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DIRECT CASE

OF THE

JOINT SPORTS CLAIMANTS Volume 2 of 3

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NBA Television & New Media Ventures

Testimony Of

EDWIN S. DESSER, PRESIDENT NBA TELEVISION & NEW MEDIA VENTURES

Before The

COPYRIGHT ARBITRATION ROYALTY PANEL 1997-99 SATELLITE RATE PROCEEDING

> WASHINGTON, D.C. DECEMBER 1996



REVISED February 24, 1997

RECYCLED PAPER

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I am Edwin S. Desser, President of NBA Television & New Media Ventures, an entity affiliated with the National Basketball Association ("NBA"). I am presenting this testimony on behalf of the Joint Sports Claimants in the 1997-99 Satellite Rate Proceeding.

I understand that the purpose of this proceeding is to set the royalty rates that "satellite carriers" will pay in order to retransmit copyrighted programming carried by television broadcast stations, direct-to-home ("DTH") via satellite, during the years 1997-99. I further understand that Congress has directed the Panel to establish rates which "most clearly represent the fair market value" of those retransmissions.

My testimony (1) provides a brief overview of the satellite carriers, including industry changes since the existing royalty rates were established approximately five years ago and (2) discusses the market value of live sports programming, which represents a significant portion of the value of these stations that satellite carriers are retransmitting. As discussed below, each and every one of these broadcast stations televises one or more packages of major sports programming.

QUALIFICATIONS

I have spent 24 years in the sports and entertainment business and have had responsibility for a wide range of television programming, production and marketing activities. My professional experience is discussed in my attached biography.

In 1991, I became the head of a new NBA entity -- NBA Television Ventures. That entity was responsible for the development of the league's use of what were then emerging technologies, including Direct Broadcast Satellite ("DBS"). In 1994 I negotiated with DTH satellite delivery services that sought the rights to transmit NBA programming packages via satellite. Most recently, NBA Television Ventures has expanded into various non-television business opportunities such as the Internet and CD-ROM and has been renamed NBA Television & New Media Ventures. I remain actively involved in negotiations and other business activities involving the cable television and satellite carrier industries, including compulsory licensing issues under Sections 111 and 119 of the Copyright Act.

As a result of my professional experience, I am familiar with the satellite carrier business and with the value of NBA and other sports programming. I testified in the 1992 satellite rate adjustment proceeding on behalf of the Joint Sports Claimants.

SUMMARY

Since the 1992 rate adjustment proceeding, there have been several significant developments in the satellite carrier business. These developments confirm Congress' judgment that satellite carriers should be required to pay marketplace rates in order to retransmit copyrighted programs carried by broadcast signals. They also demonstrate that the royalty rates adopted in the 1992 proceeding are well below the rates that would prevail in a free market.

<u>First</u>, the satellite carrier business has become dominated by large and successful communications conglomerates which do not require any subsidy from copyright owners. The corporate enterprises that now take advantage of the Section 119 compulsory license are able to -- and do -negotiate in the marketplace, and pay marketplace rates, for the vast majority of the programming that they sell to paying subscribers. There is no legitimate reason for exempting these corporations from paying marketplace rates when it comes to the programming of the broadcast stations that they retransmit.

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Second, the satellite carrier business has experienced significant growth since the 1992 rate adjustment proceeding. The development of DBS in particular has afforded satellite carriers a means for substantially expanding their business operations. When the 1992 proceeding was conducted, satellite carriers had less than two million subscribers -- a few hundred thousand of which were DBS households. Current projections are that satellite carriers will have approximately 15 million subscribers by the year 2000, the vast majority of which will be DBS households (paying upwards of \$300 per year in subscription fees). Given the substantial size and scope of the DTH industry, there is no longer any need to subsidize its development by allowing satellite carriers to pay below-market rates for the broadcast programming they retransmit.

Third, the 1992 rates require satellite carriers to pay a royalty to program owners that amounts to only a small fraction of the fee that satellite carriers (and their agents) charge consumers for such broadcast station programming. For example, consumers may purchase a package of programming from 12 broadcast stations from one satellite carrier for a monthly fee of \$12.50. Of that amount, the carrier is currently required to pay only \$1.42 (or 11.4 percent) in Section 119 royalties to the owners of the programming. Another carrier sells a package of three network stations for \$4.16 per month. Of that amount, the carrier currently pays only 18 cents (or 4.3 percent) in Section 119 royalties.

<u>Fourth</u>, in free marketplace negotiations, copyright owners receive substantially more for their programming than they do under the 1992 Section 119 royalty rates. For example, the NBA has licensed a package of up to 1,000 regular season telecasts for DTH satellite distribution under the name "NBA League Pass." All of these telecasts are originated by local broadcast stations or regional sports networks and distributed via satellite to DTH subscribers in

distant geographic markets. Satellite carriers generally charge each subscriber \$149 for the League Pass package and they pay the <u>majority</u> of that amount as a licensing fee to the NBA.

<u>Finally</u>, in marketplace negotiations, the NBA and other sports leagues require satellite carriers and cable networks not to distribute certain of the licensed telecasts in particular geographic areas. These "blackouts" are necessary to protect the exclusivity that has been afforded by the league or individual league members to local media outlets, which often pay even higher per household rights fees than national networks. They also may be necessary to promote attendance at the events themselves.

When satellite carriers retransmit broadcast signals pursuant to Section 119, however, they do not black out any of the live sports programming on the broadcast signals being retransmitted. As a result, they do not abide by the important blackout policies to which cable distributors and they themselves have agreed in recent marketplace negotiations. The failure to afford sports blackout protection is a factor that, in the marketplace, would significantly increase the license fees paid by satellite carriers when retransmitting broadcast signals and underscores the inequity of the existing Section 119 royalty rates.

DISCUSSION

I. Overview of the Satellite Carriers

Section 119 of the Copyright Act affords satellite carriers a "compulsory license" to retransmit the signals of television broadcast stations. In layman's terms, this means that satellite carriers may sell the programming that copyright owners create -- without obtaining our consent and, therefore, without negotiating over the terms and conditions of a license. To be eligible

for the compulsory license, satellite carriers must pay a royalty fee, which is collected by the Copyright Office and then distributed to program owners.

In this portion of my testimony, I describe (a) the satellite carriers, including their corporate ownership and the broadcast stations they are retransmitting pursuant to the Section 119 compulsory license; (b) the growth in the number of subscribers receiving those stations from satellite carriers since the 1992 rate adjustment; and (c) the royalties that are currently being paid by satellite carriers to retransmit broadcast stations pursuant to the Section 119 compulsory license (as compared to the prices that satellite carriers are charging consumers to receive those stations).

A. Ownership and Business Operations

At the time of the 1992 rate adjustment, there were six satellite carriers. All six of these carriers continue to retransmit broadcast signals today pursuant to the Section 119 compulsory license. They have been joined by five additional carriers -- four of which are currently taking advantage of Section 119 and one of which has announced its intent to do so. Table 1 below identifies the eleven satellite carriers, their ownership and the years in which they began retransmitting broadcast signals via satellite.

Table 1

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SATELLITE CAPPIEPS

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Carrier	<u>Ownership</u>	Commencement of Satellite Operations
United Video/Superstar	Tele-Communications, Inc. ("TCI")	1978
Southern Satellite	TCI	1976
Advance/Newhouse (Formerly EMI)	Newhouse Broadcasting Co. ("Newhouse")	1979
Netlink	TCI	1987
PrimeTime 24	Millicom Corp.	1986
Primestar	TCI, Time Warner Entertainment, Co., Comcast Corp., Cox Enterprises, Inc., Newhouse, Continental Cablevision, Inc., GE American Communications, Inc.	1986
DirecTV	Hughes Electronics Corp. (General Motors), AT&T Corp.	1994
EchoStar/DISH Network	EchoStar Communications	1996
AlphaStar	Tee-Comm Electronics, Inc.	1996
CSS	Consumer Satellite Systems, Inc.	1997
American Sky Broadcasting ("ASkyB")	The News Corporation Ltd. (Fox), MCI Telecommunications Corp.	1997 (Scheduled)





1. <u>United Video Satellite Group, Inc.</u> ("United Video") d/b/a Superstar Satellite Group ("Superstar"). Since 1978 United Video has been retransmitting television signals via "C-band" or low power satellite to cable systems nationwide. United Video's UVTV Division currently distributes three "superstations" to cable systems serving, in the aggregate, 40 million households:

> WGN (Chicago, IL) WPIX (New York, NY) KTLA (Los Angeles, CA)

Cable systems receive these superstations from United Video using C-band dishes, which are approximately 7-10 feet in diameter.

In 1986 United Video expanded its customer base to include private residences equipped with C-band satellite dishes (Home Satellite Dish ("HSD") owners). Through its Superstar Division, United Video distributes to HSD owners, pursuant to the Section 119 compulsory license, the same three superstations that it provides cable systems; it also distributes to HSD owners non-broadcast "cable network" programming services (such as ESPN, TNT, CNN, the Family Channel) for which it pays full market value to the copyright owners. Superstar contracts with various distributors who market program packages to HSD owners. It also deals directly with the dish owners. JSC Exhibit No. 9 contains promotional material which describes the various C-band program packages offered by Superstar directly to HSD owners.

During the past year, Superstar has expanded its business further by providing the same three superstations (WGN, WPIX and KTLA) to the DBS market.

Since the 1992 rate adjustment, United Video has become a publiclytraded company. According to its most recent SEC 10K filing (JSC Exhibit No.

10 at 24), United Video's 1995 revenues were <u>\$262.9 million</u> -- up from <u>\$53.4</u> <u>million</u> in 1991 (the year before the 1992 rate adjustment). Its operating income rose from <u>\$7.6 million</u> in 1991 to <u>\$38.4 million</u> in 1995. The breakdown in revenues and operating income among United Video's divisions is shown in Table 2.

Table 2

Financial Performance of <u>United Video Divisions in 1995</u>

Division	(In Millions) <u>Revenues</u>	(In Millions) Operating Income
UVTV	\$ 26.6	\$ 13.1
Superstar	\$ 166.3	\$ 20.1
Other	\$70.0	\$ _ 5.2
TOTAL	\$ 262.9	\$ 38.4

Source: United Video 1995 10K (JSC Exhibit No.10) at 26.

In 1996 United Video became a majority-controlled subsidiary of Tele-Communications, Inc. ("TCI"). TCI is the nation's largest operator of cable systems, with approximately \$7 billion in annual revenues. JSC Exhibit No. 11 at 79. TCI has combined the retail operations of Superstar with those of Netlink, another satellite carrier wholly-owned by TCI (see page 10 below). According to United Video, consolidation allows both satellite carriers to "reduce [their] per subscriber operating costs." JSC Exhibit No. 10 at 12. 2. <u>Southern Satellite Systems, Inc.</u> ("Southern"). Since 1976 Southern has been retransmitting the signal of superstation WTBS (Atlanta, GA) to cable systems. Southern's cable system customers currently serve more than 60 million households nationwide. In the mid-1980's Southern expanded into the C-band home satellite dish market, by providing WTBS to various C-band program packagers. Southern subsequently expanded into the DBS market, by providing WTBS to DBS operators Primestar, DirecTV, AlphaStar and EchoStar (discussed below).

At the current time, Southern is a wholly-owned subsidiary of TCI. However, Time Warner, the nation's second largest cable operator, has an option to acquire Southern. As a result of a recent merger with Turner Broadcasting System, Inc., Time Warner now owns superstation WTBS, the sole station retransmitted by Southern. Time Warner is the nation's second largest cable operator; its annual revenues from cable and all other operations amount to approximately \$17 billion.

3. <u>Mewhouse Broadcasting Corp.</u> (d/b/a Advance Entertainment Corp. (formerly EMI Communications Corp.) ("Newhouse")). Since 1979 Newhouse, like United Video and Southern, has retransmitted certain superstations to cable systems via satellite. Like United Video and Southern, Newhouse has used the Section 119 compulsory license to expand its retransmission business into the C-band market. Newhouse currently provides one superstation, WSBK (Boston, MA), to the cable industry and C-band program packagers. Until December 31, 1996, Newhouse also retransmitted WWOR (Secaucus, N.J./New York, N.Y.).

At least one DBS service (EchoStar) is retransmitting WSBK, thereby allowing Newhouse to expand into the DBS market.

Newhouse is also a cable television owner with newspaper, magazine and publishing interests. It has entered into a joint venture with Time Warner, which gives Time Warner a controlling interest and operational control over the Newhouse cable system operations.

4. <u>Netlink, USA</u> ("Netlink"). As noted above, Netlink is a wholly-owned subsidiary of the nation's largest cable operator, TCI. Netlink commenced operation in 1987. It retransmits, and pays Section 119 royalties on, one superstation and five network stations:

KWGN	(Denver, CO)
KUSA	(NBC, Denver, CO)
KCNC	(CBS, Denver, CO)
KMGH	(ABC, Denver, CO)
KRMA	(PBS, Denver, CO)
KDVR	(Fox, Denver, CO)

Stations KWGN, KUSA, KCNC, KMGH and KRMA are marketed under the name "the Denver 5".

Netlink operates as a packager of programming services for the HSD market. Its packages include the above stations, as well as other superstations and non-broadcast cable network programming. <u>See</u> JSC Exhibit No. 7. Netlink also sells the Denver 5 signals to cable systems. According to TCI's 1995 Form 10K (JSC Exhibit No. 11 at 95, 114), Netlink's 1995 revenues were approximately \$160 million.

5. <u>PrimeTime 24, Joint Venture</u> ("PrimeTime 24"). The majority interest in PrimeTime 24 is held by Millicom International Cellular S.A., a developer and operator of cellular telephone systems worldwide with annual revenues in excess of \$130 million. PrimeTime 24 retransmits, and pays Section 119 royalties on, the following network stations:

WRAL	(CBS, Raleigh, NC)
WNBC	(NBC, New York, NY)
WJLA	(ABC, Washington, D.C.)
KPIX	(CBS, San Francisco, CA)
KNBC	(NBC, Los Angeles, CA)
KOMO	(ABC, Seattle, WA)

Stations WRAL, WNBC and WJLA are marketed under the name "PT East," while KPIX, KNBC and KOMO are marketed under the name "PT West."

PrimeTime 24 began providing network stations to the C-band market in 1986. In 1994 it expanded into the DBS market by providing PT East and PT West to DirecTV (discussed below). PrimeTime 24 also provides these network stations to DBS operators Echostar and AlphaStar.

PrimeTime 24 operates as a packager of programming for the C-band market. Its program packages include PT East and PT West, various superstations and non-broadcast cable networks. JSC Exhibit No. 6 contains promotional material which describes the various HSD program packages offered by PrimeTime 24.

6. <u>Primestar Partners L.P.</u> ("Primestar"). Primestar operates a DBS service that distributes approximately 70 channels of broadcast and cable network programming over a medium power Ku-band satellite. To receive Primestar, a household must have a satellite dish that is approximately 36-40 inches in diameter. Primestar retransmits, and pays Section 119 royalties on, one superstation and six network stations (and pays full market rates for all other channels):

WTBS (Atlanta, GA)
WHDH (NBC, Boston, MA)
WSB (ABC, Atlanta, GA)
WUSA (CBS, Washington, D.C.)
KTVU (Fox, San Francisco, CA)
WHYY (PBS, Philadelphia, PA)
KMGH (ABC, Denver, CO)

JSC Exhibit No. 3 contains various promotional materials for Primestar.

Primestar is a joint venture of the subsidiaries of GE American Communications, Inc. (which owns the satellite over which Primestar transmits), and six of the nation's largest cable television companies -- TCI, Time Warner, Continental Cablevision Inc., Cox Enterprises, Inc., Comcast Corp. and Newhouse. Collectively, these six cable companies account for approximately 60 percent of all U.S. cable subscribers. Primestar is the original DBS service, having commenced operation in 1991. According to TCI's 1995 Form 10K (JSC Exhibit No. 11 at 91), Primestar's 1995 revenues exceeded \$200 million.

7. <u>DirecTV</u>. DirecTV operates a DBS service over three highpower Ku-band satellites. To receive DirecTV, a household must have a "DSS" (Digital Satellite System) dish that is approximately 18 inches in diameter. DirecTV provides 175 channels of broadcast and cable network programming, including superstation WTBS for which it pays Section 119 royalties. DirecTV launched its service in 1994. JSC Exhibit No. 2 contains promotional material from DirecTV.

DirecTV is owned by Hughes Electronics Corp., a subsidiary of General Motors Corp., with annual revenues in excess of \$14 billion. AT&T Corp., which markets and distributes DirecTV, recently purchased a 2.5% interest in DirecTV for \$137.5 million. AT&T has an option to increase its share of DirecTV up to 30 percent.

8. Echostar Satellite Corp. ("EchoStar"). EchoStar is owned
by Echostar Communications Corp. Founded in 1980, Echostar
Communications Corp. markets C-band hardware and programming services.
In March 1996 Echostar commenced its DBS service ("DISH Network") over a
high power Ku-band satellite, which requires an 18-inch dish for reception.
EchoStar currently provides more than 80 channels of broadcast and cable
network programming over a single DBS satellite; it intends to offer an
additional 90 channels of video channels and audio programming over a

EchoStar retransmits, and pays Section 119 royalties on, the following superstations:

WTBS	(Atlanta, GA)
WGN	(Chicago, IL)
WPIX	(New York, NY)
KTLA	(Los Angeles, CA)
WSBK	(Boston, MA)

EchoStar's current promotional materials indicate that EchoStar also offers the PrimeTime 24 network station packages (discussed above). <u>See</u> JSC Exhibit No. 4.

9. <u>Tee-Comm Electronics Inc.</u> ("Tee-Comm") d/b/a AlphaStar ("AlphaStar"). AlphaStar offers 100 channels of broadcast and cable network programming, including WTBS and various network stations. <u>See</u> JSC Exhibit No. 5. It commenced service in July 1996 and plans to offer up to 200

channels in 1997. AlphaStar's parent company, Tee-Comm, is a Canadian DBS company. Founded in 1983, Tee-Comm is one of North America's largest manufacturers of home satellite systems, with annual revenues of approximately \$50 million.

10. <u>Consumer Satellite Systems, Inc. ("CSS")</u>. CSS, founded in 1981, is a privately-held corporation. Originally organized as a distributor or satellite dish systems, CSS began uplinking the signal of WWOR-TV for distribution to the DTH market in 1997. As of 1995, CSS reported annual sales in excess of \$100 million.

11. <u>American Sky Broadcasting ("ASkyB")</u>. ASkyB is a joint venture of Rupert Murdoch's The News Corporation Ltd. (Fox) and MCI Telecommunications Corp. ASkyB acquired a DBS license in an FCC auction for \$682.5 million. It plans to commence a 300-channel DBS service in late 1997 and to offer, among other programming, local broadcast stations in certain markets -- that is, a television broadcast station licensed by the FCC to serve the market in which it is offered by ASkyB.

B. Signal Carriage

The broadcast stations retransmitted by satellite carriers are classified into three types for purposes of Section 119: (1) superstations, which are independent broadcast stations, i.e., not affiliated with any of the major broadcast networks; (2) "syndex-proof" superstations, which are superstations whose syndicated programming is not required to be blacked out by cable operators under the FCC's syndicated exclusivity (syndex) rules; and (3) network stations, which are broadcast stations affiliated with ABC, CBS, NBC, Fox or PBS. Currently, the Section 119 royalty rates vary depending upon whether the station retransmitted is a superstation, syndex proof superstation or network station. See page 20 below.

Twice each year (July and January), satellite carriers file Section 119 statements of account with the Copyright Office. Those statements identify the

stations that the carriers retransmitted during the prior six months; the number of subscribers that received each station during each month; and the royalties that the carrier owes. The most recent Section 119 statements of account are those filed in January 1997 for the second half of 1996. (JSC Exhibit Nos. 22-30.) (The 1996(1) Section 119 statements of account are contained in JSC Exhibit Nos. 12-19.) Table 3, which is based upon the 1996(2) statements of account, identifies each of the broadcast signals that satellite carriers were retransmitting as of December 1996, as well as the number of subscribers receiving each of these signals at that time.

