## Remarks by Commissioner James H. Quello Before the IEEE Broadcast Technology Society Hotel Washington, Washington, DC September 19, 1991

## **NEW TERM, NEW BALL GAME**

Thank you, etc. Generous introductions are always the most impressive part of my speaking appearances. In fact, some introductions have been so captivating I could hardly wait to hear what I was going to say. Anyway, today it's my job to speak and your job to listen -- I just hope you don't finish before I do.

As you may know, I have fortunately enjoyed reasonably good Congressional relations on both sides of the political aisle. My relationship may have taken a turn for the better when four years ago I advised my fellow commissioners to add "your oversight Senators and Congressmen" to the Fourth Commandment. I said it is a good idea to honor them -- and let the record show I think it is an appropriate well-deserved deference.

I believe, in fact I know, that I'm by far the most senior (polite word for oldest) active FCC Commissioner to ever appear before this august body. I'm glad that I flunked retirement and honored that President Bush remembered that I lost to him in tennis several times -- and reappointed me.

It all started last January when Chairman Al Sikes asked "How do you feel about reappointment? Your term is up June 30th."

I said "O.K., but I want to be wanted this time -- AI, you probably read that I have delusions of adequacy and 70% of my marbles -- a good local norm. There are many times I even feel useful."

Chairman Sikes said "Well, I want you . . . ." I considered that a very significant want.

Apparently, many others also wanted me -- including many of your members and your important clients. So with apologies to Bartles and James, I'd like to say "Thank you for your support."

I believe I'm up to the challenges and mental turmoil of the job. However, physically -- anyone who says he can do at 75 what he was doing at 25 wasn't doing much at 25!

At my official swearing-in, I thanked the audience and said the widespread support was particularly gratifying because I had been at the FCC long enough to have voted against everyone at least once. The audience shouted back "Twice"! So twice it is -- and if I find out who the S.A. lawyers were who did the shouting I might even be tempted to go for "thrice."

At reappointment time I always remember receiving a wire from longtime friend, Chuck Adams, author and advertising executive stating "Congratulations. Hang in there until they name the building after you." I appreciate the sentiment but that honor has probably been pre-empted by distinguished Chairman Rosel Hyde or Bob Lee.

However, I might challenge them in the future when I achieve a dramatic distinction all my own. When my term expires in 1996 I plan to enlist the support of the grey panthers, the AARP and the Dick Wiley and Ward Quaal Foundations for the Aging and be appointed the very first active wheelchair Commissioner! I have five more years to plot my course. Also, I believe I can be a formidable competitor in wheelchair tennis now in vogue.

I want to share a senior citizen experience with you. Think twice before attending the 50th anniversary of your college graduating class. The former egghead academic boors are now richer than you are and making big grants to the University. Also the misnamed "Dumb jock" athletes of your class appear with second wives half their age and also make big contributions to the University. However, I always make some contribution to the alumni club -- not so much for what the college did for me, but kinda in reparation for what I did to it when I was a reporter and editor vigorously implementing my journalism prof's principle

of "Comfort the afflicted and afflict the comfortable." Then too, my wife, Mary, also a Michigan State grad, pointed to one of my former girlfriends and said "Ha -- she doesn't look so hot!" I said she sure looked hot when I was dating her. Another memorable event was when the MSU Communication's Dean proposed showing a transcript of my college grades on a large screen as an encouragement to mediocre students. Fortunately, the President emeritus recalled I spent most of my quality time editing the college paper and working on the radio station.

I don't want to belabor the positive aspects of senior citizenship but there are a few. First, you have had time to develop a becoming sense of self unimportance. Then too, most of the communications press seems to respect age -- fortunately in my case, they stopped using the lethal device of quoting me exactly verbatim. I could not possibly survive that drastic kind of press abuse. (Quote Goethe on aging if time permits.)

This is an exciting challenging time to be at the FCC. During the past few years, there has been a veritable explosion of technological developments and contentious issues in all fields of communications. It is apparent that neither the FCC nor the FCBA or the IEEE have been deregulated out of business. In fact, the communications marketplace is brimming with new controversial developments and regulations that require evaluation,

interpretation, clarification -- providing, cynics say, seemingly infinite billable hours and engineering consultations. Some uncharitable souls even profess that law firms have incentives to generate crisis and regulatory contention. Surely such base motivation is far beneath the august legal profession -- one of the world's oldest if not the oldest, I am told.

