now in the hands of listeners. If the answer was yes when the question was originally asked, it is a much more resounding yes today.

We therefore join and endorse BBC in seeking rulemaking that would permit, on a voluntary basis, all-digital MA3 operation by AM licensees.

Respectfully submitted,  
CRAWFORD BROADCASTING COMPANY



W. Cris Alexander, CPBE, AMD, DRB  
Director of Engineering  
2821 S. Parker Road, Suite 1205  
Aurora, CO 80014

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<sup>2</sup> *Revitalization of the AM Radio Service*, Second Further Notice of Proposed Rulemaking, MB Docket No. 13-249.

<sup>3</sup> Of Crawford's stations, only KNSN in San Diego and WDCZ in Buffalo do not transmit in the MA1 digital hybrid mode. Because of equipment limitations in its split day/night site operation, KLVZ in Denver does not transmit a digital signal at night.