## Panel Presentation by Commissioner James H. Quello Challenges of Changing Technology: Impact on Radio AWRT's 40th Annual Convention May 17, 1991 - Atlanta, GA

This is time of some uncertainty -- perhaps apprehension is a better word -- for radio broadcasting. AM radio has suffered from a number of problems, many of them technical and the Commission is attempting to address them. FM radio is generally healthy but is also feeling the effects of the economic downturn that we all hope is nearing an end.

At its meeting on the 9th of May, the Commission attempted to deal with some of the structural problems of radio by proposing some changes in the rules. In a Notice of Proposed Rulemaking, we asked for comment on whether the current common ownership rules limited to 12 AM and 12 FM stations should be relaxed. We also are seeking comment on modifying the contour overlap rule that prohibits ownership of more than one AM and one FM station in the same area (the "duopoly" rule). proposed to adopt a policy encouraging joint ventures. this proposal, separately owned stations could function cooperatively in advertising sales, technical facilities, news bureaus and so on with certain safeguards to ensure that diversity and competition are preserved. I'm looking forward to reviewing the comments in this proceeding to determine whether these proposals or others suggested by the commenters will be beneficial to the radio broadcasting services and, hence, to the American public. (INCLUDE EXCERPTS FROM STATEMENT ON ATTIC TO BASEMENT ITEM)

There is a great deal of concern, these days, about broadcasting services, both radio and television, and their role in the future. In our <u>en banc</u> meeting on "The Network of the Future" on the first of this month, we heard a great deal about telecomputing, interactive television and fiber optic transport of signals which have historically been associated with over-the-air broadcasting. Much has been written about the technological changes that are taking place and that are just ahead. Digital technology, in particular, seems to have captured the imagination of the technical community and promises major, most dramatic improvement in AM signal quality -- if we can find spectrum.

Radio broadcasters appear to be ready to join the digital revolution and several serious proposals for Digital Audio Broadcasting (DAB) have emerged in recent months. But, much needs to be done before any system is selected for terrestrial broadcasting. FCC Chairman Al Sikes, speaking in late March to the National Association of Broadcasting board of directors, said that "...it will be something beyond the mid-90's before the FCC has rules on DAB." He said "...it's still early in the process, and we're still identifying questions." However, small AMs may not survive time required for development.



Among the proposals advanced for DAB, some call for satellite delivery of the signals. Others envision hybrid systems which will provide for both satellite and terrestrial delivery. There are also proposals, of course, that would rely upon terrestrial delivery only.

The NAB is categorically opposed to satellite delivery of DAB. It is also concerned that the FCC might not act expeditiously to establish a DAB standard for terrestrial broadcasting. These concerns prompted NAB to embrace the Eureka 147 technology developed in Europe and to seek to exclusively represent Eureka as its agent in the United States. At last report, Eureka appeared to have little interest in exclusive licensing but NAB continues to support that technology.

Eureka 147 was proposed by NAB to operate at "L" band using more than 50 MHz of spectrum. There have been other proposals for "L" band as well as proposals for "in band" operation of competing systems. The "in band" proposals would utilize the bands already occupied by the AM and FM services to provide DAB. Obviously, these systems must be tested before any serious consideration can be given to standardization.

Just last week, the Commission approved an experimental application by Strother Communications to conduct such tests over UHF television channel 15 in Boston and channel 40 in Washington, D.C. The Commission's approval was granted over the objections of WETA, Channel 26 in Washington and the Association for Maximum Service TV. The approval is conditioned upon a pledge not to cause interference to land mobile or broadcast operations and upon the construction of the test facilities within one year.

There are many questions which must be answered before we can proceed with deployment of any new broadcasting system, some technical and some non-technical. Of course, we need to know how well each system works under many different conditions. We need to know whether receivers can be manufactured and distributed at a reasonable cost. We need to address allocation and assignment questions once the technical characteristics of any new system are understood.

For example, what consideration will be given to existing terrestrial broadcasters in assigning DAB licenses? If an "in band" system is viable, will it be necessary to issue new licenses? Will any "in band" system accommodate existing AM licensees?

Another important consideration will be coverage areas. Since we're looking at a radical departure in technology, what limitations will there be on allocating stations? Will new assignments be possible? Should present coverage areas be duplicated even if the new technology permits larger areas?

Should the present <u>relative</u> coverage areas be maintained; i.e., Class A vs. Class C FM station coverage?

Whatever technical parameters are decided upon for digital audio broadcasting, it's important that the underlying nature of the radio broadcasting service remain as it is now. Broadcasting continues to carry public interest obligations and must seek to understand and respond to the needs and interests of the communities it serves. I continue to believe that one of the most important features of our system of broadcasting is localism, the requirement to serve each station's community of license. Local news, emergency bulletins, community interests and community service are fundamental ingredients of our system of broadcasting and I strongly feel that they should be preserved. While national and international services are vitally important, local service continues to distinguish American broadcasting and to best serve public needs.

Some of the proposals for DAB call for satellite delivery of the signal. I do not necessarily oppose such proposals but I believe that any new audio broadcasting service must contain a terrestrial component. Obviously, localism and direct satellite delivery are not compatible. When asked what impact DAB might have upon localism, Chairman Sikes commented: "We will not wittingly make a decision which will undermine the foundations of broadcasting." I certainly agree with that statement.

## **AWRT OPTIONAL REMARKS**

I'm pleased to participate on a panel of AWRT at 40: Facing the Future. I only wish it were I at 40 facing the future -- a future of explosive communications advanced technology developments with DAB, fiber optics transmission, HDTV and DBS.

I understand our panel today is a radio panel treating the potential and problems of digital audio broadcasting -- a technology that promises dramatic improvement in AM signal quality.

However, first I want to pay due deference to my fellow senior citizens. I don't want this day to pass without acknowledging that May is officially National Older American Month. I'm sure the large, very influential AARP (American Association of Retired People) will appreciate this acknowledgement.

As an active (groups not favorably affected by FCC action may even claim over-active) older American, I felt duty bound to make the official announcement. (Source: syndicated columnist Bard Lineman in the Detroit Free Press.) As you know, I am the senior commissioner in age, service and a few personal areas that will remain off the record. I am comforted by the encouraging remarks of relatively anew acquaintances like "Growing old is a bad habit which a busy person such as you doesn't have time to cultivate" or "The age of a person doesn't mean a thing, the sweetest music is played on the oldest violin" or "You are from that wonderful era when parents knew more about sex than their kids," etc.

These comforting remarks are in contrast to some of my longtime friends bored or jaded through years of close association. They wisecrack: "If you got by an FBI review in 1974, you certainly won't have a problem today -- I understand today when confronted with sex, you fantasize about going to sleep" or "Has Kitty Kelly called and asked how's the family?" Another wisecracked "The years have been good to you, but the weeks in between kicked hell out of you" and finally, "Remember old broadcasters never die, they just lose their frequency."

So, all these remarks tend to establish a becoming humility--a proper attitude when confronting the complex technological wonders of the future or the promising potential of DAB today.