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MM87-268

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OFFICE OF  
COMMISSIONER  
SUSAN NESS

OCT 30 3 45 PM '96

October 21, 1996

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NOV 14 1996

The Honorable Susan Ness  
Commissioner  
Federal Communications Commission  
1919 M Street, NW Room 832  
Washington, DC 20554

Federal Communications Commission  
Office of Secretary

DOCKET FILE COPY ORIGINAL

Dear Honorable Susan Ness:

For nearly a decade, the television broadcast industry has been working to develop the next generation of free, over-the-air broadcast television. With bipartisan support from Congress and the Federal Communications Commission, the broadcast and television set manufacturing industries spent a half a billion dollars developing the most advanced digital television system in the world. Our technology beat the Japanese and the Europeans. The FCC's Advisory Community on advanced television presented the system to the FCC nearly ten months ago. Free, over-the-air digital television is ready to go.

The FCC must adopt the ATSC-DTV digital television transmission standard. Without it there will be no free, over-the air digital television. Television is an open system. My station has no control over television receivers, and set manufacturers have no control over my signal. Set manufacturers will not build new digital sets unless they know what type transmission system broadcasters will use. A television station will not invest tens of millions of dollars for new digital equipment unless television sets can receive the new digital signal. This "chicken and egg" problem leads to economic paralysis. This is precisely what happened when the government failed to adopt an AM stereo standard. We should not repeat this mistake with digital television.

The computer industry is now trying to derail nearly a decade of work at the last minute. It's urging the government not to set a transmission standard for digital television. Alternatively, the computer industry is seeking to change the standard to fit its own business plans, while ignoring the needs of television viewers across America.

Adopting the computer industry's so called "baseline" approach will doom free, over-the-air digital television in America. This standard has never been tested. Compare this to the ATSC-DTV standard which has been subject to exhaustive tests for nearly a decade. The computer industry will send digital television back to the drawing board, wiping out years of effort. Because all of the FCC's proposed digital channels are based on the ATSC-DTV standard, the entire table of digital allotments will have to be reworked. Any delay will have significant negative consequences for America.

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919-872-2854

- It would delay the time when the government can reclaim and subsequently auction broadcast spectrum. Recapturing spectrum depends on local television stations shifting to digital transmission.
- It will destroy true High Definition Television. At this point in time, the digital interlaced formats in the ATSC-DTV standard are essential for broadcasting live action high definition sporting events. The computer industry wants this option eliminated. If high definition is not available, many consumers may decide not to purchase digital sets. This will undermine transition to digital television.
- It will cost consumers billions. The computer industry's plan calls for basic monitors that will receive digital signals. If you want better quality pictures or formats, you will have to buy additional software. For example, imagine a world where you will have to purchase "NFL-2000" software in order to watch a football game. For over 50 years broadcast television has been universally available to all Americans. We are about to lose this heritage to all Americans. We are to lose this heritage and replace it with the computer industry's "pay as you go" model. This will destroy universal broadcasting as we know it.

The ATSC-DTV standard being debated today is a broadcast transmission standard. It applies only to the types of digital signals that are broadcast from my tower. It simply does not impose legal obligations on the manufacture of computer monitors. The computer industry remains free to manufacture computer monitors and combined computer monitor/TV sets with progressive scan displays. If a computer manufacturer wants to build monitors capable of receiving broadcast signals, all it needs to do is include an inexpensive chip into the set to decode the signal.

Today my station must survive in a very competitive video marketplace. Direct satellite services, cable television and telephone video services are rapidly shifting to digital transmissions. Unless my station shifts to digital broadcasting, it simply will not survive.

I urge you to reject this eleventh hour attempt to undermine free, over-the-air digital television. The computer and cable industries have been part of the process from the beginning. Their concerns have been evaluated by the best engineers in America. In many instances, the needs of the computer and cable industries have been accommodated and incorporated into the ATSC-DTV standard. The time has come to move forward. The government should adopt the ATSC-DTV broadcast transmission standard as soon as possible.

Sincerely,



Eddie Edwards  
President/CEO  
WRDC-TV  
Glencairn, Ltd. Broadcasting Properties



# Pitman Police Department

110 South Broadway  
Pitman, N.J. 08071

Tel: 609-589-3500  
Fax: 609-589-5050

FCC MAIL November 8, 1996

Secretary, FCC  
1919 M. Street NW  
Room 222  
Washington, DC 20554

NOV 14 1996

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Re: Advanced Television Systems  
MM Docket no. 87-268  
And their impact upon the  
Existing Television Broadcast Service

Dear Chairman Hundt:

I have recently learned that the Broadcast Industry has made a proposal to the FCC for the use of the 500 to 512 MHZ bands for the purpose of developing a high definition TV system. These frequencies are currently being used by Emergency Services Departments (police, fire/rescue, ambulance, and emergency management) here in Pitman and other communities in surrounding Gloucester County.

