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Before the
FCC - MAIL ROOM FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the matter of:

Amendment of the FCC Rules)	
to establish a single AM Radio)	
Stereophonic Transmitting)	Docket No 92-298
Equipment standard)	
)	

INTRODUCTION

My name is Christopher Hays. I have been a broadcast engineer for 22 years. I have been involved with AM stereo since the FCC first authorized it, and I have personally done several AM stereo conversions to different stations. I feel that I have a very good understanding of the forces in the AM stereo marketplace, as well as being one of the more knowledgeable people about the technology in the country. I have personally felt very frustrated that the Commission did not choose a standard for AM stereo. HOWEVER, it is my opinion that adopting the Motorola C-Quam system as the official AM stereo standard would seriously hinder the introduction of the new digital technology developed by USA Digital by sending an improper signal to the receiver and broadcast industries. For this reason, I oppose this measure.

BACKGROUND

AM stereo has been thwarted by a number of bad decisions by the FCC. The first such decision came in the early 1960's when the Commission decided to give stereo to a new medium called FM. Even though the technology was ready then to place stereo on the AM dial, the FCC tampered with the natural evolution of the technology.

It wasn't until the 1970's that AM stereo was approached again. The FCC chose a system developed by Magnavox Corporation. This was a decision that, in my opinion, was a good one. Although Magnavox did not have the best technology, it had the advantage of being the only system proposed by a major consumer electronics firm.

Unfortunately, instead of sticking to its decision, the FCC wavered under pressure from broadcasters and decided to throw the process open to the marketplace. This decision was popular with the administration in power at the time. We may never know whether it would have worked, because once again, the FCC meddled in the process by suspending the type-acceptance of the Harris system for 6 months. The suspension came from a complaint from the Motorola Corporation, which proved to be unfounded. Yet this 6 month suspension caused one of the most popular systems to be removed from the competition. You will find that most technical-

ly aware people feel that the marketplace should have evolved into a contest between Harris and Kahn, not Kahn and Motorola.

TODAY

And now, adding insult to injury, the FCC proposes to codify the result of this comedy of errors. I submit that the only proper approach is to begin again, testing the two surviving analog systems and the new digital technology.

DISCUSSION

USA Digital, a consortium of Gannett, Westinghouse, and CBS Inc., has produced a digital technology that may be capable of moving AM radio forward to a level of quality that can carry it into the next century. Imagine AM radio with a 90 db noise floor (just like compact disks) and full 15 khz stereo response with virtually unlimited stereo separation. That is what the new digital technology offers. In addition there is a major marketing advantage: DIGITAL is a hot, marketable commodity TODAY!

This creates an opportunity to right the wrongs of the past. The FCC should move immediately to have the bureau of standards (N.T.I.A.) test the surviving analog systems and the new digital technology.

WHAT RECEIVERS?

The commission states, "there are approximately 24 million Motorola C-Quam receivers currently in use by radio listeners." Assuming most of these receivers are in the US, about 1 in every 11 Americans should be in possession of an AM stereo receiver. Clearly this is not the case, and that figure, by inspection, is preposterous. I urge the commission and its staff to research this personally: interview your friends and associates. Go shopping and try to find even one AM stereo receiver available for purchase off the shelf from a retailer. I want you to know that the receiver situation out here "in the trenches" is truly depressing. I think a "reality check" by the FCC on this matter is needed.

Even if you accept the obviously inflated figure of 24 million receivers, consider this: A service manager at Techniques Corporation told me that fewer than 30 percent of the receivers they get in for service have ANY AM stations set on buttons. That means that probably fewer than 30 percent of those alleged 24 million radios are even listening to AM, let alone AM stereo. Even that highly inflated figure translates to only about 3.2 percent of the US population listening to AM stereo. Clearly, the number of receivers in use at this time should not be a factor in choosing a standard.

THE SOLUTION

I urge the FCC immediately to ask the N.T.I.A. to begin testing the two surviving analog systems, Kahn and Motorola, AND the new USA Digital system. Although one year clearly isn't much time to complete testing, it can be done if it is assigned a high enough priority. This will ensure that the public interest is served by the best technology available.

CONCLUSION

It is my opinion that all the analog technologies for AM stereo may be obsolete, and to choose one system based on a questionable receiver count would be a great disservice to AM broadcasting and the American people. Indeed, you can reverse some or all of the damage done in the last three decades by approving an advanced DIGITAL technology that can carry AM radio into the next century.

I urge you to seriously consider this alternative approach. I am not a representative of any corporation. I do not have any pecuniary interest in this matter. I am a private citizen working in broadcast technology who believes that AM needs some serious help to make it into the next decade, and that this proposal to adopt an obsolete analog technology may be the final nail in the coffin of AM broadcasting. If you would like to discuss this matter with me, I would be happy to assist. I can be reached during business hours at (213)383-4222, and evenings at (818)952-2014. I am in the Pacific time zone. Thank you for your consideration of my comments.