Seriously, lawyers of the communications bar or engineers of IEEE don't need to generate crises -- the crises facing the FCC are mostly self generating. In fact, we need your help.

The FCC needs expert comments and input from the best legal minds of the FCBA, from the IEEE and your clients, and guidance from Congress and the courts to address the important and often contentious problems. There are so many communications issues-many with billable hours potential like: finsyn; prime time access; effective competition; must carry; retransmission consent; the timely attic to basement review; media cross ownership restrictions; political advertising clarification; children's TV; deciding relative merit of auctions or lotteries; telco entry into cable with introduction of the multi-band wonders of fiber transmission offering telecomputer services, data processing, interactive services, electronic newspapers, home shopping, etc.; indecency-obscenity enforcement; EEO requirements; comparative hearing and license renewal reforms; station brokerage agreements;

implementing phone company relief from MFJ restrictions; special tariffs; spectrum allocations auctions or lotteries; spectrum compression technology; DAB, HDTV and DBS developments; global considerations, etc. All these and related developments affect the public, millions of shareholders, top management of the various communications companies and the future communications well-being of America. Each of these important subjects could easily absorb an hour speech or a long chapter in a communications book. Let's take just one current topic, DAB, for example.

DAB is the most revolutionary and promising improvement for radio in modern times -- particularly for the troubled AM service. FCC must encourage full speed ahead and explore every technical possibility to develop a terrestrial in-band or a hybrid satellite-local service system. DAB practical tests are scheduled for the NAB convention next spring. To its credit, the NAB is in the forefront of developing this exciting new technology.

Also, digital compression of audio transmission promises to multiply the channels available for radio programming of the future. This represents both a future challenge and a multichannel opportunity for radio operators. It also presents a potential problem of diluting an already over saturated radio marketplace. As I have previously stated, I believe those who have pioneered or who have a large longtime investment in developing

communications in America deserve a priority consideration in instituting advanced technologies affecting their business.

Also, I believe the most useful contribution the FCC could make to AM radio improvement, and in many cases AM salvation, is to promulgate actions that reduce the clutter of interference and improve coverage.

Thus, I believe a substantial priority should be allotted to licensees whose movement to the new expanded band 1605-1705 would reduce interference. As I see it, the most practical way of establishing the expanded band and perhaps the only way would be to permit simulcasting on the present band and expanded band until the millions of current radio receivers are replaced with expanded band receivers -- Estimated time is 5 to 8 years. This process could be expedited by major automobile companies promptly installing expanded band receivers in cars.

Another example would be the current auctions versus lottery controversy. I'd like to propose a middle road. I believe a more responsible plan than present lotteries should have been instituted long ago for awarding non-broadcast spectrum. The ship has already sailed on valuable cellular grants. Several billion dollars worth of spectrum has been allocated without any return to the

government. Lotteries have spawned application mills and generated immediate wealth for winners who had no intention of operating the spectrum. Comparative hearings, the best method for evaluating the most qualified applicants, would seriously delay the entire process and cause an almost impossible administrative burden for the FCC. Auctions would favor the wealthy and well established who could outbid and thus then sell the spectrum or operate as they see fit. I believe a more responsible method would be a lottery with a 1% application fee, with the lottery winner paying 5% of the appraised value of the spectrum. This method should include a requirement that winners operate the system for two years. The FCC would arrange for expert appraisal of the current marketplace value of the spectrum. For simplicity's sake, let's assume an appraised value of one million dollars for personal communications systems or cellular grants. To qualify for the lottery, each applicant would be required to post a non-refundable application fee of 1% or \$10,000. The winner would be required to pay an additional 4% up front or \$40,000 (for a total of \$50,000) and be required to operate the cellular system for two years before selling. The result: the government would receive some reasonable payment for a valuable spectrum; only responsible entities willing to serve the public by operating the new spectrum would apply; the monetary amount could be easily financed by winners of a valuable business spectrum. This is an initial draft proposal that should be subjected to further comment and to fine-tuning.

Like the question of spectrum management, FCC issues and developments must be addressed in the swiftly changing and everevolving communications environment. FCC regulations must consider the greatly increased competitive environment for communication services. Today broadcasting spectrum scarcity has been replaced by program channel abundance with many more oncoming channels which reach specific demographic audiences.