The assignment of these frequencies to the Broadcast Industry would render them unusable to the Emergency Services Community. The financial impact in tax dollars, just in Pitman, would be \$147,000.00 to replace communications equipment. While that figure might be a "drop in the bucket" for a commercial TV station, it is an extremely large figure for a small, suburban municipality like ours. I am sure that the other 24 municipalities in Gloucester County face similar or even higher costs. Additionally, the disruption to emergency communications could endanger the lives and property of the citizens of Pitman and the surrounding communities.

I strongly urge that the FCC does not grant approval of the above docket, and that steps are taken to protect our citizens of the possible consequences of the proposed change.

Sincerely,

Charles W. Walker, Jr.  
Chief of Police  
Coordinator  
Office of Emergency Management

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CC:

U.S. Senator Bill Bradley  
U.S. Senator Frank R. Lautenberg  
Rep. Frank A. LoBiondo  
NJ Sen. John J. Matheussen  
NJ Sen. George F. Geist  
NJ Assemblyman Sean F. Dalton

National Broadcasting  
Company, Inc.

30 Rockefeller Plaza  
New York, NY 10112  
212 664-5531  
212 664-7070 Fax

SM/DS

**Michael J. Sherlock**  
Executive Vice President  
Technology

MM 87-268



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October 29, 1996

Hon. Susan Ness  
Commissioner  
Federal Communications Commission  
1919 M Street, NW  
Washington, D.C. 20554

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Federal Communications Commission  
Office of Secretary

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COMMISSIONER  
SUSAN NESS  
OCT 30 11 46 AM '96

Dear Commissioner Ness:

On behalf of the Broadcasters Caucus\*, I am writing to thank you for your letter of October 24 encouraging broadcasters and other interested parties to work vigorously and promptly to address some of the controversies that have delayed adoption of the ATSC digital standard. We welcome your leadership at this critical time, and we share your goal: Adoption of a digital standard by the end of this year. We also recognize that your fellow Commissioners as well as representatives of the Clinton Administration have worked constructively to bring this nine-year process of defining and adopting a digital standard to an end. We are hopeful that these last few hurdles can be cleared, and the process of implementing the transition to digital can begin with the new year.

To that end, we are pleased to report that preliminary discussions have been ongoing between broadcasters and other interested parties. We anticipate that more focused discussions will begin as early as this week. Broadcasters are committed to meeting your timetable, which is fair and realistic. We look forward to reporting back to the FCC as soon as possible with the results of our discussions.

We firmly believe that the ATSC digital standard is a well-studied, carefully documented and extensively tested standard that is all-inclusive and interoperable. We view this standard as the "best of the best" that gives all affected industries the capability they need today and the "headroom" to grow in the future. However, above all else, we firmly believe that the time for closure is now. Accordingly, we will participate with vigor in the discussions called for in your letter to address certain final details. We are committed to clearing the hurdles so that this important step on the road to the digital future for U.S. viewers can take place.

Sincerely,

Michael Sherlock  
Chairman, Broadcasters Caucus

\*The Broadcasters Caucus consists of representatives from AAPTS, ABC, ALTV, CBS, Chris-Craft, FOX, MSTV, NAB, NBC, New World, PBS, Tribune, and Viacom.

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Federal Communications Commission  
Office of Secretary

**Hal Capron**  
Vice President  
General Manager

October 23, 1996

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The Honorable Susan Ness  
Commissioner  
Federal Communications Commission  
1919 M Street, N.W. Room 832  
Washington, D.C. 20554

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The computer industry is now trying to derail nearly a decade of work at the last minute. It's urging the government not to set a transmission standard for digital television. Alternatively, the computer industry is seeking to change the standard to fit its own business plans, while ignoring the needs of television viewers across America.

Adopting the computer industry's so called "baseline" approach will doom free, over-the-air digital television in America. This standard has never been tested. Compare this to the ATSC-DTV standard which has been subject to exhaustive tests for nearly a decade. The computer industry will send digital television back to the drawing board, wiping out years of effort. Because all of the FCC's proposed digital channels are based on the ATSC-DTV standard, the entire table

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of digital allotments will have to be reworked. Any delay will have significant negative consequences for America.