Signals Retransmitted by Satellite Carriers - <u>December 1996</u>

Carrier	<u>Signals</u> *	<u>Type</u> ***	Subscribers***
United Video/	WGN (Chicago, IL)	SP	1,728,261
Superstar	WPIX (New York, NY)	S	651,841
S aboroun	KTLA (Los Angeles, CA)	S	923,640
Southern Satellite	WTBS (Atlanta, GA)	SP	1,869,444
Advance/EMI	WWOR (Secaucus, NJ)	SP	595,013
	WSBK (Boston, MA)	ls	595,013
Natink	KWGN (Denver, CO)	S	596,467
INCHINK	KIISA (Denver, CO)	N (NBC)	541,134
	KCNC (Denver, CO)	N (CBS)	543,916
	KMGH (Denver, CO)	N (ABC)	555,411
	KRMA (Denver, CO)	N (PBS)	579,708
	KDVR (Denver, CO)	N (Fox)	571,613
Drime Time 24	WIT A (Washington DC)	N (ABC)	1,917,036
Prime 1 line 24	KOMO (Seattle WA)	N (ABC)	1,160,104
	WPAL (Baleigh NC)	N (CBS)	1,902,397
	KPIX (San Francisco, CA)	N (CBS)	1,157,163
	WNRC (New York NY)	N (NBC)	1,905,023
	KNBC (Los Angeles, CA)	N (NBC)	1,158,696
Dimenter	WTPS (Atlanta GA)	SP	1,556,651
Primestar	WIDU (Roston MA)	N (NBC)	792,275
	WSP (Atlanta GA)	N (ABC)	789,772
	WSB (Attainta, OA)	N (ABC)	789,772
	WILLS A (Washington DC)	N (CBS)	792,201
	WUSA (Washington, DC)	N (Fox)	859,982
	WHYY (Philadelphia, PA)	N (PBS)	787,307
DirecTV	WTBS (Atlanta, GA)	SP	1,851,054
EchoStar	WTBS (Atlanta, GA)	SP	310,715
Echostar	WGN (Chicago, IL)	SP	309,465
	WPIX (New York, NY)	S	308,982
	KTLA (Los Angeles, CA)	S	308,985
	WSBK (Boston, MA)	S	283,818
AlabaSton	WTBS (Atlanta GA)	SP	21,699
Alphastar	WGN (Chicago, IL)	SP	21,781

* Identifies the signals retransmitted during the final month of the 1996(2) accounting period, i.e., December 1996.

** S = Superstation; SP = Syndex-Proof superstation; N = Network Station.

*** Reflects the number of subscribers during the final month of the 1996(2) accounting period, i.e., December 1996.



Since the 1992 rate adjustment, the number of households receiving each of the signal types from satellite carriers has increased significantly. This is reflected in Table 4.

Table 4

Honseholds Receiving Signals from Satellite Carriers 1991(2) vs.1996(2)*

<u>Signal</u>	Type	<u>1991(2)</u>	<u>1996(2)</u>	<u>% Change</u>
WTBS	SP	609,819	5,609,563	$ \begin{array}{r} + & 820\% \\ + & 249\% \\ + & 170\% \end{array} $
WGN	SP	589,505	2,059,507	
WWOR	SP	220,639	595,013	
KTLA	S	189,640	1,232,625	$\begin{array}{rrrr} + & 550\% \\ + & 291\% \\ + & 298\% \\ + & 160\% \end{array}$
WPIX	S	245,532	960,823	
WSBK	S	220,639	878,831	
KWGN	S	229,025	596,467	
NBC	N	439,804	4,397,128	$\begin{array}{rrrr} + & 900\% \\ + & 902\% \\ + & 1094\% \\ + & 464\% \\ + & 10735\% \end{array}$
CBS	N	438,685	4,395,677	
ABC	N	436,530	5,212,095	
PBS	N	242,238	1,367,015	
Fox	N	<u>13,213</u>	<u>1,431,595</u>	
	TOTAL	3,875,269	28,736,339	+ 642%

*Source: Statements of Account. Note that some households may be counted more than once because of the manner in which information is entered into the statements of account.

The above data are shown graphically in Figure 1 below.

Figure 1

Households Receiving Signals from Satellite Carriers 1991(2) vs.1996(2)



■ 1991(2) ■ 1996(2)



As Table 4 and Figure 1 indicate, the number of households receiving each of the superstations increased by anywhere from 160 percent to 820 percent in the approximately five years since the 1992 rate adjustment. Only one of the superstations that satellite carriers retransmitted in 1991(1) was not retransmitted in 1996(2), <u>i.e.</u>, KTVT (Dallas, TX), which was dropped by Superstar in 1995 when it became a Fox affiliate. <u>See</u> JSC Exhibit No. 10 at 30.

Between 1991(2) and 1996(2), the satellite carriers dropped several different network stations. However, in each case, the station was replaced with a station affiliated with the same network. The number of households receiving network stations increased anywhere from 464 percent to 1094 percent after the 1992 rate adjustment. The Fox Network, received by only 13,213 households in 1991(2), increased the number of households reached by more than a hundredfold.

C. Royalty Payments

In the Satellite Home Viewer Act of 1988, Congress set the Section 119 royalty rate for all superstations at 12 cents per subscriber per month, and the rate for network stations at 3 cents per subscriber per month. In the 1992 rate adjustment proceeding, a panel of arbitrators adopted the following rates (per subscriber per month). Table 5

Section 119 Royalty Rates Adopted in the 1992 Rate Adjustment

<u>Type</u>	Rate
Superstations	17.5 cents
Syndex-Proof Superstations	14.0 cents
Network Stations	6.0 cents

As a result of the 1992 rate increase and the increase in the satellite carriers' subscribers, the total Section 119 royalty payments increased from \$1.9 million in 1991(2) to \$15.4 million in 1996(2). That \$15.4 million was allocated among nine satellite carriers as shown in Table 6.



Satellite Carrier Section 119 <u>Royalties - 1996(2)</u>

Carrier	Royalty	Percentage Total Royalty
United Video/Superstar	\$ 3,209,022	20.8%
PrimeTime 24	\$ 3,045,266	19.8%
Primestar	\$ 2,561,271	16.6%
Southern Satellite	\$ 1,601,138	10.4%
Netlink	\$ 1,621,167	10.5%
Newhouse	\$ 1,175,389	7.6%
DirectTV	\$ 1,363,503	8.9%
EchoStar	\$ 806,621	5.2%
AlphaStar	\$ 16,667	0.1%
	\$ 15,400,054	100.0%
	 	4





The data in Table 6 are shown graphically in Figure 2 below.

Figure 2





As Table 6 and Figure 2 reflect, United Video's Superstar paid the largest portion of 1996(2) Section 119 royalties -- approximately one-fifth of the total royalties. The four TCI satellite carriers alone (Superstar, Netlink, Southern Satellite and Primestar) accounted for over one-half (58.3%) of the 1996(2) royalties.

As noted above, United Video's Superstar sells programming directly to C-band HSD households. Superstar offers packages which include both broadcast stations and non-broadcast cable networks. <u>See</u> JSC Exhibit No. 9. Superstar also sells broadcast stations and network stations individually on an "a la carte" basis. Table 7 below compares the Section 119 royalties that Superstar currently pays for broadcast stations with the prices that it charges consumers for those stations.

Table 7

Superstar Royalty Payments vs. Retail Price

Superstar Program Packages*	Current Sec. 119 Royalty Payments**	Retail Price***	Per Signal Retail Price****
Denver 5	\$0.415	\$4.08 - \$5.50	\$0.81 - \$1.10
Fox KDVR Denver	\$0.060	\$1.00 - \$2.00	\$1.00 - \$2.00
SuperCity Pak (WGN, KTLA, & WPIX)	\$0.490	\$3.13 - \$4.25	\$1.04 - \$1.42
Superstar Six Pak (WGN, KTLA, WPIX, WTBS, WSBK & WWOR)	\$0.945	\$6.00 - \$6.75	\$1.00 - \$1.13
WSBK & WWOR	\$0.315	\$1.25 - \$2.50	\$0.63 - \$1.25
WTBS	\$ <u>0.140</u>	<u>\$1.58 - \$2.25</u>	<u>\$1.58 - \$2.25</u>
Average per Signal	\$0.131		\$0.95 - \$1.29

Source: Superstar "A La Carte" price list (JSC Exhibit No. 9).

This column reflects the amount of Section 119 royalties that Superstar must currently pay (per subscriber per month) to retransmit all of the broadcast signals in each package.

This column reflects the amount that Superstar charges (per subscriber per month) to receive all of the signals in *** each package. The range is established by the "non-combo" one month price (highest price) and the "combo" one year price (lowest price). Source: Superstar's "A La Carte" price list (JSC Exhibit No. 9).

Average price is calculated by dividing total retail price by number of signals in the package. ****

As Table 7 illustrates, Superstar charges consumers an "a la carte" retail price that amounts to between 95 cents and \$1.29 per broadcast station. Of this amount, Superstar pays, on average, 13 cents in Section 119 royalties. In other words, the existing royalty rates result in copyright owners

receiving only about 10 percent to 14 percent of the amount that Superstar charges the consumer (\$0.131 divided by \$0.95 equals 13.8 percent; \$0.131 divided by \$1.29 equals 10.2 percent). The disparity is even greater for particular signals. For example, Superstar charges consumers between \$1.58 and \$2.25 per month for WTBS; of that amount, copyright owners now receive only 14 cents, or between 6 and 9 percent of Superstar's a la carte retail charge. These disparities are reflected in Figure 3.









Superstar permits subscribers to create their own package of 12 channels. See JSC Exhibit No. 9. A consumer could opt for a 12-channel package that contained all seven of the superstations and the five Denver network stations currently retransmitted under Section 119. The cost to the consumer would be <u>\$12.50 per month</u> (\$105 per year). Superstar's royalty payment, on the other hand, would be only <u>\$1.42 per month</u> (\$17.04 per year), or <u>\$11.08 per month</u> (\$87.96 per year) less than the retail charge.

PrimeTime 24 has a comparable mark-up on the network stations that it sells to C-band households.

Table 8

PrimeTime 24 <u>Royalty Payments vs. Retail Price</u>

PrimeTime 24 Program Packages*	Current Sec. 119 <u>Royalty Payments</u> **	Retail Price***
PT East	\$0.18	\$4.16
PT West	\$0.18	\$4.16
PT East & PT West	\$0.36	\$4.99
		-

* Source: JSC Exhibit No. 6.

** This column reflects amount of Section 119 royalties that PrimeTime 24 must currently pay (per subscriber per month) to retransmit all of the signals in each package.

*** This column reflects the amount that PrimeTime 24 charges (per subscriber per month) to receive all of the signals in each package. See JSC Exhibit No. 6.
As Table 8 illustrates, PrimeTime 24 sells its PT East and PT West packages (three network stations per package) for \$4.16 per subscriber per month (\$49.95 per year). Of that amount, PrimeTime 24 pays only 18 cents per month (or 4.3 percent) in Section 119 copyright royalty fees. PrimeTime 24's charge to consumers for the PT East and PT West packages combined (six network stations) is \$4.99 per subscriber per month (\$59.90 per year). Of that amount, PrimeTime 24 pays only 36 cents per month (7.2 percent) in Section 119 copyright royalties. These disparities are reflected in Figure 4 below.

Figure 4

PrimeTime 24 <u>Retail Price vs. Royalty Payments</u>



Likewise, DirecTV sells the network stations for 99 cents each (on top of a mandatory monthly charge that ranges from \$14.95 to \$44.95 for a package of programming). <u>See</u> JSC Exhibit No. 2. The current Section 119 royalty payment made by DirecTV for those network stations is 6 cents.

II. The Value Of Live Sports Programming

In this portion of my testimony, I discuss the value of the live sports programming being retransmitted pursuant to the Section 119 compulsory license. My testimony describes (a) the major sports packages on the broadcast stations that satellite carriers retransmit; (b) the license fees that satellite carriers must pay in order to acquire comparable sports programming in free marketplace transactions; and (c) the significance of blackout protection in marketplace negotiations for such programming.

A. Major Sports Programming On Superstations And Network Stations

Satellite carriers are currently retransmitting seven superstations and fourteen commercial network stations. Each and every one of these stations broadcasts in 1996 one or more packages of programming licensed by a major sports league or team -- the National Basketball Association ("NBA"); Major League Baseball ("MLB"); National Hockey League ("NHL"); National Football League ("NFL"); college football ("NCAA(FB)"); and college basketball ("NCAA(BK)"). The specific sports packages for each station are identified in Table 9 below.

Table 9

Major Sports Programming on Superstations Retransmitted by Satellite Carriers - 1996

Station Package	Major Sports Programming
WTBS (Altanta, GA)	NBA Braves (MLB)
WGN (Chicago, IL)	Cubs (MLB) White Sox (MLB) Bulls (NBA) DePaul (NCAA (BK))
WWOR (Secaucus, NJ)	Mets (MLB)
WSBK (Boston, MA)	Celtics (NBA) Bruins (NHL)
WPIX (New York, NY)	Yankees (MLB) Jets (NFL) *
KTLA (Los Angeles, CA)	Dodgers (MLB)
KWGN (Denver, CO)	Rockies (MLB) Nuggets (NBA)

*Refers to preseason telecasts only.

Table 10

Major Sports Programming on Network Stations Retransmitted by <u>Satellite Carriers - 1996</u>

Station Package	Major Sports Programming
KUSA (NBC, Denver, CO)	MLB NBA NFL Broncos (NFL)* Notre Dame (NCAA (FB)) Notre Dame (NCAA (BK))
KCNC (CBS, Denver, CO)	NCAA (BK, FB)
KMGH (ABC, Denver, CO)	NFL NCAA (BK, FB)
KDVR (Fox, Denver, CO)	MLB NFL NHL Avalanche (NHL)
KNBC (NBC, Los Angeles, CA)	MLB NBA NFL Notre Dame (NCAA (FB)) Notre Dame (NCAA (BK))
KPIX (CBS, San Francisco, CA)	NCAA (BK, FB) Warriors (NBA) 49ers (NFL)*
KOMO (ABC, Seattle, WA)	NFL NCAA (BK, FB)
KTVU (Fox, San Francisco, CA)	MLB NFL NHL Giants (MLB)
WNBC (NBC, New York, NY)	MLB NFL NBA Notre Dame (NCAA (FB)) Notre Dame (NCAA (BK))
WRAL (CBS, Raleigh, NC)	ACC (BK, FB)** NCAA (BK, FB) Panthers (NFL)*
WJLA (ABC, Washington, DC)	NFL Redskins (NFL)* ACC (FB)** NCAA (BK,FB)
WHDH (NBC, Boston, MA)	MLB NFL NBA Notre Dame (NCAA (BK)) Notre Dame (NCAA (FB))
WUSA (CBS, Washington, DC)	NCAA (BK, FB)
WSB (ABC, Atlanta, GA)	NFL NCAA (BK, FB)

*Refers to preseason telecasts only.

**Refers to Atlantic Coast Conference (ACC).





For example, the NBA has licensed the NBC network to broadcast 26 regular season games during the 1996-97 season. It also has licensed NBC to broadcast up to 28 post-season games, plus the 1997 NBA Finals. Satellite carriers will provide these telecasts of approximately 60 NBA games to several million HSD and DBS subscribers by retransmitting stations KUSA, KNBC, WNBC and WHDH. By law, these retransmissions may go to only those households that otherwise would not have access to any of the NBA telecasts on NBC. (Of course, in those cases where satellite carriers retransmit the NBC stations into other than the "white areas," pursuant to Section 119, such retransmissions violate not only the law but also infringe upon the exclusive rights of local NBC affiliates to carry the NBA telecasts).

The NBA also has licensed Turner Broadcasting during the 1996-97 season the rights to televise over superstation WTBS 25 regular season games and any post-season games not televised by NBC or TNT (approximately ten per year). More than 5.5 million HSD and DBS households will receive the WTBS telecasts of NBA games from satellite carriers pursuant to Section 119.

Individual NBA teams also arrange for the telecast of games in which they play by stations located in their local markets. In a number of instances, these locally licensed telecasts are carried by superstations and network stations and are retransmitted nationwide by satellite carriers. For example, the Golden State Warriors have licensed CBS affiliate KPIX (San Francisco, CA) to broadcast 21 regular season games during the 1996-97 season; these telecasts will be retransmitted to over one million HSD and DBS households. Likewise, the 25 telecasts of the Denver Nuggets on KWGN (Denver, CO) will be retransmitted to nearly 600,000 HSD and DBS subscribers.

In addition, satellite carriers will retransmit more than 600 telecasts of regular season Major League Baseball games pursuant to the Section 119 compulsory license. These telecasts will be presented over several of the superstations and network stations that satellite carriers retransmit. Satellite carriers also will use Section 119 to retransmit Baseball's All-Star Game and all of Baseball's post-season games (i.e., the Divisional Series, League Championship Series and World Series) which will be broadcast over network stations affiliated with NBC and Fox. As with the NBA network telecasts, these MLB network telecasts may be marketed lawfully by satellite carriers pursuant to Section 119 to only those households that would not otherwise have access to them.

B. The Cost Of Sports Programming Acquired In The Marketplace

NBA and other major sports programming is presently carried on two non-broadcast basic cable networks -- TNT (NBA and NFL) and ESPN (MLB, NHL, NFL, NCAA(BK) and NCAA(FB)). Satellite carriers do not have a compulsory license to retransmit TNT or ESPN. Rather, satellite carriers must pay TNT and ESPN a marketplace-negotiated licensing fee for the right to carry the programming on those networks.

The license fees that satellite carriers and cable operators pay for TNT and ESPN programming are substantially greater than the Section 119 royalty fees. Currently, TNT's license fee is approximately 52 cents per subscriber per month, while ESPN's fee is approximately 68 cents per subscriber per month. Stated otherwise, a satellite carrier must pay <u>52 cents</u> per subscriber per month in order to gain access to the approximately 45 regular season and up to 35 post-season NBA games televised over TNT (as well as all of the other programming on TNT). In contrast, by paying a Section

119 royalty of less than one-half that amount (<u>20 cents</u> per subscriber per month), a satellite carrier may retransmit the 51 NBA regular season and up to 45 post-season games broadcast by an NBC network station and superstation TBS (as well as all of the other programming on those two stations).

The substantial disparity between the existing Section 119 royalty fees and marketplace-negotiated licensing fees is highlighted by the fees certain satellite carriers have paid for sports programs packages negotiated at arms length with leagues and teams. For example, the NBA has licensed certain DBS operators (such as DirecTV) the right to retransmit approximately 1,000 NBA regular season game telecasts; each of these telecasts is originated locally (over a broadcast station or regional sports network) and placed on satellite for out-of-market distribution. That package (marketed as "NBA League Pass") is sold generally to DBS subscribers at a retail cost of \$149 per season. The satellite carriers pay the majority of that amount to the NBA as a license fee. In contrast, as noted above, the 1992 Section 119 rates can result in satellite carriers paying royalties to sports programming owners that amount to only 4 to 14 percent of the amount they receive from consumers.

C. The Role Of Blackouts In Marketplace Negotiations For Sports Programming

When retransmitting signals pursuant to Section 119, satellite carriers are not required to black out any of the sports programming on those signals -notwithstanding that their retransmission of certain programming into certain geographic areas may undermine the exclusivity which a league or a team has accorded a particular broadcaster or cable network. For example, a satellite carrier may retransmit the WTBS telecast of a Los Angeles Lakers at Orlando Magic game to subscribers in the Magic's home territory – even

though the Magic had licensed a regional sports network the exclusive right to televise that game in that geographic area (or even if the Magic had made a decision not to televise that game at all in order to promote attendance at the game).

On the other hand, in marketplace negotiations, we can ensure that the rights granted to satellite carriers do not impinge upon the exclusive rights that we grant to other parties. For example, a DBS operator carrying the NBA League Pass package is required to black out the Lakers/Magic telecast in the Orlando market. Likewise, cable operators in that territory are not permitted to carry a TNT telecast of a game involving these clubs.

The FCC's Sports Rule (47 C.F.R. 76.67) also requires that cable operators black out certain telecasts of sports events broadcast over superstations and other distant signals. For example, cable systems located within 35 miles of Orlando would not generally be able to carry the WTBS telecast of the Lakers at Magic game, if that game were played in Orlando.

In establishing Section 119 royalties, the Panel should take account of the fact that satellite carriers are not required to live by the same sports blackout restrictions that are typically negotiated in the marketplace and imposed by FCC rules. The current royalty rates do not take account of this fact.