For example, several years ago TV listings in newspapers typically carried three networks plus one or two independent and PBS stations. Today in all major papers -- locally The Washington Post and The Washington Times -- or in my former home town, the Detroit News and Free Press, now carry daily listings of 23 to 25 channels of programming -- in the process promoting the competitive and increasingly popular cable services. This multichannel abundance in a competitive marketplace certainly deemphasizes any possible charges of undue media control or lack of diversity by broadcasters.

A recent survey reported by Chairman Al Sikes revealed that an average hypothetical person, aged 34, working and living in a typical urban area has access to a 36 channel cable system, nine over-the-air television signals, and 24 AM and FM radio broadcast signals. He can subscribe to one of nine long-distance carriers, to one of two cellular radiotelephone services (directly or via five cellular resellers) and seven paging companies (including two national service providers). Other radio alternatives available range from Citizens Band (CB radio), to specialized mobile radio (SMR), to some two dozen private radio services loosely limited to members of affinity groups. Also there is access to satellite-transmitted communications, accessible through a \$1700.00 backyard receive-only earth station.

Our typical average American ordinarily has 2.2 TV sets in the home (80 percent color), 6 radios, a CD player and a video cassette recorder (VCR). This all amounts to far greater individual choice and opportunity in communications than ever before.

Legislation and regulation today must take into consideration the multiple communications choices available to consumers. FCC regulation should be based on the competitive realities of today and tomorrow's burgeoning multi-channel marketplace -- not on the communications marketplace of 20 or even 5 years ago. This makes for a contentious and sometimes an untidy regulatory process. (In this respect a friend of mine several years ago told me there are two things you should never watch made -- sausage and FCC regulations.)

My response to the very first pre-hearing confirmation question asked by the Senate majority placed a high priority on implementing advanced multi-choice technology.

You may be interested in this perceptive first question. It read "What should be the Commission's priorities for the next 5 years?" My reply was "I believe the Commission's highest priority in the next five years will be the orderly, compatible implementation of the advanced technological services of telecomputing, fiber optics, DBS, DAB, HDTV, cellular and personal phone service. Advanced technology often outstrips society's ability to integrate it into our already complex, sometimes expensive communications systems. The rate and extent of technological development will be determined by consumer acceptance and affordability, commercial practicalities, legislative and regulatory actions and by the service's beneficial contribution to total public interest.

"I believe preservation and enhancement of the all-important free universal over-the-air broadcast service should continue to be the mainspring of American mass communications . . . . In their deliberations, commissioners should apply the simple principle of the best service to the most people at the most reasonable, practical cost."

The FCC is taking some initial well-considered steps to update regulation and to implement advanced technology. In the radio area, we are looking at the issue of AM improvement, in a timely "attic-to-basement" review of the radio ownership rules and at digital audio broadcasting, or DAB. In television, we are still digesting the excellent report prepared by the Office of Plans and Policies -- Broadcast Television in a Multichannel Marketplace--and have issued a Notice of Inquiry seeking comment on the implications of this study on the future of television and on our regulations. Also, our Advisory Committee on Advanced Television Services has begun testing HDTV systems, and we hope to adopt a standard by mid-1993.

The OPP Report and the Commission initiatives have led some to say that broadcast television is a medium with a great future behind it. Increasingly there is talk -- some by network officials- of the demise of one or more of the networks and even predictions about the end of free broadcast television. But, as I said when we adopted the Notice of Inquiry on our television rules, "any interpretations in the popular press about the FCC predicting the demise of broadcasting are a little premature. We are just beginning the comprehensive inquiry."

This is not to say that there is no cause for concern. I came to recognize during the finsyn proceeding that the troublesome economic and competitive environment facing broadcasters is forcing us, as regulators, to reevaluate some of our longstanding assumptions. Or, at least, it <a href="mailto:should">should</a> force us to do so. I still have hopes that my colleagues will join the Chairman and me in this understanding during reconsideration of finsyn. Barring that, of course, it is up to the 7th Circuit. I truly believe the future of universal free TV is at stake -- the networks are still the largest distributors of universal free over-the-air programming. Surveys, TV critics, press articles all stress that network audience and influence have drastically eroded the past five years. Networks should now be free to negotiate for programming or produce their own programming without having to overcome outdated regulatory roadblocks. My 36 page dissent tells it all!