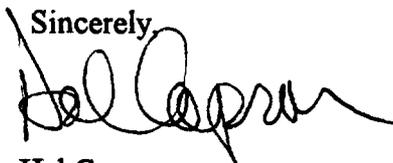
- It would delay the time when the government can reclaim and subsequently auction broadcast spectrum. Recapturing spectrum depends on local television stations shifting to digital transmission.
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- It will costs consumers billions. The computer industry's plan calls for basic monitors that will receive digital signals. If you want better quality pictures or formats, you will have to buy additional software. For example, imagine a world where you will have to purchase "NFL-2000" software in order to watch a football game. For over 50 years broadcast television has been universally available to all Americans. We are about to lose this heritage and replace it with the computer industry's "pay as you go" model. This will destroy universal broadcasting as we know it.

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I urge you to reject this eleventh hour attempt to undermine free, over-the-air digital television. The computer and cable industries have been part of the process from the beginning. Their concerns have been evaluated by the best engineers in America. In many instances, the needs of the computer and cable industries have been accommodated and incorporated into the ATSC-TV standard. The time has come to move forward. The government should adopt the ATSC-DTV broadcast transmission standard as soon as possible.

Sincerely,

A handwritten signature in black ink, appearing to read "Hal Capron". The signature is fluid and cursive, with a large initial "H" and "C".

Hal Capron



Birmingham  
 (WABM-TV), Inc.  
 a Glenscain, Ltd. Co.  
 529 Beacon  
 Parkway West  
 Suite 206  
 Birmingham  
 Alabama  
 35209

205-916-0068  
 205-290-6800  
 fax 290-0668

October 18, 1996

The Honorable Susan Ness  
 Commissioner  
 Federal Communications Commission  
 1919 M Street NW Room 832  
 Washington, DC 20554

Dear Commissioner Ness,

For nearly a decade, the television broadcast industry has been working to develop the next generation free, over-the-air broadcast television. With bipartisan support from Congress and the Federal Communications Commission, the broadcast and television set manufacturing industries spent half a billion dollars developing the most advanced television system in the world. Our technology beat the Japanese and the Europeans. The FCC's Advisory Committee on advanced television presented the system to the FCC nearly ten months ago. Free, over-the-air digital television is ready to go.

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Federal Communications Commission  
 Office of Secretary

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Sincerely,

A handwritten signature in black ink, appearing to read "Eddie Edwards". The signature is fluid and cursive, with a large initial "E" and a long, sweeping tail.

Eddie Edwards  
President/CEO  
WABM-TV 68  
Glencairn, Ltd. Broadcasting Properties

The Society of Motion Picture and Television Engineers  
Facsimile Message



MM 87-268

TO: Commissioner Susan Ness  
FM: Stan Baron  
DT: 28 Oct 96  
RE: Response to 24 October letter

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Federal Communications Commission  
Office of Secretary

Reply to: Stan Baron, SMPTE President  
N.B.C., 30 Rockefeller Plaza (2505E), New York, NY 10112, USA  
Phone: +1-212-664-7557; Fax: +1-212-664-5219  
e-mail: stan.baron@nbc.com

The number of pages including this one is: 6

Thank you for your letter of 24 October 1996. I fully support the adoption of the ATSC standard by the end of the year and welcome your leadership on this issue. To that extent, I have offered my services to assist in discussions between the broadcasters and the computer interests. I recently met with the Cinematographers to educate them on the ATSC standard's features. I have offered to return to Los Angeles to meet with the ASC and the Director's Guild to answer any remaining questions.

I have attached a copy of my most recent correspondence with the ASC for your information.

Also attached is an address correction notice.

8

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The digital television letter was addressed to the following organizations:

Ms. Catherine Hutchinson  
Apple Computer, Inc.  
One Infinite Loop, MS: 76-8CH  
Cupertino, CA 95014

Mr. Jeffrey Campbell  
Compaq Computer Corporation  
1300 Eye Street  
Suite 490 East  
Washington, DC 20005

Mr. Ted A. Heydinger  
Dell Computer Corporation  
1225 Eye Street, NW  
Suite 130  
Washington, DC 20005

Ms. Grace Hinchman  
Digital Equipment Corporation  
15401 H Street, NW  
Suite 950  
Washington, DC 20005

Mr. Michael R. Haley  
IBM Corporation  
IBM Telecommunications and Media ISU  
Mail Drop 3233  
Route 100  
P. O. Box 100  
Somers, NY 10589

Mr. Paul Misener  
Intel Corporation  
1634 Eye Street, NW  
Suite 300  
Washington, DC 20006

Mr. Craig Mundie  
Microsoft Corporation  
One Microsoft Way, 9S/1122  
Redmond, WA 98052

Mr. Edward O. Fritts  
President and CEO  
National Association of Broadcasters  
1771 N Street, NW  
Washington, DC 20036

Mr. Michael J. Sherlock  
ATSC Broadcasters Caucus  
National Broadcasting Company  
30 Rockefeller Plaza  
Room 5250  
New York, NY 10112