<u>/24/97</u> Date /

 \mathcal{M} Edwin S. Desser

Biography of Edwin S. Desser February, 1996

Edwin S. Desser, President of National Basketball Association Television & New Media Ventures, is a 24-year veteran of the sports and entertainment business, specializing in Television, marketing and Technology. He received a Bachelor of Arts in Economics from the University of California, Los Angeles and a Masters of Business Administration in Marketing from University of Southern California.

He began his career in broadcasting in 1972 serving in a variety of production, programming, technical operations, business and sales capacities. In 1977 he was named Executive Producer of the Los Angeles Lakers Radio Network, serving more than 30 affiliates in the southwest United States.

In 1978 he moved to California Sports, owner of the NBA's Los Angeles Lakers, NHL's Kings, and The Forum. There he served as Director of Broadcasting and Executive Producer for both teams and the arena.

In 1982, Mr. Desser joined the National Basketball Association as Director of Broadcasting and Executive Producer. His responsibilities included the administration of all aspects of the League's national and local cable and broadcast television arrangements.

In 1984, he added the position of Vice President/ General Manager of NBA Entertainment Inc., the League's in-house television production organization. NBAE creates basketball-related programming for national and international distribution via broadcast, cable television and home video. It also produces commercials, promotional and public service spots. Today NBAE produces the popular weekly NBC series "NBA Inside Stuff" and the international "Game of the Week" series.

In 1987, the NBA heightened its emphasis on the global market. Accordingly, Mr. Desser duties shifted to production and international distribution management. He became Vice President of Television for NBA International, Ltd. and continued as VP/GM of NBAE. Over the next seven years, he led the NBA to a 25 fold increase in international television revenue, increasing program sales from just 25 countries to over 150, making the NBA the most widely distributed sports league in the world. In 1991, Desser was named to head a new NBA entity called NBA Television Ventures. NBATV is responsible for planning and development of the league's use of new electronic media technologies. These include Direct Broadcast Satellite, High Definition Television, signal encryption, digital recording, compression and fiber/satellite transmission, and Interactive Television. NBATV began three forms of DBS distribution in 1994 via agreements with DirecTv, PrimeStar, and Liberty Satellite Sports.

Mr. Desser is also responsible for the development of overall NBA television distribution strategy, league broadcasting policies, and leads the negotiating team for major television agreements, such as those with NBC Sports and Turner Sports. He also was the architect of the NEA's television strategy for the recent Canadian expansion to Toronto and Vancouver, which lead to a network deal with CTV.

In 1995, with the beginning of media convergence, the scope of NBATV's mandate was expanded to include a variety of non-television business opportunities. Renamed NBA Television & New Media Ventures, it has also focused on the NBA's use of the Internet and CD-ROM. NBA.com launched in November of 1995, and is currently generating over 1.5 million "hits" daily.

Mr. Desser chairs the NBA's Business Planning Committee and Technology Committee, and manages the Information Technology and Strategic planning functions. He also serves on the Planning Committee for the NBA Board of Governors.

He resides in Alpine, New Jersey and New York City, with his wife, Sally.

- 2 -

SPECIAL REPORT

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I

AN ANALYSIS OF THE 1997-1999 FREE MARKET LICENSE FEES FOR BROADCAST STATIONS RETRANSMITTED BY SATELLITE CARRIERS

PREPARED BY:

KAGAN MEDIA APPRAISALS, INC. 126 CLOCK TOWER PLACE CARMEL, CA 93923 (408) 624-1536

DECEMBER 1996

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Signed:

Kagan Media Appraisals, Inc/Robin V. Flynn

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I. QUALIFICATIONS



I. QUALIFICATIONS

Kagan Media Appraisals, Inc. (KMA) has been a leading media valuation and consulting company for the last 15 years. Over that time, we have at the request of various customers valued over twenty billion dollars worth of media assets.

Over the course of its appraisal and consulting practice, KMA has routinely been asked to consider issues related to the pricing and value of basic cable networks.

Our affiliated company Paul Kagan Associates, Inc. (PKA) was founded in 1969. It has analyzed and valued hundreds of public and private companies in the monthly newsletters it publishes, which include:

BROADCAST INVESTOR TV PROGRAM INVESTOR TV PROGRAM STATS CABLE TV INVESTOR CABLE TV PROGRAMMING CABLE TV ADVERTISING MEDIA SPORTS BUSINESS CABLE NETWORK INVESTOR MARKETING NEW MEDIA THE PAY TV NEWSLETTER MOTION PICTURE INVESTOR THE DBS REPORT

These newsletters contain data on, among other things, the license fees that basic cable networks charge their affiliates (cable systems, home satellite dish packagers, DBS operators).

PKA also publishes an annual special report, ECONOMICS OF BASIC CABLE NETWORKS, which compiles data on license fees and programming expenses. In addition, PKA (through other





I. QUALIFICATIONS (Continued)

affiliated companies) organizes and moderates seminars covering topics such as pay-per-view. cable programming trends, motion picture and television program finance and DBS and satellite industry trends.

The data on which PKA bases its analyses are developed from a variety of sources, including Securities and Exchange Commission filings, press releases, industry trade publications, formal and informal surveys of subject companies, and regular conversations with industry executives. To the extent possible, PKA cross-checks data by using multiple sources and various internally developed analytical techniques.

Data published in PKA's newsletters and special reports are generally relied on by members of the industry in their daily business. Data contained in this report have been taken from the PKA databases which are used as the basis of various PKA publications, and much of the data have been published in various PKA publications.



II. PURPOSE OF REPORT

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KAGAN MEDIA APPRAISALS, INC.

II. PURPOSE OF REPORT

This report was prepared for the Joint Sports Claimants in connection with a proceeding conducted by the Copyright Arbitration Royalty Panel (Docket No. 96-3-SRA). The purpose of that proceeding is to set the compulsory licensing royalty rates that "satellite carriers" must pay to retransmit certain television broadcast stations, during the years 1997-1999, to home satellite dish owners and direct broadcast satellite (DBS) subscribers. The existing rates, established in a 1992 proceeding, range from 6 cents per subscriber per month to 17.5 cents per subscriber per month.

A 1994 law directs the panel to adopt royalty rates that most clearly reflect the fair market value of the broadcast signals retransmitted by satellite carriers.

The Joint Sports Claimants requested KMA (a) to determine the license fees that would be paid during 1997-1999, in free market transactions, for the commercial broadcast stations retransmitted by satellite carriers; and (b) to update a similar market value analysis that was presented to the arbitration panel which set the satellite carrier rates in 1992.

III. SUMMARY OF FINDINGS

KAGAN MEDIA APPRAISALS, INC.

Α.

Satellite carriers are currently retransmitting fourteen stations affiliated with one of the major commercial networks (ABC, CBS, NBC and Fox) and seven superstations. We believe that these 21 stations (the "Broadcast Stations") are roughly comparable in value to each other -- that is, in a free market (absent compulsory licensing) satellite carriers, cable systems and other multichannel video programming providers would pay approximately the same license fee to retransmit each of these Broadcast Stations ("Broadcast Station License Fee").

We believe that the best method for determining the Broadcast Station License Fee is to examine the transactions for cable networks. There are a substantial number of cable networks retransmitted by satellite carriers, cable systems and other multichannel video programming providers. No single cable network offers programming whose value is identical to the programming on any one of the Broadcast Stations. There are, however, seven cable networks that offer comparable programming and therefore provide a reasonable basis for determining the Broadcast Station License Fee -- TNT, ESPN, CNN, USA, Family Channel, Lifetime and Nickelodeon.

Based upon the license fees actually paid in free market transactions for cable networks, we believe that the Broadcast Station License Fee for the years 1997-99 would be no less than

- 1997 35 cents per subscriber per month per station
- 1998 36 cents per subscriber per month per station
- 1999 38 cents per subscriber per month per station



В.

In the 1992 proceeding Dr. Silberman examined the top of the rate card license fees paid for certain cable networks. His analysis showed an average rate of approximately 28 cents per subscriber per month. An examination of the top of the rate card license fees for the same networks shows that their average rate will have increased by 61 percent to 76 percent for the years 1997, 1998 and 1999 -- that is, 45 cents in 1997; 47 cents in 1998; and 49 cents in 1999.



IV. DISCUSSION OF FINDINGS

KAGAN MEDIA APPRAISALS, INC.

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IV. DISCUSSION OF FINDINGS

A. KMA ANALYSIS OF COMPARABLE PROGRAMMING LICENSED IN FREE MARKET TRANSACTIONS

1. Broadcast Stations Analyzed

Satellite carriers currently retransmit the following superstations:

Station	Market
WTBS	Atlanta, GA
WGN	Chicago, IL
WWOR	New York, NY
WSBK	Boston, MA
KTLA	Los Angeles, CA
KWGN	Denver, CO
WPIX	New York, NY

These superstations broadcast a variety of programming, including movies, syndicated series, news and public affairs programs and live sports. Each superstation is the "flagship" (that is, it originates the telecasts) of one or more professional sports teams. For example, WTBS broadcasts the games of the Atlanta Braves, while WGN broadcasts the games of the Chicago Cubs and the Chicago White Sox. WTBS also carries a package of games licensed by the National Basketball Association.

Satellite carriers also retransmit several stations that are affiliated with one of the major commercial networks (ABC, CBS, NBC and Fox). These stations are:



Station	Market	Network Affiliation
KTVU	Oakland, CA	FOX
WUSA	Washington, D.C.	CBS
WRAL	Raleigh, NC	CBS
KOMO	Seattle, WA	ABC
KNBC	Los Angeles, CA	NBC
KMGH	Denver, CO	ABC
WHDH	Boston, MA	NBC
WABC	New York, NY	ABC
KUSA	Denver, CO	NBC
KCNC	Denver, CO	CBS
KDVR	Denver, CO	FOX
KPIX	San Francisco, CA	CBS
WNBC	New York, NY	NBC
WJLA	Washington, D.C.	ABC

These stations broadcast the programming offered by the networks with which they are affiliated. This includes program packages licensed by the major sports leagues -- Major League Baseball (NBC, Fox); the National Basketball Association (NBC); the National Hockey League (Fox); the National Football League (ABC, NBC, Fox); college basketball (ABC, CBS); and college football (ABC, CBS and NBC). These stations also broadcast network and non-network movies, news, TV series and other programming. Some of these stations also carry non-network sports. For example, station KTVU is the flagship of the San Francisco Giants.

We refer to the above superstations and network stations as the "Broadcast Stations." Sample program schedules for certain Broadcast Stations are contained in JSC Exhibit # 20.



2. Comparable Cable Networks

There are more than 80 basic cable networks transmitted by satellite carriers, cable systems and other multichannel video programming providers. The vast majority of these cable networks were created to exploit vertical program niches that were perceived to be underserved by broadcasters or other cable networks or to target specific demographic audiences. In the last few years this has led to basic networks that increasingly focus on sub-niches, such as has occurred in the news category with the evolution of networks focusing on "consumer news", "business news", "sports news" or even just courtroom and trial proceeding coverage.

There are a handful of basic cable networks which conceptually are programmed along the lines of broadcast stations and have programming that reaches a broader audience demographic. Of all the basic networks, the one most comparable to broadcast stations is TNT, which features a general entertainment mix of syndicated, movie and original programming, along with major league sports. The most significant difference between TNT and broadcast stations is that TNT does not regularly program news. Other basic channels which also are considered to be general entertainment networks are USA Network, The Family Channel, Lifetime and Nickelodeon. Like TNT, these networks also do not carry significant amounts of news programming. Unlike TNT, none of these networks carries significant amounts of sports programming and they carry no major league sports. In order to properly compare these general entertainment networks with broadcast stations, we also considered ESPN (a 24-hour sports network which does program major league sports) and CNN (a 24-hour news network).



We refer to the seven networks discussed above, ESPN, TNT, USA, CNN, NICK, Lifetime and The Family Channel, as the "Comparable Cable Networks." Sample program schedules for these networks are contained in JSC Exhibit #21.

3. License Fees for Comparable Cable Networks

Unlike broadcast stations, cable networks are not subject to a compulsory license. Therefore, satellite carriers, cable systems and other multichannel programming providers may transmit cable networks only upon the payment of a negotiated license fee. That license fee ranges from a few cents per subscriber per month (or zero in some cases) to upwards of \$1.00 per subscriber per month (for some regional sports networks).

As part of our daily business operations, we routinely determine (a) the "top of the rate card" fees charged for cable networks (that is, the license fee before any discount); and (b) the license fees that are actually paid for cable networks (after discounts). We also routinely estimate top of the rate card and actual license fees for future years. These data are included in various Paul Kagan publications.

Table I below shows the license fees that were actually paid for the Comparable Cable Networks in 1992 and 1995. It also reflects our estimates of the fees that will be paid for these networks in the years 1997-1999:

KAGAN MEDIA APPRAISALS, INC.

NETWORK	1992	1995	1997*	1998*	1999*
ESPN TNT USA CNN NICK FAM LIFE	\$0.53 0.40 0.22 0.25 0.14 0.08 0.08	\$0.67 0.51 0.31 0.34 0.19 0.12 0.11	\$0.68 0.54 0.35 0.35 0.23 0.14 0.12	\$0.68 0.55 0.36 0.25 0.16 0.13	\$0.69 0.56 0.38 0.38 0.28 0.18 0.14

TABLE I LICENSE FEES FOR COMPARABLE CABLE NETWORKS

* Projected.

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The calculations for Table 1 rely upon the data set forth in Appendix A (Kagan estimates of the number of households that lawfully receive each cable network) and Appendix B (Kagan estimates of the total license fees for each cable network). The data in Table 1 are portrayd graphically in Figure 1, which also shows the existing satellite royalty rates for network stations, existing satellite royalty rates for network stations, "syndex-proof" superstations and superstations.





FIGURE 1 LICENSE FEES FOR COMPARABLE CABLE NETWORKS

As Table 1 and Figure 1 illustrate, in 1997 cable operators, satellite carriers and other multichannel video programming providers will pay for the Comparable Cable Networks average license fees that range from 12 cents to 68 cents per subscriber per month. The comparable range will be 13 cents





to 68 cents in 1998 and 14 cents to 69 cents in 1999. We believe that these license fees provide insight into the fair martket value of the Broadcast Stations identified above.

At the bottom end of the range are Lifetime and The Family Channel. Both offer limited original programming and no sports; they consist primarily of syndicated programming and, in the case of The Family Channel, religious programming. The average license fee for such programming will be between 12 and 18 cents per subscriber per month during the years 1997-99. Nickelodeon, which consists primarily of classic syndicated shows, cartoons and live action children's programming, will receive a somewhat greater license fee – approximately 23 to 28 cents per subscriber per month.

We believe that the marketplace values the Broadcast Stations more highly than Lifetime, The Family Channel and Nickelodeon. Each of these networks does contain programming that is comparable to that found on the Broadcast Stations. However, they lack that original programming (including major league sports programming) that is found on the Broadcast Stations and that is significantly valued in the marketplace -- as reflected by the high license fees commanded by ESPN and TNT.

In our opinion, the license fee for the Broadcast Stations should be at least as great as the license fee for the USA Network, which (like the Broadcast Stations) contains a blend of syndicated and original programming intended for general audiences. Unlike TNT (which also has a blend of original and syndicated programming intended for the general audience), the USA Network does not offer any major league sports programming (although it does contain some tennis and wresling).



Consequently, we believe that the license fee for the Broadcast Stations would likely exceed the USA Network fee -- 35 cents in 1997; 36 cents in 1998; and 38 cents in 1999.

B. SILBERMAN 1992 ANALYSIS

In the 1992 rate proceeding, Dr. Stephen D. Silberman (an economist who testified on behalf of copyright owners) presented an analysis of certain Kagan Data. That analysis was based upon our published 1991 estimates of 1993 top of the rate card license fees. Dr. Silberman focused upon four cable networks, which he considered comparable (as a whole) to the commercial and noncommercial stations retransmitted by satellite carriers: Arts & Entertainment ("A&E"), NICK, TNT and USA.

Dr. Silberman's analysis showed that the "weighted" average top of the rate card license fee for the four networks in 1993 would be 27.9 cents per subscriber per month. The average was weighted by the relative number of subscribers for each cable network. Without weighting, the average was 27.75 cents per subscriber per month.

Table 2 shows the top of the rate card license fees as relfected in rates reached in Dr. Silberman's 1993 analysis. In Table 2 we also show the actual 1995 top of the rate card license fees and our estimates of the 1997-1999 top of the rate card license fees for those same four networks chosen by Dr. Silberman:



NETWORK	1993*	1995**	1997***	1998***	1999***
A&E	\$0.17	\$0.28	\$0.30	\$0.31	\$0.32
NICK	0.27	0.39	0.50	0.55	0.56
TNT	0.42	0.61	0.63	0.64	0.65
USA	0.25	0.33	0.37	0.39	0.41
Weighted	\$0.28	\$0.40	\$0.45	\$0.47	\$0.49
Arithmetic	0.28	0.40	0.45	0.47	0.49
* 1991 Projection					

TABLE 2 SILBERMAN ANALYSIS OF 1993 TOP OF THE RATE CARD FEES AND COMPARABLE FEES FOR 1995, 1997-1999

*** 1996 Projection

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As Table 2 illustrates, the top of the rate card rates for the networks chosen by Dr. Silberman have risen substantially. The Silberman analysis would produce an average "weighted" rate of 45 cents per subscriber per month for 1997; 47 cents for 1998; and 49 cents for 1999. The unweighted (arithmetic averages) are the same. The 1997-1999 rates are between 61 percent and 76 percent higher than the 27.9 cents 1993 rate which Dr. Silberman presented to the arbitration panel in the 1992 proceeding. These results are illustrated graphically in Figure 2.

Actual



Figure 2 UPDATED SILBERMAN ANALYSIS





V. APPENDICES

APPENDIX A

The adjusted average subscriber base for each of the basic cable networks studied in this analysis are shown below:

ADJUSTED AVERAGE SUBSCRIBERS* (Millions)

NETWORK	1992	1995	1997	1998	1999
		<u> </u>	66 1	68 3	70.5
CNN	55.3	60.4	00.1	00.5	70.0
ESDN	55.5	60.5	66.1	68.4	70.6
ESFIN	54.0	57 1	63.6	66 1	68.6
FAM	51.2	57.1	00.0	00.1	00.0
	50.5	56.7	63.2	65.7	68.3
	52.6	58.2	64.0	66.3	68.9
NICK	52.5	50.0	65.0	67 3	70.0
TNT	52.4	50.9	05.0	07.5	70.4
USA	54.2	59.7	65.5	67.7	70.1

* The Nielsen estimates of total TV households were adjusted downwards by 8% to account for theft-of-service. While those households are counted for viewing, ratings and ad sales purposes, they do not generate affiliate license fees and must therefore be factored out of the affiliate fee calculations.

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APPENDIX B

TOTAL AFFILIATE LICENSE FEES (Millions)

NETWORK	1992	1995	1997	1998	1999
CNN	\$166.5	\$247.4	\$278.4	\$294.9	\$322.2
ESPN	350.0	485.2	536.8	557.8	585.8
FAM	51.9	82.3	107.7	126.9	147.9
I IFF	50.0	74.1	87.2	102.5	114.4
NICK	87.0	134.0	177.2	198.9	230.8
TNT	250.5	360.2	419.2	444.2	468.3
USA	143.0	220.0	278.6	292.5	319.7
Total	\$1,098.9	\$1,603.1	\$1,885.1	\$2,017.6	\$2,189.1

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AN ESTIMATE OF THE MINIMUM COMPULSORY FEE FOR SATELLITE-RETRANSMITTED BROADCAST STATIONS

Prepared by

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National Economic Research Associates, Inc.

November 27, 1996

White Plains. NY / Washington, DC / Los Angeles. CA / Cambridge. MA / Philadelphia, PA / San Francisco, CA / New York, NY / Ithaca, NY / Seattle, WA / London / Madrid A MARSH & MCLENNAN COMPANY

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I. QUALIFICATIONS AND SUMMARY

I am an economist and a Vice President of National Economic Research Associates, Inc. I have conducted research on broadcast, cable and satellite television and copyright licensing issues for the past twenty years. My recent research projects include the likely performance of a start-up satellite service, the effect of proposed FCC rules concerning cable rates and broadcast television network-affiliate relations, the competitive impact of cable system advertising representative agreements, and the characteristics of local television stations added to cable systems as a result of the must-carry law. A detailed statement of my qualifications is set out in Attachment A.

Counsel for PBS asked me to assess the current compulsory fee for the retransmission of broadcast stations by satellite carriers to home satellite dish owners, including the retransmission of network and PBS stations in white areas,¹ and to determine a minimum compulsory fee for 1997-99 in accord with the statutory criteria.