So what is the current situation? Ken Auletta, in his new book on the networks entitled "Three Blind Mice: How the TV Networks Lost Their Way" characterized the changes in the network business as "an earthquake that struck as if in slow motion, cracking their foundations." He points out that since 1976, the three networks have lost one-third of their viewers, primarily to cable and VCRs! These shocks to the system, he writes, "registered a 10 on the Richter scale." I noted these changes in my separate statement on finsyn. Among other things, I pointed

## out that:

- -- In 1970, 2,490 cable television systems had 4.5 million subscribers; by 1990, 10,823 cable systems had about 54 million basic subscribers.
- -- In 1970, cable "networks" were virtually nonexistent; by 1990, there were about 90 basic cable networks and 17 pay movie channels.
- -- In 1970, VCRs did not exist as a consumer product; by 1990, they were installed in 66 million households. This represents about 72 percent of all television households.

## As a result of these changes:

- -- By 1990, prime time viewing of the three networks had dropped from 90 percent to about 57 percent, and was headed downward. The most recent "sweeps" period, ending last July, revealed that the network prime time viewing audience dropped below 50 percent-
  - the first time ever during a "sweeps" month.

Then too, networks compete aggressively against each other as well as against cable, DBS, syndications, independent stations, VCRs, etc. For example, expert financial analyst George Michaelis noted the revenues from the syndication of the Cosby show alone totals more than all three networks in the last two or three years (in the August 30th Investors Digest).

Also, Larry Gerbrandt of the prestigious Paul Kagan Associates praised USA Network in an September 15 edition of the New York Times. Mr. Gerbrandt estimated that USA Network, a 50-50 partnership of Paramount Communications and MCA, Inc. made \$70 million last year on sales of \$270 million. He said this year USA could make more than at least two of the three major TV networks.

Applying these trends to the coming decade, the OPP Report predicts that broadcast television will still remain a "reasonably prominent" feature of the American landscape. But it also finds, and I agree, that broadcasting "will be a smaller and far less profitable business in the year 2000 than it is now" and that the impact will be most severe in smaller markets. On the radio side, the NAB recently reported that more than half of all radio stations lost money in 1990!

Where does the future of broadcast television lie? Since I am not privy to an unclouded view of the future, I can only speculate along with the rest of you. But, from my perspective at the FCC, I do have some views of where technology appears to be taking us with or without our consent.

My own preference would be that television broadcasting services continue on their present course with the benefit of technological advances which can improve quality, coverage and affordability. I have long been a strong advocate of "free, overthe-air broadcasting" which has historically provided the American public with a wide range of valuable services, linking the world and beyond with our living rooms. Many of us sat on the edges of our chairs watching live, over-the-air television as Neil Armstrong first stepped upon the surface of the moon more than twenty years ago. We have watched countless sporting events unfold on the small screen in our homes. We have been entertained, informed and enlightened for the price of purchasing a TV set and providing the power to enable it to operate. And, for those advertisers who want to reach a mass audience by television, network TV even with its eroding audiences is still the most practical way of reaching that audience.

Will over-the-air television broadcasting continue to be a method of delivering video programming to our homes and businesses into the next century? Let's look at what's happening to technology. Well over sixty percent of the homes in the United States have access to cable television services. There are more than a million television receive-only satellite dishes in use. Video tape rentals and sales are booming. Wireless cable is starting to develop.

High-powered direct broadcasting services by satellite (DBS) are promised within three years. Heavy demands are being made on spectrum by mobile services and others to accommodate an ever more mobile society.

Many of you may be familiar with the so-called "Negroponte Switch." It's not something you buy at a hardware store: it's a concept. Nicholas Negroponte of M.I.T.'s Media Labs has looked at the means by which various electronic services are delivered to consumers and has concluded that we've got it all wrong. He notes that very small users of spectrum such as voice telephone service are generally distributed by wires while relatively spectrum-hungry services such as broadcast television use over-the-air spectrum. He postulates that services using large amounts of spectrum should use wires (or cables or fiber) which do not require dedicated use of frequencies and which can coexist with virtually unlimited competing services and that small users of spectrum-which tend to benefit from mobility -- should be allocated over-the-air spectrum. Thus, telephone services should be provided over-the-air while television should use broadband cable.