Ms. Margita White  
President  
Association for Maximum Service Television  
1776 Massachusetts Avenue  
Suite 310  
Washington, DC 20036

Mr. Gene Reynolds  
President  
Directors Guild of America  
7920 Sunset Boulevard  
Los Angeles, CA 90046

Mr. Jack Valenti  
President and CEO  
Motion Pictures Association of America  
1600 Eye Street, NW  
Washington, DC 20006

Mr. Gary Shapiro  
President  
Consumer Electronics Manufacturers  
Association  
2500 Wilson Boulevard  
Arlington, VA 22110-3834

Dr. Peter J. Bingham  
Grand Alliance  
Philips Laboratories  
Philips North America Corporation  
345 Scarborough Road  
Briarcliff Manor, NY 10510-2099

Mr. Stan ~~Barron~~ *Baron*  
Society of Motion Picture and Television  
Engineers  
30 Rockefeller Plaza (2505E)  
New York, NY 10112

Mr. Victor Kemper  
American Society of Cinematographers  
1782 North Orange Drive  
Hollywood, CA 90028

*National Broadcasting Company*



## Society of Motion Picture and Television Engineers®

595 WEST HARTSDALE AVENUE, WHITE PLAINS, NY 10607-1824

TELEPHONE: (914) 761-1100 FAX: (914) 761-3115

President, Society of Motion Picture and Television Engineers  
 Chairman, Advanced Television Systems Committee - T3  
 Chairman, International Telecommunications Union TG11/3

23 October 1996

Mr. Victor Kemper  
 President, American Society of Cinematographers  
 1782 North Orange Drive  
 Hollywood, CA 90028

Dear Victor:

Firstly, I want to thank the ASC and Bob Primes for your invitation to discuss our mutual concerns about film presentation at your October meeting. I hope that the discussion was helpful to your members. I have attached the charts that I used at the meeting for your information and for distribution to your members as you see fit.

I found the opening presentation by Rob Hummel very helpful. It showed very clearly the improvement in presentation achieved when the work is presented in its original aspect ratio.

I would suggest that the way to approach the issue of aspect ratio is to understand that the electronic standard provides a structure for coding. Works can be presented in either system in their original aspect ratio by "mapping" the work into the coding structure. The first chart demonstrates that both the 1.78:1 and 2.00:1 structures require the use of letter-box techniques to map the work into their respective structures. It also demonstrates that the difference in the number of lines required by the two systems does not result in a measurable difference in quality.

Both coding structures divide the work-space into macro-blocks of 16 lines x 16 pixels. The 2:1 aspect ratio system, as proposed, requires slightly over 50% more macro-blocks per second to represent the images than the 1.78:1 proposal. Most of this increase results from the increased frame rate.

The amount of data available for video is fixed at approximately 18.5 Mbits/s. As the number of macro-blocks is increased, the number of bits per macro-block is reduced, thereby reducing the quality of the pixels and, thus, the image quality. There is also a cost impact on the receiver due to the 12+% greater area of the 2:1 display and the additional memory support required.

I also discussed the differences that result between mapping the work into the 1080-line and 720-line systems. The 1/3 lower resolution in the 720-line system has a significant limiting effect on quality.

During the meeting I made the following points concerning the two systems:

1. Both systems provide for transporting film progressively scanned. The ATSC codes the pictures at 24 frames/second, sans interlace, in the original aspect ratio. (WHD-TV in

Washington broadcast "Lawrence of Arabia" as a progressively-scanned, 24 frame/second, ATSC encoded picture in its original aspect ratio as part of its inauguration of service on 6 August 1996.)

2. The resolution of the presentation is approximately the same for both systems.
3. The number of macro-blocks per second required of the 2:1 system, as proposed, is inappropriate for use in sporting events and other works requiring portrayal of scenes with high motion and detail content.

I also responded to questions about SMPTE:

4. SMPTE provides an open forum for the development of standards by consensus.
5. I explained how ASC members could keep current on SMPTE standards work by accessing the SMPTE WEB site ([www.smpte.org](http://www.smpte.org)).
6. The audience asked if SMPTE could generate a Recommended Practice suggesting that the proper way to present film works was in their original aspect ratio. I agreed that SMPTE could and offered to create the first draft of the document. (A letter from you to William Miller, SMPTE Engineering Vice President, ABC, 77 West 66th Street, New York, NY 10019 would suffice to officially launch the project.) I have already forwarded a draft document to Mr. Miller.

One of my questions, however, remained unanswered:

7. CICATS representatives have suggested that the FCC limit the standard to a "911-service" consisting of the SDTV (low-resolution) 512-line subset of the CICATS system and disallow HDTV transmission until some undefined future date. Since the ASC has been described in Washington as a supporter of the CICATS consortium, I assume that you have contributed to this decision. What is still unclear in my mind, however, is why the ASC believes that the removal of the HDTV capability will lead to a better portrayal of the work as the artist intended.