I conclude that the current fees are less than the fair market value of the signals. The retransmitted stations have equal or greater value than the popular basic cable networks with which they compete for distribution to satellite homes. In 1992, the average license fee for a group of 12 popular basic cable networks was 18 cents per subscriber per month, approximately the same as the maximum compulsory fee. The average license fee for these networks increased to 24 cents in 1995 and is expected to increase further to an average of 27 cents in 1997-99. The market value of all types of broadcast stations retransmitted to satellite homes—network and PBS stations and superstations—is at least as high as the average license fee for the compulsory fee that does not take into account attributes of the retransmitted broadcast signals that suggest their higher market value.

¹ White-area homes are those not served by a network or PBS station over the air or via cable within the last 90 days.



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In addition, I conclude that a fee at least as high as the average rate charged for these popular basic cable networks will not have a significant adverse effect on the ability of satellite carriers to retransmit the stations nor curtail the availability of secondary transmissions to the public.

II. A BASIC CABLE NETWORK BENCHMARK

In this section, I explain why I use the average price of popular basic cable networks as a minimum benchmark for the compulsory license fee for all types of satelliteretransmitted stations. My approach is based on the fair market value of the satelliteretransmitted stations. In summary:

• Satellite retransmission of broadcast stations is a secondary market. Prices in such secondary markets are based on the demand for the programming given the prices and attractiveness of alternative programming. For satellite homes, the closest alternative programming is popular basic cable networks.

• Consumers value network and PBS stations and superstations at least as highly as popular basic cable networks, and watch them at least as much. As a result, satellite distributors would be willing to pay at least as much for the retransmitted network and PBS stations and superstations as they pay for the popular basic cable networks.

• The average license fee for popular basic cable networks is a good estimate of the minimum price satellite distributors pay for the programming rights to basic cable networks, rights that are comparable to the compulsory license. There is no need to adjust for extra satellite carrier distribution cost or the availability of advertising inserts in order to estimate the value of the compulsory license. The only adjustment needed is a projection to the future time period covered by the compulsory fee.

A. Prices in Secondary Programming Markets

Satellite retransmission is a secondary market for the affected stations. Secondary markets for program rights are common; examples include theatrical motion pictures sold to television networks or network TV series sold in syndication. Program prices in



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secondary markets are determined by demand in the secondary market.² This does not mean that any revenue from the secondary market has no effect on the supply of programming. Initially, the quantity and quality of the retransmitted broadcast stations, including programming decisions, depend on conditions in the primary broadcast market. However, once the secondary market is established, the station's subsequent programming decisions are affected by expected revenues from the secondary market as well as the primary market.

The secondary market demand for the retransmitted stations depends on the other alternatives available to satellite homes, the relative attractiveness of those alternatives and their prices. Basic cable networks are the closest alternative programming available to satellite homes in the white areas where network and PBS stations are retransmitted.³ Basic cable networks compete with broadcast stations retransmitted to satellite homes at the consumer level (when dish owners are choosing programming services) and at the distributor level (when satellite carriers and other distributors are selecting the programming to resell to consumers). The satellite homes choose which basic cable networks and retransmitted stations to purchase and then choose from among both sources of programs in deciding what programs to watch at a particular time.

B. Relative Values of Retransmitted Stations and Popular Basic Cable Networks

Surveys of relative attractiveness show that consumers typically value broadcast stations as highly or more highly than popular basic cable networks. For example, based on a 1993 survey that asked consumers to split a dollar figure between broadcast stations and basic

³ Stations retransmitted by cable are not alternatives to network and PBS stations retransmitted to satellite homes. Satellite carriers are permitted to retransmit network and PBS stations only to white-area homes which are unlikely to have the option of subscribing to cable. Moreover, to the extent that there is competition between cable systems and satellite services, the cable systems are likely to offer local, rather than distant, network and PBS stations. As a result, cable compulsory rates for distant signals are not relevant to any such competition. Further, negotiated rates for cable retransmitted local stations are likely to be influenced by their ability to be received over the air, a situation not applicable in white areas.



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² The only supply-side consideration in most secondary programming markets is the additional cost of distribution to the secondary market, an amount that is typically small relative to the demand-side value of the programming. The role of distribution cost in establishing programming prices in the satellite market is discussed below.

cable networks,⁴ consumers assigned a value of \$2.04 per station, on average, for stations affiliated with the three major networks, a primary PBS station and superstation WTBS versus \$1.69 per network, on average, to the five popular basic cable networks reported.⁵ (See Table 1.)

Although the highest-rated networks and stations are not necessarily those consumers value most highly in making their subscription decisions, I note that ratings for network affiliates, PBS stations and superstations are also as high or higher than popular basic cable networks. For example, in cable homes—which have a choice of basic cable networks and broadcast stations—total-day ratings for the major network affiliates, public stations and reported superstations equal or exceed the average ratings of the 12 basic cable networks with near-universal cable distribution.⁶ (See Table 2.)

Given these consumer preferences, satellite homes would likely value retransmitted broadcast stations—whether network or PBS stations or superstations—at least as highly as popular basic cable networks, and satellite distributors would likely be willing to pay at least as much for the retransmitted broadcast stations as they do for popular basic cable networks. In fact, these consumer data suggest that the retransmitted stations (and particularly the network and PBS stations) are valued more highly than popular basic cable networks.

Under the current compulsory license scheme, satellite carriers pay six cents per subscriber per month for retransmitted network and PBS stations, and 17.5 cents for superstations.⁷ In considering the fair market value of broadcast station signals, I have found no



⁴ For these purposes, it does not matter whether the survey revealed the amount consumers were willing to pay to receive local broadcast stations via cable (rather than over the air) or whether it revealed the exact value of the broadcast stations and basic cable channels. What is relevant is the relative value of each type of programming.

⁵ The average value for other basic cable networks, although not separately reported, was apparently below that of the five popular cable channels based on reported aggregate value for the two groups and the number of channels on the targeted cable systems. (Norman Hecht Research, Inc., "Cable Subscribers' Valuation of Broadcast and Cable Channels on Two Cable Systems," April, 1993.)

⁶ The table compares broadcast station viewing with that of 12 widely distributed basic cable networks because these 12 are likely to be available to the typical cable and satellite home. The same conclusion would apply to a comparison with the five popular basic cable networks included in the Hecht survey, a subset of these 12.

⁷ There is also a separate 14 cent rate for "syndex-proof" superstations.

basis that supports a lower value for network and PBS stations than for superstations. The benchmark I establish applies to all categories of broadcast signals as a minimum value.

C. The Appropriate Price for Use as a Benchmark

Because the compulsory fee at issue here covers only the right to retransmit broadcast station programming and not the actual retransmission of the signals (which is performed by the satellite carriers), the benchmark basic cable network price for purposes of this analysis should also cover programming rights and not the distribution of the basic cable networks to satellite homes. An estimate of such a benchmark price exists. When basic cable networks sell to satellite distributors, the networks incur extra costs of distribution and pass on these extra costs to the satellite distributors. The price to satellite distributors before these (and any other) extra costs is approximately the same as the price to cable operators.⁸

Satellite carriers have subscriber volumes in the range of an average-size cable operator.⁹ Thus, an estimate of the satellite distributor price for the basic cable programming rights should be based on the average price of the basic cable networks which principally reflects the price charged to average-size cable operators, and not the top-of-the-rate-card price paid by small cable operators.

Moreover, the extra cost of basic cable network distribution to satellite homes is similar to the cost of retransmitting broadcast stations to satellite homes.¹⁰ Thus, if the compulsory fee for satellite retransmission rights were set at the average basic cable network





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⁸ The 1992 Cable Act prohibits discrimination by vertically integrated cable networks; that is, it prohibits different prices other than those due to differences in costs or volume. Satellite distributors complained that they were being charged discriminatorily high prices but the FCC recognized that pricing differentials with respect to home satellite distributors may be justified, particularly due to distribution cost differences. The FCC referred the distributors to its case-by-case complaint procedure. (FCC CS Docket No. 94-48, First Report, September 28, 1994, Par. 183.) Most of the 12 basic cable networks were vertically integrated between 1992 and 1995, and so presumably charged satellite distributors prices in excess of cable operator prices by an amount explained by cost and volume differences, including incremental satellite distribution cost.

⁹ According to CDC data, individual satellite carriers had 500,000 to two million subscribers at the end of 1995. This is equivalent to the seventh through twenty-first largest cable operator, larger than the many cable operators with far fewer subscribers but smaller than the top four operators which serve over half the cable subscribers. (*The Cable TV Financial Data Book*, 1996, pp. 10, 16 and 17.)

¹⁰ See summary of comments of satellite carriers and cable programmers, both of which are subject to the same nondiscrimination provision, concerning cost of satellite distribution. (FCC MM Docket No. 92-265, First Report and Order, April 30, 1993, Appendix C, Pars. 48-50.)

price, satellite distributors would be paying at least as much for the basic cable networks (average price plus extra charge for extra distribution cost) as for the retransmitted stations (compulsory fee plus satellite carrier distribution cost).

In establishing a benchmark price for satellite retransmission of broadcast signals, there is no need to reduce the fee satellite distributors pay for programming rights to basic cable networks to take account of advertising inserted by either the network or the distributor. First, both basic cable networks and retransmitted commercial stations contain national advertising. Any gain of extra advertising revenue due to additional measurable audience from distribution to satellite homes is already reflected in the basic cable network price. No further adjustment is necessary to pick up any value to the retransmitted stations of reaching a slightly wider audience.¹¹

Second, neither basic cable networks nor retransmitted stations typically contain advertising inserted by the satellite distributor.¹² The lack of satellite-distributor-inserted advertising on basic cable networks is unlikely to mean that satellite distributors pay lower prices for the networks. While cable operators benefit from the ability to insert advertising (which would increase their willingness to pay higher basic cable network prices), they also suffer from the requirement to provide expensive cable system capacity in order to distribute the basic cable network (which would reduce their willingness to pay). On balance, cable operators likely have a higher net cost of distributing a basic cable network to consumers than satellite distributors do.

¹² This may be changing in both cases. Earlier this year Direct Broadcast Satellite operators were negotiating to insert their own national advertising in the "local" advertising availabilities provided by basic cable networks. (*Cable TV Programming*, February 29, 1996, p. 1.) In addition, I understand that one satellite carrier is permitted to insert its own ads on WRAL and WNBC in return for sharing the ad revenue with the stations.



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¹¹ Basic cable networks that have not yet achieved widespread cable penetration offer lower, promotional prices because of the value of additional audiences to sell to their advertisers and the reputational value of increased carriage. For the same reason, the price for Fox Net, the basic cable network version of Fox network programming for areas with no local Fox affiliate, is likely to be promotional. Promotional prices are not a good benchmark for the compulsory rate. Setting a fee based on regular prices rather than promotional prices will not discourage broadcast stations that want to expand distribution via satellite because they are free to negotiate rates below the compulsory level. Therefore, new and growing networks (and FoxNet) are not included in the basic cable network benchmark used here.

If basic cable networks were not prohibited from charging differential prices based on the costs and benefits to the distributor of carrying the network, they would charge higher prices to satellite distributors.¹³

D. The Benchmark Cable Network Price

Taking all these factors into account, I have calculated a basic cable network benchmark price and used it to estimate a minimum compulsory fee for satellite-retransmitted broadcast stations. The average license fee of the 12 popular basic cable networks was 18 cents in 1992¹⁴—when the maximum satellite compulsory rate was 17.5 cents—and has risen to 24 cents in 1995, an annual increase of ten percent per year.¹⁵ (See Table 3.) The license fees for these 12 basic cable networks are forecast to increase to an average of 26 cents in 1997, 27 cents in 1998 and 28 cents in 1999.¹⁶ This suggests that the compulsory rate for satellite-retransmitted stations should increase at least correspondingly with the average prices for basic cable networks, to average at least 27 cents in the 1997-99 period. The amount satellite distributors pay for popular basic cable networks is a minimum benchmark, not adjusted for the extra value of the retransmitted stations relative to basic cable networks.



¹³ For example, vertically integrated cable programmers wanted to claim that satellite distributors had lower costs in order to justify higher prices for satellite distributors. The FCC recognized that satellite distributor costs might be lower than cable operator costs but did not allow this type of cost justification. (FCC MM Docket No. 92-265, First Report and Order, April 30, 1993, Par. 107.)

¹⁴ While the 18 cent rate is similar to the rate the Arbitration Panel cited in its March 2, 1992 decision, the two numbers were calculated in different ways. The primary difference is the number of basic cable networks included. The Panel number is the average license fees for four basic cable networks (TNT, Nickelodeon, USA and A&E) in 1993, less an estimated five cents for the value of insertable advertising. The number shown on Table 3 is the average for 12 basic cable networks (the four used by the Panel plus eight others) in 1992, with no deduction for insertable advertising as explained above. In addition, average license fee data in Table 3 are calculated based on paying subscribers, rather than all reported subscribers which were apparently used in the calculation cited by the Panel.

¹⁵ The average price for the five popular basic cable networks included in the Hecht survey was somewhat higher but increased at the same rate: from 24 cents per subscriber per month in 1992 to 31 cents in 1995, an annual increase of ten percent.

¹⁶ The 1998 and 1999 forecast is based on the projected annual growth rate for all basic cable network license fees per subscriber per month between 1997 and 1999, about five percent per year. In prior years (i.e., 1992 to 1997) the average annual growth rate in license fees for the 12 popular basic cable networks was approximately the same as for all basic cable networks. (*Cable TV Programming*, September 30, 1994, p. 2, September 30, 1995, p. 2, and September 30, 1996, p.2.)

III. IMPACT OF HIGHER FEES ON SATELLITE CARRIERS AND AVAILABILITY OF SECONDARY TRANSMISSIONS

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In addition to the factors I considered in determining the basic cable network minimum benchmark, the statute establishing the compulsory license for satellite retransmission of broadcast signals lists other factors to consider in looking at fair market value. In particular, the statute mentions the impact of the fees on satellite carriers and on the continued availability of secondary transmission to the public. In this section, I show why the increase in the compulsory fee to an average of 27 cents in 1997-99 is unlikely to harm satellite carriers or restrict the availability of secondary transmissions. In summary:

• The growth in the number of satellite homes has been, and will continue to be, an important influence on satellite carriers and their retransmission of broadcast stations, and on satellite distributors and their carriage of basic cable networks. Because of this growth, neither the May 1992 increase in the compulsory fee, nor the 1992-95 increase in license fees for popular basic cable networks, had any significant adverse effect on satellite carriers or consumers. Similarly, because of expected growth, an increase in the compulsory license fee to the level set by the basic cable network benchmark should have no significant adverse effect on the continued willingness of satellite carriers to retransmit broadcast signals and on their continued ability to profit from these retransmissions.

• An increase in the network and PBS compulsory license fee to the general rate level would have no significant adverse effect on satellite carriers or consumers. Retail prices of popular basic cable networks are similar to those of retransmitted network and PBS stations, despite the license fee differences. Further, expansion of network and PBS station transmissions, and other transmissions with limited audiences, shows that no special discount is needed to account for the limited size of the white areas.

A. Growth in Satellite Homes, Retransmissions and Profits

An increase in the compulsory license fee should not slow the rapid growth of the satellite industry. The number of satellite subscribers has grown rapidly since 1989, when the satellite compulsory rate was first established, and it is expected to continue to grow through



1999, the end of the compulsory rate period. (See Table 4.) Initially, the growth was spurred by better encryption technology, which served to convert more C-Band dish owners into subscribers. More recently, the growth was due to the establishment of direct broadcast satellites (DBS) such as PrimeStar, DirecTV and Echostar. In the future, the number of DBS subscribers is expected to continue its rapid growth, while the number of C-Band subscribers declines slightly. This growth has thus more than offset any negative impact of the increase in satellite compulsory rates in May 1992 and basic cable license fees between 1992 and 1995. It is likely also to overwhelm any adverse effects from an increase in compulsory rates to 27 cents in 1997-99.

The May 1992 increase in compulsory satellite license fees had no apparent adverse effect on the availability of secondary transmissions. There were no changes in the number of stations retransmitted to satellite homes in the second half of 1992 or the first half of 1993. (See Table 5.) Further, the number of subscribers to retransmitted stations increased commensurately with satellite homes in 1992 and 1993. (See Table 6.) Moreover, the May 1992 increase in fees apparently had no adverse effect on satellite carriers. United Video Satellite Group, the parent of UVTV (a carrier of retransmitted stations to cable and satellite homes) and Superstar (a distributor of retransmitted stations and cable networks to satellite homes), reported increased sales and operating profits for both these divisions. (See Table 7.)

Similarly, the increase in the satellite distributors' programming rights cost for the 12 popular basic cable networks between 1992 and 1995 had no apparent adverse impact on their availability to satellite homes. All these basic cable networks were available to satellite homes throughout the 1992-1995 period¹⁷ and their subscribers grew due to the rollout of DBS service. Further, while United Video reports that programming costs accounted for an increased portion of Superstar's revenue between 1992 and 1994, it also reports increased profits due to increases in subscribers.¹⁸ Forecasts of future increases in basic cable network prices have not

¹⁸ United Video Satellite Group, SEC Form 10-K, 1994 (from Disclosure).



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¹⁷ If anything, they are more widely available today since they are included in more popular packages. For example, today these 12 networks are included in Netlink's "One Stop", Primetime 24's "AmericaPak" and Superstar's "SuperView" but in 1991 Netlink offered only ten of these networks, Primetime 24 only six and Superstar only nine. (*Orbit*, September 1996 and March 1991.)

diminished forecasts of future growth in satellite homes and basic cable network subscribers among satellite homes.¹⁹ This suggests that a similar increase in compulsory satellite retransmission fees would not hurt the carriers or the availability of secondary retransmissions.

B. The Network and PBS Station Rate

An increase in the compulsory rate for retransmitted network and PBS stations to equal the general rate is consistent with an approach that sets license fees based on fair market value and would not unreasonably burden satellite carriers or curtail retransmissions. Despite the difference between the compulsory rate (6 cents) and license fees for the 12 popular basic cable networks (average of 24 cents in 1995), the retail prices of retransmitted network and PBS stations are not substantially lower than the retail prices for those basic cable networks. Satellite distributors generally offer consumers various program packages made up of different combinations of cable networks and broadcast signals. The "create-your-own" package option offered by National Programming Service (NPS) allows a focused comparison on these particular basic cable networks and retransmitted stations: NPS charges \$11.75 for the 12 basic cable networks included in my benchmark calculation (98 cents each)²⁰ and \$3.45 to \$3.60 (86 to 90 cents each) for the three network stations and one PBS station. (See Table 8.) Other satellite distributors sell the retransmitted network and PBS stations in broadcast station packages at prices ranging from 70 cents to \$1.10 per station.²¹ Superstar puts the 12 popular basic cable networks on an equal plane with the retransmitted network and PBS stations in its create-your-own package, which allows subscribers to choose any 12 of these (and other)

²¹ Package prices range from \$3.50 to \$5.50 for the Denver 5 (three network, one PBS and one independent station) and from \$3.99 to \$5.00 for four network stations and one PBS station. Data are based on monthly prices supplied by DirecTV, Echostar, PrimeStar, Turner Home Satellite, Disney Channel Home Satellite Services, Superstar Satellite Entertainment, Showtime Satellite Services and Netlink over the telephone in late August and early September, 1996.



¹⁹ Paul Kagan Associates forecast both a five percent annual increase in basic cable license fees per subscriber between 1995 and 1999 and a more than doubling of satellite homes in the same period. (See sources on Table 3 and 4.) In addition, Kagan increased its forecast for the basic cable network sector due to the expansion of the new video delivery technologies including Direct Broadcast Satellite. (*Cable TV Programming*, July 31, 1995, p. 1 and September 30, 1995, p. 1.)

²⁰ Six additional basic cable networks (History, CNNi, VH1, The Learning Channel, Outdoor and Sci-Fi) are included for the same price. These channels are not included in the average.

channels for \$12.50.22

One possible argument for having a lower compulsory license fee for network and PBS stations is that the satellite carriers are permitted to retransmit these signals only to white areas. I conclude that it would not be appropriate to discount the compulsory fee to take account of the white-area limitation on retransmission. Current rates are so low compared to demand that satellite carriers increased the number of network signals uplinked (e.g., the addition of Prime Time West) and the number of uplinkers for the same station (e.g., Netlink and Primetime 24 both uplinking the PBS station KRMA) despite the increase in their fixed uplinking cost to do so. (See Tables 5 and 5A.)