While I don't necessarily fully subscribe to this concept, I believe it needs to be carefully examined. It occurs to me, first of all, that free-spectrum conservation might not be the only criterion in deciding telecommunications policy. Where the public

is now accustomed to receive television broadcasts over-the-air without a monthly fee, whoever installs and maintains cable (coaxial or fiber) will expect to be compensated and that means a new price to be paid by consumers. Also, there are areas where it is uneconomic to provide cable services. While satellite-delivered television can conceivably provide entertainment services to remote areas, it generally cannot provide local news and information and other community services. It is possible that universal free TV service to all the public may eventually require a legislative mandate. There is a vital public interest argument for universal public access to the most pervasive and influential news and information media, particularly in a democracy that relies on an informed electorate for efficient government.

Even given these concerns and caveats, however, it seems certain that big changes in the broadcasting industry -- already shaken by a multiplicity of video and audio providers -- will continue at an accelerating pace. George Gilder of the Hudson Institute, writing in the September/October issue of the Northern Telecom magazine,"Connections," notes that "(on) behalf of stricken constituents, throngs of lawyers and lobbyists -- in Washington, in 50 state capitals, in thousands of contentious courtrooms, at public utilities commissions, at regulatory and legislative sessions -- will roar at the tide of change like King Canute. But, the logic of the shift is inexorable."

The folly of thwarting advanced technology reminds me of a letter written to President Andrew Jackson in 1829 by Martin Van Buren when he was Governor of New York. Van Buren urged the President to forestall the development of "a new form of transportation known as 'railroads.'" If railroads were to supplant canal boats, the Governor cautioned, "boat builders would suffer and towline, ship and harness makers would be left destitute... not to mention the numerous farmers... employed in growing hay for horses." Also, "[i]n the event of unexpected trouble with England, the Erie Canal would be the only means by which we could ever move the supplies so vital to waging modern war."

Finally, Governor Van Buren argued that the new technology was a threat in its own right, that such railway engines "roar and snort their way through the countryside, setting fire to crops, scaring the livestock and frightening women and children" while traveling at "the enormous speed of 15 miles per hour." Van Buren concluded, "The almighty certainly never intended that people should travel at such breakneck speed." And he called on President Jackson to create an Interstate Commerce Commission "to protect the American people from the evils of 'railroads."

Now, I don't know whether the almighty ever intended for us to have the choice between dozens or perhaps hundreds of television channels, but as Walter Cronkite used to say, "that's the way it is." I say we should welcome everyone to the party, but at the same time, make sure our rules do not inadvertently impose a higher admission fee on the original invitees. I believe that pioneers of industries that made large investments over the years developing communications in America deserve a priority opportunity to participate in advanced technologies affecting their business.

The most important challenge facing the Commission in the coming decade is to take care that our policies do not erode one of our nation's most valuable institutions: universal free over-the-air television available to all the public. Congress seems dedicated to this all-encompassing principle that best serves public interest and so should all of us.

Overall, it is a challenging time to be at the FCC. The FCC has offered me the most exciting and gratifying period of my career. This is a period of revolutionary growth, contentious developments and technological advancements in all fields of communications -- and the best is still to come! The FCC's challenge will be the orderly practical implementation of advanced technology services of telecomputers, fiber optics, DBS, DAB and HDTV. We must deal, too, with the implications of increasing communications globalization.

In summary, industry, the communications bar, engineers and government must work together to implement advanced technology and to maintain and increase our communications leadership so that Americans remain the best informed, most gainfully employed and best served people in the world.

Thank you for your indulgence -- your good humor and courtesy chuckles are appreciated -- I have a final message by author Samuel Ullman on aging that I find inspiring I want to share with you.

"... In the center of your heart and my heart there is a wireless station; so long as it receives messages of beauty, hope, cheer, courage and power... so long are you young. When the aerials are down, and your spirit is covered with snows of cynicism and the ice of pessimism, then you are grown old, even at 20, but as long as your aerials are up, to catch waves of optimism, there is hope you may die young.... (at an advanced age)"

As for me, I expect to live to 100 years or die trying.

However, when in the natural course of events, I am eventually called by that all-time great regulator in the sky, it shouldn't be a tragic big deal -- It will only be the logical inevitable culmination of an exciting and challenging full life.

Thanks to all of you and to all my FCC associates for being such an important part of that exciting life. Best wishes to all of you for personal fulfillment in the exciting great years ahead.

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