Thank you again for the opportunity to address your members. I look forward to improved communication between the ASC and SMPTE and further discussions on what steps can be taken to make this a reality. Please feel free to call me if you have any questions on this issue or about on-going work at SMPTE.

Best personal regards,



cc: Robert Primes, ASC  
David George, SMPTE Executive Vice President  
William Miller, SMPTE Engineering Vice President

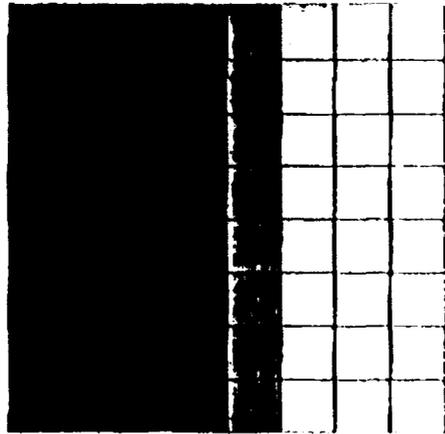
P.S. I've asked SMPTE staff to add Bob Primes to the *Journal* distribution list for one year.

<b>Aspect Ratio</b>	<b>ATSC (1920x1080) # Lines</b>	<b>CICATS (2048x1024) #Lines</b>
1.33:1 (Standard 4:3)	1080	1024
1.67:1 (Standard 5:3)	1080	1024
1.75:1 (UK Capture)	1080	1024
1.85:1 (Standard)	1038	1024
1.96:1 (Vistavision) [1]	980	1024
2.00:1 (Superscope)	960	1024
2.21:1 (Panavision, Todd-AO)	869	926
2.27:1 (Ultra-Panavision)	846	902
2.35:1 [2]	817	871
2.55:1 (Cinemascope 55)	753	803
2.64:1 (Wonderama ARC-120)	727	775
2.77:1 (Cinerama)	693/721	739
2.94:1 (MGM 65)[3]	653/679	697/724

[1] Also documented at 1.85:1 and 2.21:1

[2] Cinemascope, Superscope-235, Techniscope, Technirama, Todd-AO 35

[3] Also documented as supporting 2.2:1, 2.35:1, and 2.7:1 versions.



(A)

DCT-DC Component

0	12.5	25	37.5	50	62.5	75	87.5
0	12.5	25	37.5	50	62.5	75	87.5
0	12.5	25	37.5	50	62.5	75	87.5
0	12.5	25	37.5	50	62.5	75	87.5
0	12.5	25	37.5	50	62.5	75	87.5
0	12.5	25	37.5	50	62.5	75	87.5
0	12.5	25	37.5	50	62.5	75	87.5
0	12.5	25	37.5	50	62.5	75	87.5
0	12.5	25	37.5	50	62.5	75	87.5
0	12.5	25	37.5	50	62.5	75	87.5

(B)

43.8	-40	0	-4.1	0	-1.1	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

(C)

Binary Coded

- (43.8) = 0010 1011. 11 = 43.75
- (40.0) = 0010 1000. 00 = 40.00
- (0) = 0000 0000. 00 = 00.00
- (4.1) = 0000 0010. 00 = 04.00
- (0) = 0000 0000. 00 = 00.00
- (-1.1) = - 0000 0001. 00 = -01.00

End-of-String Code

Quantized

- (10 bits) 0010 1011.11 = 43.75
- (8 bits) +10 1000. 00 = + 40.00
- (6 bits) +00 0000 = 0.00
- (6 bits) +00 0010 = +4.0
- (6 bits) +00 0000 = 0.00
- (4 bits) - 0000 = 0.00

End-of-String Code

SNDS

4041 North 35th Street • Milwaukee, WI 53216

**WVTV** INC.

414•874•1850

FAX - 414•874•1802

October 21, 1996

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The Honorable Susan Ness  
Commissioner  
Federal Communications Commission  
1919 M Street, NW Room 832  
Washington, DC 20554

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Federal Communications Commission  
Office of Secretary

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SUSAN NESS  
OCT 20 5 01 PM '96

Dear Honorable Ness:

For nearly a decade, the television broadcast industry has been working to develop the next generation of free, over-the-air broadcast television. With bipartisan support from Congress and the Federal Communications Commission, the broadcast and television set manufacturing industries spent a half a billion dollars developing the most advanced digital television system in the world. Our technology beat the Japanese and the Europeans. The FCC's Advisory Committee on advanced television presented the system to the FCC nearly ten months ago. Free, over-the-air digital television is ready to go.