Moreover, limited DBS subscribership is not associated with low programming rights fees relative to retail prices. Other optional satellite services that are chosen by only a portion of DBS subscribers, like premium cable networks and pay-per-view services, have higher license fees relative to their retail prices than retransmitted network and PBS signals. For example, Morgan Stanley estimates DirecTV's and Echostar's pay-per-view programming expenses at 50 percent or more of retail revenues and their premium programming expenses at 60 percent of retail revenues.²³ In contrast, the minimum benchmark fee I suggest for the retransmitted network and PBS stations is only about 30 percent of current retail prices. (See Tables 3 and 8.)

Further, the number of white-area subscribers is not so small when compared to the total number of cable and satellite subscribers obtained by long-carried "regional"



²² The 12 popular cable networks and retransmitted network, PBS and independent stations are also offered in larger packages containing other, less popular cable networks, at prices that average out to 40 to 55 cents per network. For example, Netlink's One Stop provides 43 channels for \$19.50 (45 cents each) for white-area homes or 37 channels for \$19.50 (53 cents each) for homes not receiving the retransmitted network and PBS stations and Fox Net. (Ads in *Orbit*, September 1996.)

²³ Morgan Stanley & Co., Cable Television Metamorphosis—The Arrival of DBS and RBOC Competition, September 15, 1995, pp. 25 and 35.

superstation WSBK. In 1995, both WSBK²⁴ and satellite-retransmitted PBS stations had 1.2 million subscribers. (See Table 6.)²⁵

In addition, white-area subscribers are projected to continue to grow as DBS service gains more subscribers in rural, noncabled areas. For example, Morgan Stanley estimated that about one-third of the homes in noncabled areas were C-Band or DBS home satellite subscribers (2.8 million subscribers) in 1995 and projected this penetration to rise to about half of the homes (4.4 million subscribers) by 1999. Accordingly, Morgan Stanley also projected that DirecTV's subscribers (which it expects to account for much of this increased penetration of noncabled areas) to retransmitted network stations would grow proportionately with DirecTV's total subscribers.²⁶ That is, as the number of DBS subscribers in white areas increases due to lower equipment prices and enhanced service offerings, more white-area homes will subscribe to retransmitted network and PBS stations.²⁷

For all these reasons, an increase in the compulsory rate for retransmitted network and PBS stations, as well as superstations, to at least an average of 27 cents for the 1997-99 period is consistent with the statutory fair-market-value criteria.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief.

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²⁴ Cablevision, June 5, 1995, p. 53.

²⁵ The subscribers to retransmitted PBS and network stations shown on Table 6 may include "illegal" subscribers outside white areas. Estimates of white-area households made in 1987-88 were about 800,000 to 1 million. (FCC GEN. Docket No. 86-336, Second Report, March 11, 1988, Par. 64 and footnote 41.)

²⁶ Cable Television Metamorphosis, pp. 83 and 86.

²⁷ If all current "illegal" subscribers were dropped, the total number of subscribers to retransmitted network and PBS stations might well decrease from current levels despite the increase in white-area subscribers.

AVERAGE TOTAL-DAY RATINGS In Cable Homes <1 1992-1995

					Average
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	. <u>1992-95</u>
12 Popular Cable Networks					
A&E <2	0.47	0.57	0.75	0.70	0.62
CNN	0.68	0.58	0.60	0.93	0.70
DSC <2	0.58	0.55	0.55	0.63	0.58
ESPN	0.83	0.80	0.75	0.79	0.79
FAM	0.63	0.63	0.55	0.60	0.60
HNews	0.35	0.33	0.30	0.31	0.32
Life <2	0.63	0.65	0.65	0.84	0.69
MTV	0.48	0.50	0.53	0.48	0.50
Nick <2	1.10	1.08	1.00	1.46	1.16
TNN <2	0.55	0.53	0.50	0.50	0.52
TNT	0.98	0.95	0.90	1.03	0.96
USA	1.20	1.13	1.10	1.10	1.13
Average	0.71	0.69	0.68	0.78	0.71
Broadcast Stations					
ABC	4.65	5.07	4.89	4.41	4.76
CBS	4.96	5.07	4.89	4.10	4.76
NBC	4.96	4.44	4.56	4.41	4.59
PBS	0.77	0.89	1.07	0.83	0.89
WTBS	1.38	1.35	1.25	1.18	1.29
WGN <3	0.70	0.73	0.60	0.60	0.66
Average	2.91	2.93	2.88	2.59	2.82

1> Each cable network and superstation is rated in its own cable universe, broadcast network and PBS stations are rated in all cable homes.

2> Less than 24-hour day, e.g. 8am-4am.

3> The first and second quarters of 1992 and the first quarter of 1995 are not available.

Source:

Cable (except WGN): Cable TV Programming, December 20, 1995, p. 6 and February 29, 1996, p. 11.

Broadcast: Cable TV Facts, 1993, p. 22; 1994, p. 20; 1995, p. 20; 1996, p. 15. WGN: Cable TV Programming, Day Part Ratings Averages, various issues.

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Average Allocation For Individual Broadcast Stations and Basic Cable Networks

Broadcast Stations

Basic Cable Networks

Note: Includes primary ABC, CBS and NBC network and PBS stations in survey.

Source: Norman Hecht Research, Inc., Cable Subscribers' Valuation of Broadcast and Cable Channels on Two Cable Systems, April 1993, p. 8.

AVERAGE LICENSE FEE PER SUBSCRIBER PER MONTH 12 POPULAR BASIC CABLE NETWORKS 1992-1995, 1997-1999

									Forecast	
	-	992	<u>1</u>	<u>993</u>	1	<u>994</u>	<u>1995</u>	<u>1997</u>	<u>1998 <1</u>	<u>1999 <1</u>
A&E	\$	0.09	\$	0.12	\$	0.12	\$ 0.16	\$ 0.17		
CNN & HN		0.27		0.31		0.35	0.36	0.37		
Discovery		0.11		0.11		0.13	0.14	0.17		
ESPN		0.53		0.58		0.65	0.67	0.68		
FAM		0.08		0.10		0.11	0.12	0.14		
Lifetime		0.08		0.09		0.10	0.11	0.12		
MTV		0.12		0.13		0.14	0.15	0.18		
Nickelodeon		0.14		0.15		0.17	0.19	0.23		
TNN		0.11		0.13		0.14	0.15	0.16		
TNT		0.40		0.45		0.46	0.51	0.54		
USA		0.22		0.24		0.26	0.31	0.35		
Average <2	\$	0.18	\$	0.20	\$	0.22	\$ 0.24	\$ 0.26	\$ 0.27	\$ 0.28

Annualized Percent Change 1992-95

10%

Note: Networks were selected based on 1992 to 1995 cable penetration of 90 percent or greater with the exception of Headline News (83 percent penetration in 1992), which was included because the combined CNN/HN license fee is reported. See *Cable TV Programming*, February 29, 1996, p. 6.

License fees were computed based on average subscribers for the year adjusted for an estimated 8 percent of subscribers reported as illegal (nonpaying). See *Cable TV Programming*. September 30, 1995, p. 5.

- 1> 1998 and 1999 forecast is based on the projected annual growth for all basic network license fees per subscriber per month between 1997 and 1999 of 4.7 percent per year. See *Cable TV Programming*. September 30, 1995, p. 2.
- 2> Sum of the license fees divided by 12. i.e., CNN and Headline News are counted as two services in computing the average, although they are sold to satellite distributors and consumers together. If CNN and Headline News were counted as one service in computing the average (so that the sum of the license fees were divided by 11), the average license fee would be slightly higher.

Source:

License Fees: 1992-94: Kagan's Economics of Basic Cable Networks, 1996. 1995, 1997: Cable TV Programming, September 30, 1996, p. 2. Subscribers: 1992-94: Kagan's Economics of Basic Cable Networks, 1996. 1995-97: Cable TV Programming, February 29, 1996, p. 4.

DIRECT BROADCAST SATELLITE AND C-BAND HOME SATELLITE SUBSCRIBERS 1989-1999

	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u> .	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
						(000)					
DBS	nr	nr	nr	nr	<70	602	2,200	4,800	7,100	9,000	10,500
C-Band	640	720	764	1,023	1,612	2,178	2,500	2,400	2,200	2,000	1,900
Total	640	720	764	1,023	1,682	2,780	4,700	7,200	9,300	11,000	12,400

nr = not reported

Source:

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1989-90: The Kagan Media Index, July 31, 1996, p. 14.

1991-94: FCC, Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, December 11, 1995, Table G-1.

1995-99: DBS: The Kagan Media Index, August 31, 1996, p. 2.

C-band: The DBS Report, August 11, 1995, p. 2.

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SATELLITE RETRANSMITTED STATIONS 1989-1995

Туре	Station	<u>1989-1</u>	<u>1989-2</u>	<u>1990-1</u>	<u>1990-2</u>	<u>1991-1</u>	<u> 1991-2</u>	<u> 1992-1</u>	<u>1992-2</u>	<u>1993-1</u>	<u>1993-2</u>	<u>1994-1</u>	<u>1994-2</u>	<u>1995-1</u>	<u>1995-2</u>
Independent	KTLA	х	x	х	х	х	х	x	х	х	х	х	х	х	Х
•	WGN	х	х	х	х	х	х	Х	Х	х	х	х	х	х	X
	WPIX	х	х	х	х	х	х	Х	х	х	х	х	х	х	Х
	KTVT <i< td=""><td>х</td><td>х</td><td>х</td><td>х</td><td>х</td><td>х</td><td>Х</td><td>х</td><td>х</td><td>х</td><td>x</td><td>X</td><td></td><td></td></i<>	х	х	х	х	х	х	Х	х	х	х	x	X		
	WSBK	х	х	х	х	х	Х	х	Х	X	х	X	X	x	X
	WWOR	х	х	х	х	х	Х	Х	х	х	х	X	X	X	X
	WTBS	х	х	х	х	х	х	х	х	х	X	X	X	X	x
	KWGN	х	х	х	Х	х	х	х	х	x	х	х	х	х	Х
ABC Network	KUSA	x	х	х	х	х	х	x	x	х	х	х	Х	х	х
	WABC	х	х	х	х	х	х	х	х	х	х	х	Х	Х	х
	WPLG											х	х	х	Х
	КОМО												х	х	Х
CBS Network	KMGH	х	x	x	x	х	x	х	х	х	x	x	х	х	х
000111111	WBBM/WRAL<2	х	х	х	х	х	х	Х	Х	х	х	х	х	х	х
	WUSA											х	х	X	X
	кріх												х	х	х
NBC Network	KCNC	х	х	x	x	x	х	x	х	х	х	х	х	х	х
1.001.00	WXIA/WNBC<3	х	х	х	х	х	х	Х	х	х	х	Х	х	х	х
	WBZ/WHDH<4											х	х	х	х
	KNBC												х	х	х
PBS	KRMA	х	х	x	х	х	х	x	x	x	х	x	х	х	х
105	WIIYY						х	x	х	х	х	х	х	Х	Х
Eav	KTVH				x	x	х	x	x	х		x	x	x	x
POX -	KDVR	х										х	х	х	х
	WFLD												x	x	х
Total number of stat	ions	16	15	15	16	16	17	17	17	17	16	21	25	24	24

1> Station dropped when switched from independent to network affiliate in 1995. See United Video Satellite Group, SEC Form 10-K, 1993 (from Disclosure).

2> Switched in 1992-1 from WBBM to WRAL.

3> Switched in 1995-2 from WXIA to WNBC.

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4> WHDH was substituted for WBZ in 1995-1 when WBZ dropped its NBC affiliation and WHDH picked it up. See NAB, Market-by-Market Review, 1995.

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CARRIERS OF SATELLITE RETRANSMITTED STATIONS 1989-1995

		First	Time	Period	Second	Tir	ne Period	Third	Tin	e Period
Type	Station	<u>Carrier</u>	From	To	Canier	From	10	Carrier	From	To
Independent	KTLA	UVTV	89-1	95-7	PrimeStar	00.2	02.2			_
	WGN	UVTV	89-1	95.2	Drimetra	90-2	95-2			
	WPIX	TIVIV	89-1	95-2	Delineretar	90-2	94-1	Netlink	89-1	91-2
	KIVI		80-1	01.2	rnnestar	90-2	94-1			
	WSBK	FMI	80-1	05.3	D	0 H 0				
	WWOR	EMI	80-1	93- <u>2</u> 05 2	PrimeStar	90-2	93-1			
	WIRS	ccc	90.1	9J-2 05 2	PrimeStar	90-2	93-1			
	KWCN	Notink	09-1 90 1	93-2	PrimeStar	90-2	95-2	DirecTV	94-1	95-2
	KWCM	INCOME	89-1	95-2						
ABC Network	KUSA	Netlink	89-1	95-2						
	WABC	Primetime 24	89-1	95-2						. ·
	WPLG	Netlink	94-1	95-2	PrimeStar	94-1	05.2			
	КОМО	Primetime 24	94-2	95-2	- micolin	74-1	73-2			
CBS Network	KMGH	Netlink	89-1	95-2						
	WBBM/WRAL<2	Primetime 24	89-1	05.2				``		
	WUSA	Netlink	94-1	95-2	Driver	04.1				
	KPIX	Primetime 24	94-7	05.2	rimestar	94-1	95-2			
		T tanetine 24	74-2	93-2						
NBC Network	KCNC	Netlink	89-1	95-2						
	WXIA/WNBC<3	Primetime 24	89-1	95-2						
	WBZ/WHDH<4	Netlink	94-1	95-2	PrimeStar	94-1	95.2			
	KNBC	Primetime 24	94-2	95-2		<i>·</i> ···	<i>yy</i> -2			
PBS	KRMA	Netlink	89-1	95-2	Drimuting 24	01.2	04.0			
	WHYY	PrimeStar	91.2	95.2	rrunetime 24	94-2	95-2			
		, micour	71-2	JJ-2						
Fox	κτνυ	PrimeStar	90-2	95-2 < 5						
	KDVR	Netlink	89-1, 94-1 < 6	95-2						
	WFLD	Primetime 24	94-2	95-2						

1' Station dropped when switched from independent to network affiliate in 1995. See United Video Satellite Group, SEC Form 10-K, 1993 (from Disclosure).

2- Switch in 1992-1 from WBBM to WRAL.

3 - Switch in 1995-2 from WXIA to WNBC.

4 - WHDH was substituted for WBZ in 1995-1 when WBZ dropped its NBC affiliation and WHDH picked it up. See NAB, Market-by-Market Review, 1995.

5 - Station not carried during 1993-2.

6 > Station carried in 1989-1 and then from 1994-1 to 1995-2.

Source: Cable Data Corporation, TVRO Systems, 1989-1995.

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TABLE 6

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AVERAGE SUBSCRIBERS SELECTED SATELLITE RETRANSMITTED STATIONS AND TOTAL HOME SATELLITE 1989-1995

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				Total Home Satellite	As A Percer	it of Total He	ome Satellite
	<u>PBS <1</u>	<u>ABC <2</u>	<u>WTBS</u>	Subscribers	PBS	<u>ABC</u>	WTBS
1989	89.392	146,678	278,369	520,000	17%	28%	54%
1990	149,211	252,556	414,043	680,000	22%	37%	61%
1991	197,317	351,417	526,394	742,000	27%	47%	71%
1992	284,516	548,170	708,399	893,500	32%	61%	79%
1993	433,189	944,331	1,161,320	1,352,500	32%	70%	86%
1994	597,365	1,505,890	1,787,226	2,231,000	27%	67%	80%
1995	1,173,278	2,465,599	3,088,304	3,740,000	31%	66%	83%

1> KRMA and WHYY.2> KUSA. KOMO, WABC and WPLG.

Source:

Retransmitted Stations: Table 6A. Home Satellite: Table 4.

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SUBSCRIBERS TO SELECTED SATELLITE RESTRANSMITTED STATIONS 1989-1995

		PBS				ABC				WTBS	
	NetLink	Primetime 24	PrimeStar	NetLink	NetLink	Primetime 24	Primetime 24	PrimeStar	PrimeStar	DirecTV	SSS
	<u>KRMA</u>	KRMA	<u>WHYY</u>	<u>KUSA</u>	<u>WPLG</u>	<u>KOMO</u>	<u>WABC</u>	<u>WPLG</u>			
1989-1	71,617			71,617			49,989				236,606
1989-2	107,167			94,911			76,839				320,132
1990-1	135,033			122,244			102,772				383,179
1990-2	163,389			150,683			129,411		121		444,786
1991-1	181,311			168,944			150,628		2,021		497,060
1991-2	206,706		6,617	195,767			187,494		8,192		545,517
1992-1	235,996		22,029	232,350			255,446		22,316		615,982
1992-2	273.628		37,379	275,442			333,103		37,380		741,120
1993-1	335.417		52,184	341,592			474,472		52,183		956,520
1993-2	415.369		63,408	427,869			644,728		63,407		1,250,529
1994-1	475.606		63,148	481,878	19,783		788,639	7,758	69,154	736	1,500,298
1994-2	536.314	26.053	93,610	525,522	107,292	37,936	949,342	93,631	141,821	97,867	1,764,576
1995-1	564.058	186.136	249.337	531,400	174,733	137,028	1,153,022	251,092	373,720	440,861	1,900,149
1995-2	562,431	346,511	438,084	521,514	194,478	202,881	1,327,581	437,469	740,232	768,439	1,953,207

Note: Subscribers except PrimeStar are calculated as the total dollars divided by 6 months divided by the rate for the station (3 cents for network and PBS stations or 12 cents for independent stations (WTBS) prior to 5/1/92 and 6 cents for network and PBS stations or 14 cents for syndex-proof independent stations (WTBS) after 5/1/92. Calculations for the first half of 1992 use the old rate for 4 months and the new rate for 2 months.

Source:

Cable Data Corporation, TVRO Systems 1989-1995.

CRT, 1991 Satellite Carrier Rate Adjustment Proceeding, in Federal Register, May 1, 1992, p. 19052 and WHYY subscribers: PrimeStar Partners Statement of Account for Secondary Transmissions by Satellite Carriers for Private Home Viewing for the periods 1991-2 to 1992-1 and 1993-1 to 1995-2.

UNITED VIDEO SATELLITE GROUP Superstar and UVTV Financial Data 1991-1995

	<u>1991</u>	<u>1992</u>	<u>1993</u> (\$000)	<u>1994</u>	<u>1995</u>
Superstar:			(0000)		
Revenues	\$ 16,900	\$ 25,200	\$ 65,517	\$ 134,905	\$ 166,306
Operating Expenses <1	16,400	23,500	61,785	121,682	144,671
EBITDA <2	500	1,700	3,732	13,223	21,635
Depreciation & Amortization			703	1,099	1,524
Operating Income			\$ 3,029	\$ 12,124	\$ 20,111
EBITDA Margin Percent	3%	7%	6%	10%	13%
Operating Margin Percent			5%	9%	12%
<u>UVTV:</u>					
Revenues	\$ 19,100	\$ 21,200	\$ 21,474	\$ 22,873	\$.26,572
Operating Expenses <1	10,895	9,900	8,451	8,761	10,983
EBITDA <2	8,205	11,300	13,023	14,112	15,589
Depreciation & Amortization			2,634	2,471	2,447
Operating Income			\$ 10,389	\$ 11,641	\$ 13,142
EBITDA Margin Percent	43%	53%	61%	62%	59%
Operating Margin Percent			48%	51%	49%

1> Before depreciation and amortization.

2> Earnings before interest, taxes, depreciation and amortization. .

Source:

1991-92: United Video Satellite Group, SEC Form 10-K, 1993 (from Disclosure). 1993-95: United Video Satellite Group, SEC Form 10-K, 1995, pp. 29-30.

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TABLE 8

PRICES CHARGED BY NATIONAL PROGRAMMING SERVICE (NPS) FOR 12 POPULAR CABLE NETWORKS AND RETRANSMITTED NETWORK AND PBS STATIONS

	Mo	nthly		
	<u>R</u>	ate	A	Average
12 Popular Cable Networks				
A&E <1	\$	0.95		
CNN/HN <2		1.35		
DISC		0.40		
ESPN		2.00		
FAM		0.60		
LIFE		0.65		
MTV <3		1.50		
NICK <4		1.25		
TNN		0.65		
TNT		1.40		
USA <5		1.00		
Total	\$	11.75	\$	0.98

Retransmitted Network and PBS Stations

Denver 3 (ABC, CBS, NBC)	\$ 2.50	
PBS (KRMA)	0.95	
Total	\$ 3.45	\$ 0.86
PT24 East (ABC, CBS, NBC)	\$ 2.65	
PBS (KRMA)	0.95	
Total	\$ 3.60	\$ 0.90

Note: Monthly rate requires purchase of a minimum of five services.