The FCC must adopt the ATSC-DTV digital television transmission standard. Without it there will be no free, over-the-air digital television. Television is an open system. My station has no control over television receivers, and set manufacturers have no control over my signal. Set manufacturers will not build new digital sets unless they know what type transmission system broadcasters will use. A television station will not invest tens of millions of dollars for new digital equipment unless television sets can receive the new digital signal. This "chicken and egg" problem leads to economic paralysis. This is precisely what happened when the government failed to adopt an AM stereo standard. We should not repeat the mistake with digital television.

The computer industry is now trying to derail nearly a decade of work at the last minute. It's urging the government not to set a transmission standard for digital television. Alternatively, the computer industry is seeking to change the standard to fit its own business plans, while ignoring the needs of television viewers across America.

Adopting the computer industry's so called "baseline" approach will doom free, over-the-air digital television in America. This standard has never been tested. Compare this to the ATSC-DTV standard which has been subject to exhaustive tests for nearly a decade. The computer industry will send digital television back to the drawing board, wiping out years of effort. Because all of the FCC's proposed digital channels are based on the ATSC-DTV standard, the entire table of digital allotments will have to be reworked. Any delay will have significant negative consequences for America.

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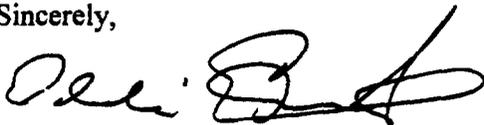
- It would delay the time when the government can reclaim and subsequently auction broadcast spectrum. Recapturing spectrum depends on local television stations shifting to digital transmission.
- It will destroy true High Definition Television. At this point in time, the digital interlaced formats in the ATSC-DTV standard are essential for broadcasting live action high definition sporting events. The computer industry wants this option eliminated. If high definition is not available, many consumers may decide not to purchase digital sets. This will undermine transition to digital television.
- It will cost consumers billions. The computer industry's plan calls for basic monitors that will receive digital signals. If you want better quality pictures or formats, you will have to buy additional software. For example, imagine a world where you will have to purchase "NFL-2000" software in order to watch a football game. For over 50 years, broadcast television has been universally available to all Americans. We are about to lose this heritage and replace it with the computer industry's "pay as you go" model. This will destroy universal broadcasting as we know it.

The ATSC-DTV standard being debated today is a broadcast transmission standard. It applies only to the types of digital signals that are broadcast from my tower. It simply does not impose legal obligations on the manufacture of computer monitors. The computer industry remains free to manufacture computer monitors and combined computer monitor/TV sets with progressive scan displays. If a computer manufacturer wants to build monitors capable of receiving broadcast signals, all it needs do is include an inexpensive chip into the set to decode the signal.

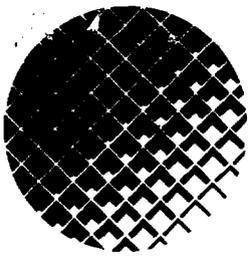
Today my station must survive in a very competitive video marketplace. Direct satellite services, cable television and telephone video services are rapidly shifting to digital transmissions. Unless my station shifts to digital broadcasting, it simply will not survive.

I urge you to reject this eleventh hour attempt to undermine free, over-the-air digital television. The computer and cable industries have been part of the process from the beginning. Their concerns have been evaluated by the best engineers in America. In many instances, the needs of the computer and cable industries have been accommodated and incorporated into the ATSC-DTV standard. The time had come to move forward. The government should adopt the ATSC-DTV broadcast transmission standard as soon as possible.

Sincerely,



Eddie Edwards  
President/CEO  
WVTV TV 18  
Glencairn, Ltd. Broadcasting Properties



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Federal Communications Commission  
Office of Secretary

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COMMISSIONER  
SUSAN NESS

October 18, 1996

Ms Susan Ness, Commissioner, FCC  
Federal Communications Commission,  
1919 M Street N.W., Washington DC 20554,  
Tel : (202) 418-0200.

DOCKET FILE COPY ORIGINAL

Dear Commissioner Ness :

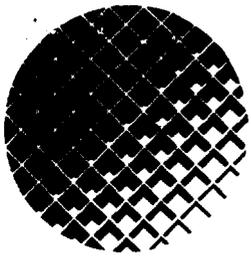
I recently attended a Consumer Electronics Manufacturers Association workshop on digital video where an interesting talk on the current state of the U.S. advanced television development effort was presented. I have been led to believe that one factor in the opposition to the proposed ATSC Grand Alliance standard is the inclusion of some interlaced video scanning formats. I understand that the opponents believe that the inclusion of the interlaced formats will result in continued incompatibilities with computer system displays. I would like to clarify this view and add that there are companies like Genesis Microchip Inc. that have developed cost effective (< \$20 U.S. in quantity), high quality, single IC solutions to convert interlaced video signals into progressive scan formats. Genesis Microchip has developed and today commercially sells the gmVLD8 and gmVLD10 de-interlacing (i.e. line doubling) ICs. These ICs perform vertical and temporal processing to convert an interlaced video signal into a progressive scan format for display on computer monitors. Genesis Microchip also has a line of high quality real time image/video scaling ICs that allow users to re-size an image in real time to any target display resolution. Our ICs will allow system OEMs to design equipment that will process and display ATV video signals on computer displays.

I have enclosed some introductory Genesis product information for your review. Please feel free to distribute it as required. For further information you may visit our Web page at [www.genesisus.com](http://www.genesisus.com) or contact myself, or Lance Greggain, VP Product Development Operations. Thank you.

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Genesis Microchip Inc.

200 Town Centre Blvd. • Suite 400 • Markham • Ontario • Canada • L3R 8G5 • Tel: (905) 470-2742 • Fax: (905) 470-2447  
U.S. Subsidiary: Genesis Microchip Corp. • Tel: (415) 428-4277 • Fax: (415) 428-4288



**GENESIS**

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Mandl". The signature is fluid and cursive.

**Peter Mandl**  
Manager, Video DSP Technology

PM/pm

cc: **Paul Russo, Chairman and CEO, Genesis Microchip Inc.**  
**Lance Greggain, VP Product Development Operations, Genesis Microchip Inc.**

**Reed Hundt, Chairman, FCC**  
**James Quello, Commissioner, FCC**  
**Rachelle Chong, Commissioner, FCC**

**Genesis Microchip Inc.**

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Intel Government Affairs  
1634 I Street, NW #300  
Washington, DC 20006  
(202) 628-3838  
Fax (202) 628-2525

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Federal Communications Commission  
Office of Secretary

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SUSAN NESS

October 25, 1996

BY FACSIMILE AND U.S. MAIL

Honorable Susan Ness  
Commissioner  
Federal Communications Commission  
Room 832  
1919 M Street, NW  
Washington, DC 20554-0001

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Dear Commissioner Ness:

Thank you for your letter encouraging all industries to work together to resolve the current dispute over the proposed digital television broadcasting standard. For the benefit of our ultimate customers – PC users – Intel believes that the American public is best served if DTV broadcasting is expeditiously and successfully deployed based on a computer-friendly standard. Your guidance will help us attain that goal.

Intel is actively engaged in discussions – both within and outside the PC industry – towards reaching a compromise solution. As you are aware from our recent conversations, Intel is committed to concluding these discussions as soon as possible. You have set an ambitious schedule for our work, but we will try our best to meet all of the deadlines you set forth.

Of course, we believe the PC industry's cooperation with broadcasters should not end with the FCC's decisions. For example, Intel plans to continue its work in the Advanced Television Systems Committee and hopes to join broadcasters in efforts to develop DTV applications.

Again, Intel appreciates your call for cross-industry cooperation on serious DTV technical issues and appreciates your clear recognition that delay would not serve the best interests of American consumers or any of the industries involved.

Sincerely yours,

Paul E. Misener  
Manager, Telecommunications and  
Computer Technology Policy

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1309 S. 19<sup>th</sup> Rd.  
Arlington, VA 22202  
November 12, 1996

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Federal Communications Commission  
Office of Secretary

The Honorable Reed E. Hundt  
Chairman  
Federal Communications Commission  
FCC Building, Room 814  
1919 M Street, N.W.  
Washington, DC 20554-0001

Dear Chairman Hundt:

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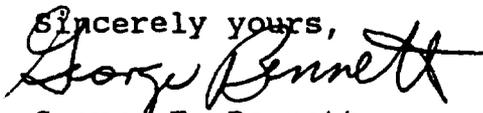
You didn't ask my opinion about the current digital television squabble, but as a consumer with no vested interest in the warring parties, I would like to offer one. I'm basing this letter on an article I just read in the November 11 issue of *U.S. News & World Report*.

The FCC has an opportunity here to usher in an incredible technological advance in this wonderful medium of mass communications called high definition television, if everything I read about it is true. But as in most other advances like this, powerful interests have conflicting goals. Remember when VCRs were first a possibility for the consumer market and the interests in Hollywood screamed that it ruin the movie business? Those interests that don't have their ideas adopted will adapt to the new high standards, I am sure.

Since it seems impossible to appease all of the conflicting commercial interests, I would like to see the Commission take what seems to me to be the fairest course: Give consumers the highest quality television system possible.

I hope the Commission doesn't weaken the tremendous quality of high definition television and hurt the public by trying to placate all the commercial interests. The U.S. public is still suffering from many decades of inferior color television (compared to Europe) because, I am told, RCA was allowed to prematurely introduce its system in the 1940s so the company could be the first in the world to have color.