1> Includes History.

2> Includes CNN International.

3> Includes VH1,TLC, Outdoor Channel.

4> Includes TLC, Outdoor Channel.

5> Includes Sci-Fi.

Source: National Programming Service, Entertainment Price Guide, pp. 8-9.



ATTACHMENT A

STATEMENT OF QUALIFICATIONS OF LINDA McLAUGHLIN

Linda McLaughlin is an economist and Vice President at National Economic Research Associates, Inc. (NERA), a firm of consulting economists.

She received a Bachelor of Science degree in Mathematics, cum laude, from Marquette University in 1968 and a Master's degree in Economics from the University of Pennsylvania in 1970. While studying at the University of Pennsylvania, she completed all Doctoral course requirements and written examinations and was awarded a teaching assistantship for the 1969-1970 academic year.

From 1970 to 1974 she was employed as an Instructor in Economics at Hofstra University where she taught courses in introductory economics, microeconomic theory and the application of mathematics to economics.

Since joining NERA in 1974, she has worked extensively on antitrust and trade regulation matters. She has investigated the dimensions of product and geographic markets, market structure and performance, the impact on competition of various mergers and acquisitions, vertical and horizontal arrangements and other trade practices in a variety of consumer and producer industries.

Ms. McLaughlin has performed a number of economic analyses of electronic and print media. In the antitrust area, these include the competitive effect of horizontal mergers

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LINDA MCLAUGHLIN

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between cable system operators, home video distributors and programming rights owners; of vertical mergers between motion picture producer-distributors and cable programmers and between cable programmers and system operators; of music rights society practices in licensing local stations and cable programmers; and of changes in newspaper and magazine distribution. She has also undertaken price-cost studies in connection with allegations of predatory pricing by cable system operators and newspaper publishers. In the regulatory area, Ms. McLaughlin has evaluated existing and proposed FCC rules concerning ownership of television stations in adjacent markets, broadcast network financial interest and syndication, the broadcast network-affiliate relationship, cable rate regulation, access to cable programming and media competition. She has also analyzed the effect of restrictions on local telephone companies in connection with their ownership interests in cable programmers and operators. Further, she has analyzed the future demand for, and cost of, satellite pay-per-view ventures and cable television franchises.

In the area of insurance, she has analyzed proposed changes in the antitrust exemption, the so-called crises in liability and auto insurance, the effect of various regulatory mechanisms and the impact of changes in distribution.

In addition, Ms. McLaughlin has worked extensively in the area of impact and damages in connection with antitrust, contract, environmental and other litigation. She has prepared affirmative damage estimates on behalf of both plaintiffs and defendants, as well as analyses of damage studies performed by others. The firms involved in these analyses include manufacturers of photographic supplies, consumer electronic products, fertilizers, paint, windows and pharmaceutical products and distributors of chemicals, steel, cellular phones and emergency lighting equipment.



LIST OF TESTIMONY, REPORTS AND PUBLICATIONS

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Mississippi Chemical Corp. v. Chemical Construction Corp. et al. (S.D. Miss.), a breach of contract case.

Deposition testimony, June 1982.

East Coast Chemicals v. Exxon (Sup. Ct. N. J.), a product liability case. Damages report, June 1983; deposition testimony, June 1983.

Action Publications v. Panax Corp. et al. (W.D. Mich.), an antitrust case. Deposition testimony, June 1984; trial testimony, December 1984.

Acorn Building Components, Inc. v. Norton Co.; Jeld-Wen, Inc. v. Norton Co.; and Weather Shield Mfg, Inc. v. Norton Co. (E.D. Mich., Southern Div.), product liability cases. Deposition testimony, October 1985.

James F. Chumbley, et al. v. Rockland Industries, Inc. (D. Md.), a breach of contract case. Deposition testimony, December 1985; trial testimony, January-February 1986.

Apache Corp. v. McKeen et al. (E.D.N.Y.), a RICO case. Deposition testimony, April 1987.

James M. King and Associates, Inc. v. G. D. Van Wagenen Co., et al. (D. Minn.), an antitrust case.

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LINDA MCLAUGHLIN

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With Philip A. Beutel and Howard P. Kitt, Report, October 1995, Supplemental Report, January 1996.

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Report, February 1996; deposition testimony, March 1996.

April 1996



TESTIMONY OF PAUL I. BORTZ

before the

Copyright Arbitration Royalty Panel

August 1995

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<u>Summary</u>

The purpose of my testimony is to discuss the value that cable operators placed upon different types of distant signal non-network programming during the period 1989 to 1992 -- based upon my experience and upon the 1989 and 1992 surveys of cable operators that were conducted under my supervision.

I will compare the methodology and results of our 1989 survey (about which I had testified in the 1989 cable royalty distribution proceeding) and our 1992 survey (which was conducted after release of the Copyright Royalty Tribunal's ("CRT") final determination in the 1989 proceeding). In each of the surveys, a random sample of nearly 200 Form 3 cable operators assessed the relative value of the various types of non-network programming on the distant signals that they actually carried. The cable operators were asked, among other questions, to allocate a fixed dollar amount (a program budget) to each of the program categories. As in the royalty distribution proceedings, an increased allocation to one category could be made only at the expense of another category.

•	Percentage	Allocated
	1989	1992
Live professional and college team sports	34.2%	38.8%
Movies	31.2	25.6
Syndicated shows, series and specials	16.9	16.0
News and public affairs programs	11.8	12.4
Devotional and religious programming	4.3	3.9
PBS and all other public TV programming	1.3	3.0
Canadian programming	0.2	0.3
Total	99.9%*	100.0%

The surveys show that cable operators would have allocated their distant signal program budgets as follows:

*Does not equal 100 percent due to rounding.

In my testimony, I will discuss the factors that cable operators consider when evaluating different kinds of programming, including distant signal programming. I will also explain the role of survey research in ascertaining program value and describe how the 1989 and 1992 cable operator studies were conducted. In particular, I will highlight the ways in which the 1992 study responded to concerns expressed by the CRT regarding the 1989 and prior cable operator surveys. Finally, I will compare the results of the two studies with my experience in the industry and with the viewing concept advanced by the Motion Picture Association of America in the cable distribution proceedings. Based upon my experience and the surveys I am sponsoring, it is my opinion that:

- Throughout the period 1989 to 1992, cable operators valued live professional and collegiate sports programming more highly than any other type of distant signal programming;
- Between 1989 and 1992 cable operators attached an increasingly greater value to distant signal sports programming than to distant signal movies, with the gap between the two categories rising from three percentage points in 1989 to thirteen percentage points in 1992; and
- In a free market absent compulsory licensing, cable operators would have spent in excess of one-third of their 1989 to 1992 distant signal program budgets on sports programming.

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TESTIMONY OF PAUL I. BORTZ

I am presenting this testimony on behalf of the Joint Sports Claimants in the 1990-92 cable royalty distribution proceeding.

I. Experience With the Television Industry and Program Valuation Issues

I am President of Bortz & Company, Inc. Bortz & Company is an economic, financial and market consulting firm serving clients in the media, sports and entertainment industries -- with particular emphasis on the cable television and broadcasting industries. Prior to founding Bortz & Company in August 1988, I was a managing director of Browne, Bortz & Coddington, Inc. (BBC) and oversaw the telecommunications practice at that firm. Prior to joining BBC in 1979, I was Deputy Assistant Secretary of Commerce with the National Telecommunications and Information Administration. A copy of my resume is attached as Appendix A.

During the past 16 years, I have directed numerous cable, broadcasting and sports programming studies at BBC and Bortz & Company.

<u>A. Cable.</u> The cable television studies have addressed both operations and programming elements and have included economic and financial assessments, strategic planning and competitive analysis.

My research and consultation regarding programming has involved a variety of issues related to all aspects of the cable business, including the role of programming on cable television in attracting and retaining subscribers; the economic and market prospects of existing and proposed cable programming ventures; the potential value to cable operators and their subscribers of a particular program concept; the impact on individual cable system subscribership of certain cable network programming; the role of programming (including sports programming) in differentiating cable television and its existing and potential competitors; and the valuation of cable programming from subscriber and operator perspectives. My work in this area has involved numerous interviews with senior programming executives at major cable multiple system operators ("MSO"); interviews at the local cable system level; focus group research; and cable operator and subscriber survey research.

Clients I have advised on cable television matters include: Capital Cities/ABC (formerly the American Broadcasting Companies, Inc.), Citibank, N.A., Cox Communications, the Cable Television Administration and Marketing Society (CTAM), E! Entertainment Television, ESPN, Inc., Tele-Communications, Inc., Times Mirror Cable Television and The Washington Post Company.

<u>B. Broadcast</u>. My research in the broadcasting industry has focused on economic, financial, strategic planning and programming areas. Among other things, studies have addressed the effects of cable television programming on broadcast viewing and have analyzed the television program market. A study specifically addressing sports programming on television was completed for the NAB. Capital Cities/ABC, Inc. has been a retainer client since 1979. Studies have also been completed for the National Association of Broadcasters (NAB), the Television
Operator's Caucus and numerous broadcast station group owners, such as Group W Broadcasting and Landmark Communications.

<u>C. Sports</u>. The sports television market and negotiation of the sale of sports television rights have been another focal point of my research and consulting practice. I have been responsible for survey research studies regarding consumer demand for sports programming and have analyzed the economics of delivering sports programming by cable TV. I have been personally involved in negotiations for the rights to sports programming for basic and pay cable services and broadcast packages at both the national and local levels.

Clients include the National Basketball Association, the National Hockey League and several professional basketball, major league baseball and hockey franchises. Organizations assisted in the negotiation process include the National Basketball Association, National Hockey League, Golden State Warriors, New Jersey Nets, Dallas Mavericks, Denver Nuggets and St. Louis Cardinals.

II. How Cable Operators Value The Different Types of Program Services

Cable television originated in the 1950s as a "reception service," providing a means to deliver the signals of over-the-air broadcast stations to (primarily rural) areas where over-the-air reception of those signals was poor. Since the mid-1970s, however, cable television has extended its reach and captured the interest of consumers in major markets by offering a large number of channels featuring a wide variety of programming types. In addition to improved reception, the choice and variety provided by cable TV has contributed to the industry's substantial growth in market penetration. A channel lineup for a "typical" cable television system (in this case Mile High Cable Television of Denver) is presented on Table 1. The programming services typically carried and their general characteristics are described below.

Channel Station Category					
Basic	Basic Service (\$8.80 per month)				
2	KWGN	Local broadcast			
3	Program Guide	Local origination			
4	KCNC	Local broadcast (NBC)			
6	KRMA	Local broadcast (PBS)			
7	KMGH	Local broadcast (CBS)			
8	Municipal Channel	Local access			
9	KUSA	Local broadcast (ABC)			
10	KTCI	Local origination			
12	KBDI	Local broadcast (PBS)			
13	KDVR	Local broadcast (Fox)			
17	KUBD	Local broadcast			
19	KRMT	Local broadcast			
20	KTVD	Local broadcast			
22	Public Access/Mind Extension University	Local access/basic			
49	TBS	Distant signal			
50	KCEG	Local broadcast			
51	WGN	Distant signal			
53	KWHD	Local broadcast			
54	Access/All Request TV	Local access/PPV			
55	Access/All Request TV	Local access/PPV			
56	Access/City Agency	Local access			
57	Access/Denver	Local access			
58	Access/Denver	Local access			
60	Galavision	Basic			
61	The Learning Channel	Basic			

TABLE 1. CHANNEL GUIDE FOR MILE HI CABLE TELEVISION OF DENVER

TABLE 1. CHANNEL GUIDE FOR MILE HI CABLE TELEVISION OF DENVER, CONTINUED

Channel	Station	Category
Expanded	Basic (optional) (\$18.39 per monti	h)
23	The Discovery Channel	Basic
24	Black Entertainment Television	Basic
25	The Family Channel	Basic
26	CSPAN	Basic
27	fX	Basic
28	Nickelodeon	Basic
29	MTV	Basic
30	E! TV	Basic
31	VH-1/Comedy	Basic
32	Prime Sports Network	Basic
33	USA Network	Basic
34	ESPN	Basic
35	CNBC	Basic
36	BRAVO	Basic
37	Headline News	Basic
38	CNN	Basic
39	American Movie Classics	Basic
40	TNT	Basic
41	Arts & Entertainment	Basic
42	Court TV	Basic
43	Lifetime	Basic
44	The Nashville Network	Basic
45	Country Music Television	Basic
46	ESPN2	Basic
47	QVC	Basic
59	Home Shopping Network	Basic
A La Carte	e Services (optional) (\$1.75 - \$4.75	per service per month)
18	Encore	Premium
48	Starz!	Premium
Premium (Channels (optional) (\$11.95 per serv	vice per month)
1	HBO2	Premium
5	Showtime	Premium
14	HBO	Premium
16	Cinemax	Premium
21	The Disney Channel	Premium
Pay-Per-Vie	ew (optional) (\$3.99 per movie; typ	ically \$20 - \$40 events)
11		Pay-per-view
15	PPV 15	Pay-per-view
52	Spice	Pay-per-view

A. Nature of program services offered by cable. Cable system operators deliver the following types of programming services:

<u>1. Local broadcast stations</u>. Cable systems retransmit the signals of local broadcast stations -- that is, stations that are generally available in the cable system's community off-the-air. Local stations include those that are affiliated with national networks (ABC, CBS, NBC and Fox), commercial independent outlets and public stations (which generally offer Public Broadcasting Service or PBS programming). On Table 1, the local broadcast stations include KWGN, KCNC (NBC affiliate), KRMA (PBS), KMGH (CBS affiliate), KUSA (ABC affiliate), KBDI (PBS), KDVR (Fox affiliate), KUBD, KRMT, KTVD, KCEG, and KWHD.

2. Distant broadcast stations. A cable system may also retransmit the programming of a "distant signal" -- a broadcast station whose signal originates in a market that is generally more than 35 miles away. A distant signal is available overthe-air (that is, without cable) in its market of origin and is distributed to the cable system via satellite or microwave or through the aid of specialized antennas. Distant signals include any of the types of stations described above (network affiliate, commercial independent, public and in some instances Canadian stations). Certain commercial independent stations which have extensive distant signal distribution via satellite are referred to as "superstations." The most prominent of these are WTBS (originating in Atlanta), WGN (Chicago) and WWOR (New York/Secaucus, New Jersey). On Table 1, the distant signals are WTBS (carried on channel 49) and WGN (channel 51).

<u>3. "Basic cable" networks</u>. During the 1989 to 1992 period, cable system operators typically marketed a single package of programming services usually referred to as the "basic package." In addition to the local and distant broadcast signals described above, the most widely distributed programming services offered in this package (commonly known as "basic cable networks") included:

Network	Service Began	Programming Description
ESPN	1979	Live and taped sports programming and sports news
Cable News Network (CNN)	1980	24 hour news programming
USA Network	1980	General entertainment programming featuring movies and syndicated series
Discovery Channel	1985	Documentary programming featuring history, science and nature
Nickelodeon/Nick-at-Nite	1979	Children's programming, accompanied by "classic" syndicated series in evenings
TNT	1988	General entertainment programming featuring movies and sports
C-SPAN	197 9	Live and taped coverage of the U.S. House of Representatives
The Nashville Network	1983	Country music videos and other "country lifestyle" programming
MTV	1981	Music videos and related youth-oriented entertainment programming
The Family Channel	1977	Family-oriented general entertainment programming featuring movies and syndicated series
Lifetime	1984	Programming oriented toward women and featuring syndicated series and movies
Arts & Entertainment	1984	Culturally-oriented programming featuring movies

Regional sports networks which feature local professional and college sports teams and other sports programming and regional news networks may be offered as basic services or as premium services (discussed below). On Table 1 Prime Sports Network (channel 32) is a regional sports network.

The basic networks began to develop in the late 1970s and early to mid-1980s as entrepreneurs recognized the need for expanded programming choices (i.e., beyond local and distant broadcast signals and premium movie services) to encourage subscriber growth in areas where local broadcast signal reception was adequate. These networks generate revenue by charging cable systems license fees and by selling advertising. License fees range from over \$1.00 per subscriber per month for selected regional sports networks to only a few cents per subscriber (or even free) for other services. Basic cable networks typically sell approximately 80 percent of their advertising inventory on a national basis, and grant the cable system delivering the service about 20 percent of the inventory for local sale. In the aggregate, cable network revenues are divided roughly equally between license fees and advertising sales. Basic cable networks, unlike distant signals, are not available over-the-air (that is, without cable) in any market.

<u>4. Premium and pay-per-view service</u>. Cable operators also offer services which are marketed individually to consumers. Premium services (including movie-based services such as Home Box Office and Showtime as well as other services such as The Disney Channel and The Playboy Channel and in some instances regional sports networks) are offered for a separate per channel charge. Pay-per-view services generally schedule movie, event (i.e., sports, concerts, etc.) or adult programming which the customer can order on a per program basis. With the exception of regional sports networks, premium services are typically commercial free -- and are supported solely by the sale of subscriptions to consumers. On Table 1 these services include Home Box Office (Channels 1 and 14), Showtime (channel 5), Cinemax (channel 16), The Disney Channel (channel 21), Encore (channel 18), Starz! (channel 48), Request Television (channels 11 and 15) and Spice (channel 52).

<u>5. Local origination/access</u>. Many cable systems also reserve channels for locally originated programming, including programming produced by the cable system itself as well as programming created by local governments, local educational entities and community members. On Table 1 these include channels 8, 10, 22 and 54 through 58.

B. Determinants of program value. In making decisions about which services to carry, many cable operators are faced with channel capacity constraints. As shown below, in 1989 79 percent of all cable households subscribed to systems with capacity of fewer than 54 channels; in 1992 the comparable number was 65 percent:¹

Channel	Percent of Ca	ble Subscribers	
Capacity	1989	1992	
54 or more	20.6%	34.6%	
30 - 53	66.2	59.9	
Less than 30	<u> 13.2</u>	<u> </u>	
Total	100.0%	100.0%	

Table 2. Channel Capacity of Cable Systems: 1989-1992

¹Warren Publishing, Inc., <u>Television & Cable Factbook</u>, various years.

Considering the number of available program services, the supply of programming service options exceeds demand by most cable operators (i.e., as limited by capacity constraints for the majority of these systems). Moreover, cable operators must carefully weigh the cost of adding a new programming service (including actual costs as well as the opportunity cost of choosing it over other available services) against the value it may provide to the system. It is in this context that programming carriage decisions are made by cable operators. In my experience, programming carriage decisions are made based on two primary determinants of value:

- (1) <u>Ability to attract and retain subscribers</u>. Cable television systems in the aggregate derive approximately two-thirds of their revenues directly from basic (and expanded basic) subscription fees. Moreover, essentially all other available revenue sources (including premium service subscriptions, equipment rentals, installation fees, advertising and home shopping revenues) are dependent on the number of subscribers to the system. Thus, cable operators maximize revenue by attracting the largest number of subscribers within their designated franchise areas. Equally important, profitability is influenced by substantial turnover in the subscriber base (more than one-fourth of subscribers "churn" annually). Thus, retention of subscribers is also critical to operators. The value that cable operators attach to most programming depends primarily on its ability to attract and/or retain subscribers.
- (2) <u>Programming economics</u>. Programming can have substantial value if it attracts and retains subscribers, but that value is indirect. Most programming options also involve direct revenues and/or costs. Premium and pay-per-view services are the most straightforward examples. When a customer chooses to pay on the order of \$10 per month to subscribe to HBO, this income is divided (generally about equally) between the local cable systems and HBO. A similar revenue sharing arrangement exists with regard to pay-per-view programming when a subscriber purchases an individual program.

A different equation is evident for basic cable networks. Cable operators pay a per subscriber license fee to the programming service for each subscriber to which the service is available. No direct subscription revenue attributable to the services accrues to the operator. Operators do receive a portion of the advertising inventory (usually about 20 percent and not varying much across services) offered within the program service for sale in the local franchise area -- so direct revenue can be obtained in this manner. Local ad sales by cable operators are estimated to have increased from almost \$500 million in 1989 to nearly \$900 million in 1992.² (It should be noted that one category of basic services -- home shopping networks -- does not charge license fees or sell advertising and actually shares with cable systems a percentage of home shopping sales generated within the system's franchise area.)