Do what's right by the American consumer and you will have made the right decision. Commercial interests will adapt to your decision; we the public are stuck with it, probably for decades. Thanks for considering this approach.

Sincerely yours,  
  
George E. Bennett

cc: The Honorable Susan Ness, FCC Commissioner

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October 28, 1996

The Honorable Susan Ness  
Federal Communications Commission  
1919 M Street, N.W., Room 832  
Washington, D.C. 20554

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Office of Secretary

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SUSAN NESS  
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Re: Advanced Television

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Dear Commissioner Ness:

Compaq greatly appreciates your interest in achieving a resolution of issues related to the proposed digital television broadcast standard on the basis of cooperation by all affected parties. Compaq is pleased that you recognize the importance of developing the best digital broadcasting system for the American public, including ensuring that the system is computer-friendly.

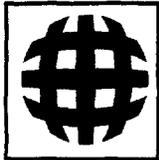
Compaq will continue in its efforts to work with broadcasters and other affected parties to make changes to the proposed standard that will meet the needs of all industries. We will strive to meet the aggressive schedule that you have set. Hopefully, these efforts will bring about improvements in the proposed standard to the benefit of the American public.

Sincerely,

Jeffrey A. Campbell  
Manager, Federal Government Affairs

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# News Corporation

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RUPERT MURDOCH, A.C.

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CHAIRMAN AND CHIEF EXECUTIVE

October 25, 1996

The Honorable Susan Ness  
Chairman, Federal Communications Commission  
1919 M Street, NW, Room 832  
Washington, DC 20554

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Federal Communications Commission  
Office of Secretary

Oct 28 11 15 AM '96

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COMMISSIONER  
SUSAN NESS

Dear Commissioner Ness:

Because of a long-standing commitment, I am unable to join my broadcast colleagues in meeting with you today. But, I join my colleagues in urging the Federal Communications Commission to move forward as expeditiously as possible in adopting a standard for digital television.

The Grand Alliance Standard was developed after years of consultation between broadcasters and various other industry groups including the cable and computer industries. No compromise can satisfy all of the concerns of all parties; that is the nature of a compromise. While we are willing to continue discussing the concerns of all interested parties, at some point in the very near future a standard must be adopted. We appreciate your continued efforts to promote inter-industry discussion on the digital standard. Your willingness to recommend a schedule which would result in a decision by Thanksgiving is especially important. Unless the Commission shows a willingness to impose a deadline, discussions may drag on endlessly. While we hope all sides share the same goal of rapid a resolution of the standard, some parties to the discussion may have less incentive to reach a conclusion than we might wish.

We greatly appreciate your efforts to bring broadcasters and, most importantly, our viewers the improvements of digital technology. With thanks for your consideration,

Sincerely,

Rupert Murdoch

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**CBS**

CBS Inc., 51 West 52 Street  
New York, New York 10019-6188  
(212) 975-6050

Peter A. Lund  
President and Chief Executive Officer

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NOV 14 1996

Federal Communications Commission  
Office of Secretary

Dear Mr. Chairman:

CBS emphatically stands behind the ATSC industry-approved digital television standard. Having answered the call of your predecessors and contributed substantial funds and expertise to this consensus driven advanced television development process over the past decade, we are convinced the ATSC approved standard is a triumph of American ingenuity. Its adoption will help put the American public on the best path to digital television whose distribution is free and universal, and where television sets remain comparatively inexpensive and long lasting.

While the argument has been made that standards can stunt innovation, I believe just the opposite is true in this case. As soon as a standard is set, the best and the brightest can begin to develop a host of products designed to that standard. Moreover, the flexibility and headroom built into the ATSC standard can accommodate all manner of innovation for the foreseeable future.

Perhaps some critics of the ATSC standard either do not fully understand its capabilities, or they have motives other than those presently stated. CBS will be happy to participate in discussions to reassure representatives of other industries about the standard or to accommodate legitimate concerns they may have. But I hope the FCC will take into account that some of the critics may fall into the latter category whose only aim is further delay in adopting any standard other than one that suits their narrow business plans. Should that happen, American viewers who have to upgrade their television sets every few years are likely to wonder how that aspect of the public's interest was determined.

To avoid further unnecessary delay, I hope the FCC will make clear that it intends to act on the standard in the very near future, certainly before year's end. In return, that should allow parties of good faith to resolve any remaining questions in a timely fashion. Thank you.

Sincerely,



The Honorable Reed Hundt, Chairman  
Federal Communications Commission  
1919 M Street, N.W.  
Washington, D.C. 20554

October 28, 1996

cc: The Honorable James Quello  
The Honorable Susan Ness  
The Honorable Rachelle Chong

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