²Paul Kagan Associates, Inc., <u>The Cable TV Financial Databook</u>, various years.

Finally, distant broadcast signals are retransmitted in return for payment of compulsory licensing copyright fees and, in some instances, a fee to satellite distributors of the signal. These signals (like basic cable networks) are typically included in the basic service package. However, for these signals no local advertising inventory is available to, and thus no direct revenue stream is obtained by, the cable operator.

These distinctions between service types are critical to understanding how programming (and in particular distant signal programming) is valued by cable operators. In contrast to essentially all other discretionary programming services which cable operators may opt to carry, distant broadcast signals do not offer the potential of a direct revenue stream. As a result, the decision to carry these signals must be predicated solely on their value in attracting and/or retaining subscribers. Likewise, the relative value of each type of programming on distant signals turns upon its ability to attract and to retain subscribers. In a free market, cable operators would pay the most for the programming which they believed was most useful in subscriber attraction and retention.

III. The Role of Survey Research and the Constant Sum Scale in Determining Relative Program Values

Survey research is frequently utilized and relied upon in decisionmaking regarding a variety of issues in the cable industry, including new product/service introductions, valuing and/or assessing perceptions of existing products/services and quantifying actual behavior. Cable system operators often use survey research to measure customer satisfaction as well as to measure the appeal of various types of programming service, while programmers commonly survey consumers and/or operators regarding the attractiveness of their concept. Survey research is currently occupying a key role in assessing competitive strategies as cable operators prepare for the entry of telephone companies and other new service providers, and is an important element in decision-making regarding prospective services including interactive television. Moreover, survey research is often the most important tool available for assessing potential behavior (especially in instances where market tests cannot be conducted).

We have sought -- as directly as possible -- to address the issue of what cable system operators would pay for distant signal program types in a free marketplace. Decisionmakers at the cable systems themselves were contacted. A survey technique known as the constant sum approach was selected. This approach requires the respondent to allocate a percentage of a finite pool (in this case a programming budget) to each of the program categories. An increased valuation to one program type can only be made at the expense of another. This is similar to "real world" budget allocations in which a fixed set of resources must be divided among competing possible uses. The constant sum approach is the most appropriate survey research technique when (as here) a comparative rather than absolute value measure is being sought.

IV. Cable Operators' Valuation of Distant Signal Program Types: The 1989 and 1992 Constant Sum Studies

A number of constant sum studies have been performed by various market researchers in conjunction with the Copyright Royalty Distribution Proceedings. The methodology, key findings and criticisms of these studies are described in a Bortz & Company report entitled <u>History and Analysis of the CRT Cable Operator Surveys:</u> <u>1978-1993</u>. Bortz & Company Senior Vice President James M. Trautman will provide testimony regarding this report.

My testimony focuses on the 1989 and 1992 studies, which were completed under my supervision. I presented the 1989 study before the Copyright Royalty Tribunal in the 1989 Proceeding. The Tribunal stated that the study formed "a key part of our determination,"³ but also criticized certain study elements. In preparing our study for 1992 (the first year after release of the Tribunal's 1989 Final Determination), we attempted to make improvements in response to the Tribunal's comments. Our methodology and those modifications are discussed below, followed by a summary of key findings in both studies and consideration of trends indicated by the two studies.

<u>A. Methodology</u>. The 1989 and 1992 surveys asked a random sample of cable operators four sets of questions. The first survey question "screens" potential respondents to ensure that they are qualified to answer the key valuation question. The second asks the respondent which categories of programming were most popular among subscribers. The third asks the respondent to identify which types of programming the operator used in advertising and promotion. Finally, the fourth question asks the respondent to allocate a fixed program budget among the different categories of programming.

The survey uses a stratified random sampling design enabling results to be projected to the universe of Form 3 cable systems; and respondents are asked only about the programming on distant signals they actually carried during the subject year of the survey.

<u>1. Questionnaire design</u>. Survey instruments used in 1989 and 1992 are set forth as Appendices B and C, respectively. Bortz & Company drafted the survey instruments giving consideration to earlier survey instruments and responding to issues raised by the Tribunal in the 1989 and prior proceedings. In drafting the questionnaires, Bortz & Company consulted with various experts including Dr. Michael O. Wirth (Professor and Chairperson of the Department of Mass Communications at the University of Denver), Dr. Len Reid (Professor and Head of the Department of Advertising at the University of Georgia) and Dr. Samuel Book (President of MTA Market Research). Each of these individuals has testified in prior copyright royalty distribution proceedings. Drs. Book and Wirth provided input into the questionnaire design for 1992. Drs. Wirth and Reid assisted in the design of the 1989 survey instrument.

³Federal_Register, Vol. 57, No. 61, April 27, 1992, p.15301.

Data as to carriage of distant signal broadcast stations by cable operators were compiled by Bortz & Company from Statements of Account which were filed with the Copyright Office. For the 1989 survey, Statements of Accounts for the 1988-2 accounting period were used, and respondents were asked whether their complement of signals had changed in 1989. For the 1992 survey, 1992 Statements of Accounts were used, so there was no need to ask respondents if their signal complement had changed.

2. Cable system sampling. The cable system operator sampling plans were developed by Dr. George E. Bardwell, Consultant in Mathematics and Statistics, and Professor of Mathematics and Statistics at the University of Denver, with sample selection conducted by Bortz & Company professional staff based on parameters established by Dr. Bardwell. A stratified random sampling approach was utilized, with the stratification based on copyright royalty payments. Only Form 3 systems were surveyed since they contributed in excess of 97 percent of the royalties each year; royalty data were obtained from Statements of Account filed with the Copyright Office. The sampling plans were designed to provide a statistically valid predictor for allocation of royalty payments; proportionately more systems with large royalty payments were sampled relative to systems with small royalty payments.

The sample design included four strata of royalty classes, one of which (largest royalty payers) required that all systems within that stratum be included in the sample. The boundaries of the remaining three strata were constructed using the 'cum square root of f rule' applied to a frequency distribution of royalty payments in \$500 increments. This rule gives reasonable assurance the calculated stratum boundaries are maximally effective in reducing the sampling error for a given sample size. Neyman's allocation formulas provide an optimum allocation of the total sample to each stratum so as to achieve minimum sampling error in the overall survey estimates.

The required stratification and certain associated statistics for each study are summarized below:

Royalty Stratum	Number of Systems	Mean Royalty	Percent of Total Royalties	Royalty Standard Deviation	Sample Size
		1989			
\$0-31,699	1,254	\$ 14,612	19.7%	\$ 7.519	62
\$31,700-109,999	528	57,471	32.7	21,860	66
\$110,000-299,999	160	175,423	29.8	52,948	81
\$300,000 or more	35	458,453	<u> 17.8</u>	163,945	_35
Total/Average	1,977	46,992	100.0%		244 ⁴

Table 3. Stratification Statistics for 1989 and 1992 Surveys

⁾ ____

⁴The sample initially included 244 systems. However, seven systems were discarded -- five due to a lack of complete signal data as a result of Statements of Account which could not be located at the Copyright Office at the time of the survey, one which was determined to be an MMDS operation, and one which was determined to be a home satellite dish programming distributor.

Royalty Stratum	Number of Systems ⁵	Mean Royalty	Percent of Total Royalties	Royalty Standard Deviation	Sample Size
		1992			
Less than \$22,000	1,278	\$ 11,127	15.6%	\$ 5,140	64
\$22,000-59,999	593	36,598	23.9	10,656	45
\$60,000-249,999	325	112,187	40.1	47,785	93
\$250,000 or more	47	393,425	20.3	171,312	47
Total/Average	2,243	40,515	99.9%*		249 ⁶

Table 3. Stratification Statistics for 1989 and 1992 Surveys, Continued

*Does not equal 100.0 percent due to rounding.

Sample systems were randomly selected from each stratum in accordance with the sample size requirements given in the foregoing tables. The sample in 1992 was selected in three "waves" based on availability of remittance records from the Copyright Office. Complete remittance records were available at the time of sample selection in 1989.

<u>3. Survey completion</u>. A pilot test of the 1992 survey instrument was conducted by Burke Marketing Research from December 1 to December 8, 1992. A pilot test was also completed by Bortz & Company for the 1989 study from November 8 to December 1, 1989.

Telephone surveying in both studies was completed by Burke Marketing Research, one of the largest market research firms in the United States, from their facility in Cincinnati, Ohio. Along with Jim Trautman, Senior Vice President of Bortz & Company, I oversaw selection and training of interviewers. Only interviewers specializing in surveying professional and managerial personnel were utilized. Interviewers were not told the name of the client or given any information, other than that on the survey form, regarding the nature of the study. Mr. Trautman listened to interviewers understood the subject matter, were communicating properly with survey respondents and were accurately recording the information supplied by the respondents.

Dates during which surveys were completed are as follows:

Study Year	Survey Period
1989	December 4, 1989 to March 8, 1990
1992	December 9, 1992 to April 13, 1993

⁵Represents the total number of Form 3 systems for which 1992-1 remittance records had been processed as of January 31, 1993. According to Copyright Office personnel, this represents in excess of 95 percent of Form 3 systems.

⁶The sample initially included 249 systems. However, 14 systems were discarded due to a lack of complete signal data as a result of Statements of Account which could not be located at the Copyright Office at the time of the survey; one system was discarded because it carried no distant signals; and two records were determined to cover the same cable system. Therefore, Burke Marketing Research attempted to administer a total of 233 questionnaires.

Calls were placed between 8:30 a.m. and 4:30 p.m. Central Standard Time. Interviewers were instructed to call back as often as necessary to obtain a completed interview or refusal. Up to 30 calls were made to some systems; however, every completed interview required only one or two direct contacts with the eventual respondent.

Interviews were completed with over 80 percent of cable systems included in the sample frame provided to Burke Marketing Research. In 1989 approximately 79 percent of the sample answered the budget allocation question; the comparable figure in 1992 was 77 percent. In our experience, these response rates are well above industry norms for survey research.

	Questionnaires Administered	Surveys Completed	Response Rate	Response Rate to Valuation Question
1989	237	198	83.5%	78.9%
1992	233	189	81.1	76.8

Table 4. Response Rates of 1989 and 1992 Surveys

Interviewers were instructed to ask first for the system general manager and to confirm that the manager was the person at the system "most responsible for programming decisions made" by the system in 1992 and "most familiar with programming carried" in 1989. If the general manager did not fit the description, the interviewer was instructed to ask for the person who was the most responsible for programming decision (1992) or most familiar with programming carried (1989). In all cases, the eventual survey respondent, whether or not the system manager, was required to affirmatively answer the qualifying question. As I discuss subsequently, respondents were overwhelmingly individuals with general management, marketing or programming responsibilities.

B. Response to CRT concerns. The 1992 study reflects a number of refinements which were made in response to concerns raised by the CRT.

<u>1. Respondent qualifications</u>. The Tribunal determined in the 1983 proceeding that the constant sum survey conducted by Browne, Bortz & Coddington (BBC) "was designed to ascertain the proper individual."⁷ However, in its 1989 Final Determination the CRT expressed concern regarding the qualifications of approximately 11 percent of the survey respondents and also indicated uncertainty with respect to the involvement of the respondents in the program budgeting process.⁸

I believe respondents to the earlier BBC and Bortz & Company surveys were qualified. Respondents were overwhelmingly individuals with general management, marketing or programming responsibilities. In conducting numerous market research studies and many other analyses involving cable system operations for over a decade,

⁷<u>Federal Register</u>, Vol. 51, No. 72, April 15, 1986, p. 12810.

⁸Federal Register, Vol. 57, No. 61, April 27, 1992, p. 15301.

it is my experience that these are the individuals at the system level most responsible for decisions (including budgeting) regarding programming. Further, in several instances where the titles of respondents did not imply programming oversight, the systems involved were small properties where individuals frequently have multiple responsibilities.

Nevertheless, in light of the concerns expressed by the CRT in the 1989 case, the initial respondent qualifying question was modified in the 1992 survey to ensure that the respondent was the person "most responsible for programming decisions at the cable system." In 1992, 185 of 189 respondents (98 percent) occupied general, marketing or programming management positions:

	1989		1992	
Job Title	Number of Respondents	Percent of Total	Number of Respondents	Percent of Total
General Manager/Regional Manager/President/CEO	112	56.6%	135	71.4%
VP Marketing/Marketing Director/Marketing Manager	60	30.3	44	23.3
VP Programming/Programming Director/Programming Manager	4	2.0	6	3.2
Office Manager/Business Manager/Government Affairs	8	4.0	1	0.5
Chief Technician/Operation Manage	er 4	2.0	1	0.5
Sales Manager/Representative	4	2.0	2	1.1
Customer Service Manager	2	1.0	-	-
Other	4	2.0		
Total	18	99.9%*	189	100.0%

Table 5. Positions of Respondents to 1989 and 1992 Surveys

*Does not equal 100.0 percent due to rounding.

<u>2. Category definition</u>. Since cable operator surveys were first introduced into these proceedings for the year 1978, the Tribunal has expressed concern regarding the wording of descriptions of the various programming types. In the 1983 study, BBC developed category definitions which attempted to improve upon those used in earlier surveys; ELRA (on behalf of the NAB) also provided new category definitions. The BBC categories were utilized in the 1989 survey while two new categories were added to represent the Devotional Claimants and Canadian Claimants.

I believe the descriptions used in these surveys provided respondents with distinguishable and readily understood categories for which they were able to allocate value. I also acknowledge the potential for certain "fringe" programming to be interpreted as belonging in one category when for the purposes of copyright royalty distribution it may belong in another. However, categories must be defined as concisely as possible. Moreover, I believe the use of examples is inappropriate in that it necessarily excludes programming types not included as examples. I am aware of no instances in any of our surveys where respondents expressed confusion regarding the programming categories.

While acknowledging the complexity of the task, the Tribunal in its 1989 determination continued to express a desire for enhanced programming definitions.⁹ In response, Bortz & Company modified the category definitions in the 1992 survey to conform more closely to definitions by the Tribunal and to further aid respondents in accurately distinguishing among categories. Category definitions for 1989 and 1992 are compared below:

1989	1992
Movies	Movies broadcast by the U.S. commer- cial stations I listed.
Live professional and college sports	Live professional and college team sports broadcast by the U.S. commer- cial stations I listed.
Syndicated shows and series	Syndicated shows, series and specials distributed to more than one television station and broadcast by the U.S. com- mercial stations I listed.
News and public affairs	News and public affairs programs pro- duced by or for any of the U.S. com- mercial stations I listed, for broadcast only by that station.
PBS, educational and other program- ming carried by	PBS and all other programming broad- cast by U.S. noncommercial station
Devotional/religious programming	Devotional and religious programming broadcast by the U.S. commercial stations I listed.
Canadian programming carried by (excluding National Hockey League and Major League Baseball games and U.S. produced programs).	All programming broadcast by Canadian station

Table 6.	Programming Category Definitions for 19	89 and
	1992 Surveys	

<u>3. Public television and Canadian programming</u>. In the 1989 survey, questions regarding public television and/or Canadian stations were deleted in instances where a cable system did not carry such stations, and respondents were not asked to make a programming allocation to these categories. I agree with the Tribunal's determination in the 1989 proceeding that these stations may have had a certain value and possibly would have been carried had they been available at a lower price (i.e., at a price which was less than that being charged under the statutory rate). At the same time, I also concur with the Tribunal's 1989 conclusion that our survey design is intended to measure value based on programming actually carried and that questions regarding public television or Canadian stations in instances where they were not carried would

cause confusion.¹⁰ For this reason, the 1992 survey treats Canadian and public television programming the same as the 1989 survey.

<u>4. Respondent recall</u>. As in 1989, the survey for 1992 was conducted at the end of and immediately following the year in question. In its 1989 Determination, the CRT acknowledged that this was an improvement over earlier surveys conducted more than a year after the periods for which a determination was to be made, but continued to be concerned that respondents would have been unable to recall all of the individual programs they were being asked to value.¹¹

I believe that the timing of the 1989 and 1992 surveys is the most appropriate in that it allows respondents to consider the value of programming immediately following the year in which it was aired. Most important with respect to recall, however, is the recognition that cable system operators (in my experience) do not (and cannot) identify all programs on any particular program service in deciding whether to carry that service and how much to pay for it. Rather, in those marketplace dealings, operators make decisions based on a dominant impression of what is included on the service and its corresponding value. In actual marketplace dealings (as in our surveys), programming decisions are made by cable operators without identifying every individual program title.

<u>5. Budget allocation process</u>. In the 1983 survey, the constant sum question asked respondents to allocate value assuming that the total value of distant signal non-network programming was 100 percent. In its 1983 Determination, the Tribunal questioned the relationship of this allocation process to tasks actually performed by cable operators. In response, Bortz & Company modified the constant sum question in the 1989 study to ask respondents to allocate a programming budget -- a task closely related to activities operators actually perform.

While the Tribunal acknowledged in its 1989 determination that this approach was an improvement, there was still concern regarding the short time period allowed for respondents to consider their allocations in responding to a telephone survey.¹² Implicit in this assessment is the notion that further consideration might lead to different responses. As noted before, I believe responses to our survey reflect dominant impressions of programming value formed by respondents in their ongoing decisionmaking processes regarding programming and that survey results would not be materially different if respondents were given more time to consider their answers.

However, the allocation question for 1992 was modified to ensure that respondents considered the question in a more formal manner. Respondents were first instructed to write down the programming categories and to think about their relative value; they were then asked to write down their estimates for each category. Subsequently, the interviewer reviewed the estimates for each category with the respondent to allow for any changes upon reconsideration. In essence, the 1992 study represented the culmination of Bortz & Company's efforts to design a study which is methodologically and procedurally correct and which also addresses the particular requirements of the copyright royalty distribution process as identified over a period of years.

<u>C. Comparison of results</u>. In both the 1989 and 1992 surveys, cable system operators were asked to assess various distant signal non-network programming types on the basis of popularity with subscribers and use in advertising and promotional efforts. They were then asked to allocate a distant signal programming budget. Results are detailed below.

<u>1. Popularity with subscribers</u>. After identifying the distant signals carried by the respondent's cable system, the interviewer asked each respondent which types of programming broadcast by these stations were "most popular" with their subscribers. The question ("Question 2" in both Appendices B and C) was asked on an "unaided" basis -- in other words, respondents were not given a list of programming categories from which to choose. Multiple responses were permitted to this question.

	198	39	199	92
Category	Percent Mentioned as "Most Popular"	Absolute Confidence Interval*	Percent Mentioned as "Most Popular"	Absolute Confidence Interval*
Live professional and college team sports	5 73.1%	±8.3	76.2%	±7.9
Movies	44.6	9.5	41.0	8.8
Syndicated shows, series and specials	30.1	8.6	23.4	7.7
News and public affairs programs	6.4	4.1	19.0	7.2
PBS and all other public television programming	1.1	1.3	7.3	4.4
Devotional and religious programming	1.0	1.3	2.1	2.6
Canadian programming	0.2	0.3	1.1	2.1
Other	5.6	4.5	7.9	5.0

Table 7. Distant Signal Programming Popularity Among Subscribers: 1989-92

*These and subsequent confidence intervals expressed as percentage points.

On an unaided basis (i.e., without being prompted as to which programming types were carried), approximately three-fourths of respondents mentioned sports as among the most popular distant signal programming with subscribers in both 1989 and 1992.

These results are illustrated graphically on Figure 1.







FIGURE 1. DISTANT SIGNAL PROGRAM POPULARITY AMONG SUBSCRIBERS, BY PROGRAM TYPE; 1989-92



<u>2. Advertising/promotional use</u>. In Question 3, respondents were first asked if they utilized any distant signal programming in advertising and promotional efforts to attract or retain subscribers. The question referred directly to the distant signal stations identified in the prior question. Approximately one-third of cable system operators featured distant signal non-network programming in their 1989 and 1992 advertising and promotional efforts to attract and retain subscribers.

States and	-	1989		1992		
Category	Percent	Absolute Confidence Interval	Percent	Absolute Confidence Interval*		
Yes	34.9%	±8.9	31.5%	±8.2		
No	65.1		68.5			
Total	100.0%		100.0%			

Table 8. Use of Distant Signal Programming forAdvertising/Promotional Purposes:1989-92

Respondents who did use distant signal programming in their marketing efforts were then asked a series of follow-up questions addressing the specific types of programming utilized. They were first asked about usage on an unaided basis; follow up questions asked specifically about usage of any programming types not mentioned. Only respondents whose system carried PBS/educational and/or Canadian stations on a distant signal basis were asked about marketing use of these program types.

	1	989	1992		
Category	Percent Using	Absolute Confidence Interval	Percent Using	Absolute Confidence Interval	
Live professional and college team sports	90.3%	±9.4	95.6%	±7.6	
Movies	73.0	15.3	50.3	17.6	
Syndicated shows, series and specials	45.2	17.5	38.3	16.9	
News and public affairs programs	17.6	14.1	23.6	15.3	
PBS and all other public television programming	0.7	0.6	8.1	10.3	
Canadian programming	-	- 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19	2.8	5.3	
Devotional and religious programming	4.0	7.9	0.5	1.0	
Other	19.5	14.5	4.4	7.6	

Table 9.Advertising/Promotional Useof Distant Signal Programming:1989-92

As indicated above and on Figure 2, approximately 96 percent of the systems that promoted distant signal programming during 1992 featured sports -- up from 90 percent in 1989. Movies, on the other hand, declined from 73 percent in 1989 to 50 percent in 1992.



FIGURE 2. USE OF DISTANT SIGNAL PROGRAMMING IN CABLE ADVERTISING AND PROMOTION, PERCENTAGE OF SYSTEMS USING CATEGORY; 1989-92



This group was also asked to rank the relative importance of the distant signal non-network programming types they feature in advertising/promotional campaigns.

	1989	Second Call		1992
Category	Percent Most Important	Absolute Confidence Interval	Percent Most Important	Absolute Confidence Interval
Live professional and college team sports	63.7%	±15.5	67.7%	±16.6
Movies	15.0	10.1	18.8	13.2
News and public affairs programs	4.2	7.9	4.4	7.6
Syndicated shows, series and specials	0.1	0.1	0.7	1.0
Devotional and religious programming	-	- 1	-	- 1. J.
PBS and all other television programming	-	-	-	
Canadian programming	-		-	-
Other	8.1	10.8	-	-
Don't know/no response	8.9	NA	8.3	NA
Total	100.0%		99.9%*	

Table 10. Most Important Distant Signal Programming for Advertising/Promotional Purposes: 1989-92

*Does not equal 100.0 percent due to rounding.

Sports was considered most important to feature by about two-thirds of systems in both 1989 and 1992, followed by movies at 15 percent in 1989 and just under one-fifth in 1992 (see Figure 3).

FIGURE 3. USE OF DISTANT SIGNAL PROGRAMMING IN CABLE ADVERTISING AND PROMOTION, MOST IMPORTANT PROGRAM TYPE; 1989-92



<u>3. Programming budget allocation</u>. Finally, cable operators were asked to allocate a fixed program budget among the different categories of distant signal programming.

In order to avoid confusion as to the actual stations and programming under consideration in the survey, each respondent was read a list of the specific distant signal stations actually carried by his or her system. Individual stations were identified for each respondent based on Statements of Account filed with the Copyright Office. The questionnaire design was such that the list of stations was read for the second time during the operator valuation question (it was also read in Question 2).

As further clarification, respondents were specifically instructed not to consider any national network programming from ABC, CBS and NBC (to avoid possible confusion, this instruction was deleted in instances where no distant network affiliated stations were carried).

Five to seven program categories were used, depending upon whether or not the respondent's cable system carried distant PBS/educational and/or Canadian stations. For 1992, the categories were:

- a Movies.
- □ Live professional and college team sports.
- Syndicated shows, series and specials distributed to more than one television station.
- News and public affairs programs produced by or for any of the commercial stations listed, for broadcast only by that station.
- Devotional and religious programming.
- PBS and all other programming broadcast by the noncommercial station or stations carried.
- a All programming broadcast by the Canadian station or stations carried.

Categories used in 1992 contained slightly different wording than that used in 1989 so as to more closely follow the program categories established by the Copyright Royalty Tribunal (see Appendices B and C).

If no PBS or Canadian stations were carried, the operator was not asked to value these program types.

In 1989, program categories were read once so that the respondent had a chance to think about them, then re-read to get the operator's valuation estimates. In 1992, program categories were again read once so that the respondent had a chance to think about them, and the respondent was instructed to write the categories down. The program types were then re-read to allow the respondent to write down their budget allocations and provide them to the interviewer. (The program types were randomly ordered to prevent ordering bias.) The interviewer then reviewed the program categories and allocations with the respondent, providing the respondent an opportunity to revise the allocations if necessary.

This question was the last of a series of questions relating to the relative value of distant signal programming. Preliminary questions were intended to ensure that the respondents would be prepared to perform the requested programming value allocation. The responses to the constant sum question are presented in Table 12.

		89	1992		
Category	Percent Allocation	Absolute Confidence Interval	Percent Allocation	Absolute Confidence Interval	
Live professional and college team sports	34.2%	±2.5	38.8%	±2.2	
Movies	31.2	2.0	25.6	1.7	
Syndicated shows, series and specials	16.9	1.5	16.0	1.3	
News and public affairs programs	11.8	1.3	12.4	1.7	
Devotional and religious programming	4.3	0.9	3.9	0.6	
PBS and all other television programming	1.3	0.6	3.0	1.4	
Canadian programming	0.2	0.2	0.3	0.3	
Total	99.9%		100.0%		

Table 11. Cable Operator Allocation of Distant Signal Program Budget: 1989-92

As Table 12 illustrates, Form 3 cable systems in the U.S. would have allocated 39 percent of a distant signal non-network programming budget to live professional and college team sports in 1992, compared with 34 percent in 1989. Movies ranked second, at 26 percent in 1992 compared with 31 percent in 1989. Syndicated shows, series and specials received a 16 percent allocation in 1992 versus 17 percent in 1989, while news and public affairs programs were accorded 12 percent in both surveys. The results of the 1989 and 1992 constant sum questions are shown graphically on Figures 4 and 5.



FIGURE 4. CABLE OPERATOR ALLOCATION OF VALUE BY DISTANT SIGNAL PROGRAM TYPE; 1989-92







FIGURE 5. CABLE OPERATOR ALLOCATION OF DISTANT SIGNAL PROGRAM BUDGET; 1989-92



3

V. Relationship of Survey Results to Industry Experience

There are three primary conclusions to be drawn from the 1989 and 1992 survey results. First, for these years sports programming was the distant signal programming type most highly valued by cable operators. Second, the disparity between the value of sports programming and the value of movie and syndicated product increased from 1989 to 1992. Third, in a free market absent compulsory licensing, cable operators would have spent in excess of one-third of their 1989 to 1992 distant signal program budget on sports programming.

These results are consistent with my experience in the cable, broadcast and sports industries.

A. The value of sports programming. As discussed earlier, distant signal programming does not provide local cable operators with a direct revenue stream (either through local advertising inventory or the direct sale of subscriptions); thus, its sole value lies in its ability to contribute to the operator's efforts to attract and retain subscribers. The perception of cable operators as to what types of programming have this effect vary from market to market and system to system. As a general matter, however, the sports programming found on distant signals is considered by the cable industry to attract and retain subscribers to a greater degree than any other type of distant signal non-network programming.

In large measure this is because live sports programming is unique among the various programming types. It is new, "first run" and of demonstrated national appeal. Viewers in large and small markets follow major professional and collegiate sports through television, radio, newspaper and magazine coverage. Sports generates intensely loyal followers who are willing to become and to remain cable subscribers in order to have access to sports programming.

To have value in attracting and retaining subscribers, programming must be fresh and unique -- offering something which would be noticeably missed if removed or not carried. Moreover, a single program or continuing series with strong intensity of appeal can be of greater value than many hours of less appealing product. Sports programming on distant signals has these qualities.

Distant signal carriage of a particular team has much broader appeal than to fans of the team alone; it opens a window to a whole league. Whether it's major league baseball, professional basketball, professional hockey or major college football and basketball, people are generally interested across the nation. This accounts for the national appeal of superstation sports programming and the crucial role it plays in obtaining and retaining carriage on cable systems. Sports is virtually synonymous with the image of superstations.

While I believe our study results accurately reflect these marketplace realities, we can also look to the actual behavior of individual cable operators across the nation to find the value of distant signal sports programming. Superstations represent by far the most extensively distributed distant broadcast signals; it is no coincidence that stations which have achieved superstation status without exception prominently feature sports programming. In the local marketplace -- particularly in the largest markets (from which superstations generally originate) -- there are many examples of

successful (and highly viewed) independent broadcast stations which do not feature significant sports programming. Yet only those stations which feature sports programming have generally been deemed appealing enough to be "exported" on a regional or national basis as superstations.

B. Changes in value. Survey results for 1989 and 1992 show an increase in the value accorded by cable operators to sports programming, along with a growing gap between allocations to sports and movies. In 1989, cable operators valued sports and movies rather closely, with sports receiving only a three point advantage over movies. In 1992, however, the disparity in value had grown to thirteen percentage points. This change is also consistent with my experience.

The importance and value of distant signal sports increased between 1989 and 1992 with the expanded distribution of superstation WGN (carrying the 1990-91 through 1992-93 National Basketball Association Champion Chicago Bulls and adding Major League Baseball's Chicago White Sox since 1990) and the strong on-field performances of the National League Champion Atlanta Braves (carried on superstation WTBS) in 1991 and 1992. Along with the historically popular Chicago Cubs (also carried on WGN), these sports franchises have established national identities.

Furthermore, distant signal movies faced increased competition between 1989 and 1992. The number of basic tier cable programming services and the amount and quality of movie programming which they offer have expanded greatly in recent years. As an example, distribution of the commercial free American Movie Classics service expanded to 43 million homes by the end of 1992; in 1989, this service was a "minipay" channel with limited reach. Moreover, leading cable programming networks (particularly USA Network and Lifetime) began to acquire pre-broadcast syndication rights to major movie packages. This activity began in October 1989¹³ when USA acquired five year exclusive pre-syndication rights to 26 Touchstone films and Lifetime purchased four year pre-syndication rights to 23 Orion titles. Another 124 presyndication titles from studios including Twentieth Century Fox, Warner, Paramount, MCA/Universal and Orbis were acquired by Lifetime and USA between 1990 and 1992.¹⁴ The added availability of such movies on basic cable networks no doubt diminished the appeal of the movies shown on distant signals.

<u>C. MPAA "viewing hours"</u>. Through my experience in working with broadcast networks, cable programming networks and local broadcast stations, I am well aware of the critical importance to these entities (which rely either entirely or in very large part on advertising sales) of the size and demographic breakdown of the audiences different kinds of programming attract. Ratings (which reflect audience size and demographics) are <u>the</u> performance measure for these outlets which sell advertising.

However, I have not seen the "household viewing hours" measure used by MPAA in these proceedings utilized outside of these proceedings. The household viewing hours tabulation differs from the ratings described above because it does not

¹³Although agreements were reached in 1989, exhibition rights to titles acquired did not begin until at least 1990.

¹⁴Paul Kagan Associates, Inc., <u>Cable TV Programming</u>, various issues.

differentiate by when viewing occurs or by who is viewing, thus ignoring key differences in value in one daypart versus another (e.g., prime time is of much greater value than late night) as well as demographic variations.

An example of daypart value differences is provided in Table 12, which summarizes 1992 "cost per thousand" data for spot television in Nielsen Designated Market Areas (DMAs).¹⁵

	Market Grouping					
Daypart	Top 20	Top 50	All Markets			
Early Morning (M - F, 7 - 9AM)	\$ 4.24	\$ 4.15	\$ 4.24			
Daytime (M - F, 9AM - 4PM)	4.06	4.02	4.12			
Early Fringe (M - F, 4 - 7:30PM)	4.49	4.56	4.67			
Early News (M - F, 6 - 7:30PM)	5.38	5.51	5.77			
Prime Access (M -F, 7:30 - 8PM)	6.3 9	6.35	6.51			
Prime Time (M - Sat, 8 - 11PM)	13.36	12.43	11.79			
Late News (M - F, 11 - 11:30PM)	9.53	9.12	8.77			
Late Fringe (M - F, 11:30PM - 1AM)	6.23	6.33	6.42			

Table 12. Spot Television Cost Per Thousand by Major Daypart, First Quarter 1992

Note: Rates are for network affiliated stations only except in Early Fringe, Prime Access and Late Fringe, for which data reflect the top three stations in a market. Rates in news dayparts reflect only news programming and rates in other dayparts exclude all news programming.

Regardless of market size, advertisers pay on the order of two to three times more per viewer (or viewing hour) for prime time than they do for other dayparts.

More fundamentally, audience size and demographics are far less important to cable system operators (who typically obtain only five percent or less of their revenue from advertising) than to cable networks and broadcast stations -- and still less important when applied to programming (such as that on distant signals) in which no local advertising opportunity exists.

It is also critical to understand that while Nielsen studies do attempt to measure actual behavior, they attempt to measure the behavior of subscribers -- not of the system operators responsible for programming acquisitions and other programming decisions. Cable operators, and not subscribers, would be purchasing distant signal programming in a free market. Viewing studies thus target a group whose attitudes (and behavior) have only limited relevance to the issues to be decided. A constant sum survey, which both considers the judgments of cable operators and specifically addresses the issue of distant signal programming value, more clearly reflects the amounts that cable operators would pay for different types of distant signal programming.

¹⁵Bethlehem Publishing, Inc., Media Market Guide, 4th Quarter 1991.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Paul I. Bortz

APPENDICES

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APPENDIX A. RESUME OF PAUL I. BORTZ

EXPERIENCE:

<u>August 1988 to present</u> ... President, Bortz & Company, Inc., consultants in media, sports and entertainment ... financial and market analysis for broadcasting, cable television, video programming, and professional sports organizations ... much of the work involves station, system and sports rights valuations, business feasibility and acquisition analyses, and corporate development planning.

Media, sports and entertainment clients include Capital Cities/ABC, Inc., Citibank, N.A., National Association of Broadcasters, National Cable Television Association, National Basketball Association and Telecommunications, Inc.

Assignments have included:

- Financial evaluation of broadcast television, cable system and cable network properties.
- Valuation and negotiation of sports cable and broadcast television contracts.
- J Business plans for new cable and broadcast program services.
- Analysis of international broadcast, cable and programming opportunities.

Analyses of cable television operations and business opportunities have been provided for clients including:

- □ American Television and Communications (ATC)
- □ Buford Television, Inc.
- □ Cable Television Administration and Marketing Society (CTAM)
- Continental Cablevision
- Daniels & Associates
- □ Heritage Communications
- ⊐ Multimedia
- D National Cable Television Association (NCTA)
- Telecommunications, Inc.
- United Cable

Other clients for which work on broadcasting and cable matters have been performed include:

- □ Capital Cities/ABC, Inc.
- □ Citibank, N.A.
- a Continental Cablevision
- Corporation for Public Broadcasting
- Daniels & Associates
- □ ESPN, Inc.
- JCPenney Company, Inc.
- ⊐ Lifetime
- Public Broadcasting Service (PBS)
- □ Time Warner
- u U S West

Bortz has testified as an expert witness for:

- Joint Sports Claimants (Copyright Royalty Tribunal)
- City of St. Paul/Continental Cablevision
- Indiana Pacers
- □ Sacramento Kings
- Texas Rangers
- National Basketball Association
- D United Artists Cable/Telecommunications, Inc.

He has also testified (both as an expert and as Deputy Assistant Secretary of Commerce) in front of House and Senate communications subcommittees on television policy matters and in front of other House and Senate subcommittees on budget and communications intelligence matters.

<u>1979 to July 1988</u> . . . Managing Director, Browne, Bortz & Coddington, Inc. . . . management of a diversified market and economic consulting firm, including overall direction of its broadcast, cable and professional sports activities.

<u>1978 to 1979</u>... Deputy Assistant Secretary of Commerce for Communications and Information ... administered the Executive Branch agency responsible for developing domestic and international communications policy.

<u>1969 to 1978</u>... Industrial Economics Division, University of Denver's Research Institute ... head of the division from 1974 to 1978 ... variety of applied economic research projects including telecommunications, technology innovation, business planning.

<u>1961 to 1969</u> ... Ford Aerospace and Communications Corporation in California ... program engineer on advanced missile systems.

EDUCATION:

B.S., Aeronautical Engineering, Purdue University M.A., Applied Mathematics, Harvard University

OTHER:

Member, National Association of Business Economists, and Institute for Electrical and Electronics Engineers (IEEE) . . . featured in articles in <u>Forbes</u>, <u>Broadcasting</u>, <u>CableVision</u>, and <u>Electronic Media</u> magazines . . . testimony before House and Senate subcommittees both as a government official and as an expert witness . . . featured speaker at numerous national association and industry meetings and university symposia . . . on several boards and advisory committees for telecommunications organizations.

APPENDIX B. SURVEY INSTRUMENT

1989 SYSTEM OPERATOR PROGRAMMING QUESTIONNAIRE¹

System Name:		
City / State:	·······	Remit Number
Respondent's Name:		
Position:		
Date:		
Interviewer:		

(ASK TO SPEAK WITH SYSTEM MANAGER. IF UNAVAILABLE, CONFIRM HE / SHE IS PERSON MOST FAMILIAR WITH PROGRAMMING CARRIED BY THE SYSTEM AND ARRANGE CALL BACK. IF NOT, ASK TO SPEAK WITH THE PERSON MOST FAMILIAR WITH THE PROGRAMMING CARRIED BY THE SYSTEM.)

Hello, I'm ______ from Burke Marketing Research. We are conducting a short national survey among randomly selected cable system operators (or programming officials as appropriate) regarding the programming carried by your system. I only have a few questions.

1. Are you the person at your system most familiar with programming carried by your system during 1989 or not?

Yes	1
No	2
••••••	

ASK TO SPEAK WITH PERSON MOST FAMILIAR WITH PROGRAMMING CARRIED BY THE SYSTEM. REPEAT INTRODUCTION AND Q.1.



¹This questionnaire reflects that used in the year 1990 for the subject year 1989. Very slight differences exist in the wording of questions on surveys completed in 1989. Individual questionnaires were also modified to reflect differing signal carriage characteristics (e.g., if no network affiliate stations were carried, references to "other than...ABC, CBS and NBC" were deleted).

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2a. Industry data indicate that during 1988, your system carried the following broadcast stations from other cities:

Call Letters	<u>City</u>	<u>Affil</u>
<u></u>	······	
······································		
		······································

INSERT DISTANT SIGNAL CALL LETTERS, CITY AND AFFILIATE

- 2b. Did you discontinued carriage of these _____ broadcast stations during 1989? _____ (ASK ONLY IF YES) Which of these stations did you discontinue? (LIST CALL LETTERS BELOW)
- 2c. Did you add any broadcast stations from other cities such as those mentioned above during 1989? _____ (ASK ONLY IF YES) Which stations did you add? (LIST CALL LETTERS BELOW)

(READ Q.2d. ONLY IF ONE OR MORE STATIONS HAVE BEEN DISCONTINUED OR ADDED; IF NO STATIONS HAVE BEEN DISCONTINUED OR ADDED, SKIP TO Q.2e.)

- 2d. Just to confirm your 1989 line-up, you have indicated that during 1989 you carried (READ ALL CALL LETTERS OF STATIONS IN Q.2a. -- REMOVING ANY DISCONTINUED STATIONS -- Q.2b. -- AND ADDING ANY NEW STATIONS --Q.2c.).
- 2e.
 Thinking back to 1989, what types of programming on the stations mentioned above, other than any national network programming from ABC, CBS and NBC, do you think were most popular with your subscribers? (DO NOT READ LIST)

 Movies
 1

 Live professional and college sports
 2

 Syndicated shows and series
 3

 News and public affairs
 4

 PBS, educational and other programming carried by
 5

 Devotional / religious programming
 6

 Canadian programming carried by
 6

 Hockey League and Major League Baseball games
 7

 Other (SPECIFY)
 8

3a. Did you feature any programming available on the stations I mentioned, again, other than any national network programming from ABC, CBS and NBC, in your 1989 advertising and promotional efforts to attract and retain subscribers or not?

Yes 1 No 2 GO TO Q.4

3b. What types of programming on these stations do you feature in your advertising? (DO NOT READ LIST--RECORD BELOW UNDER Q.3b, "UNAIDED")

(FOR EACH TYPE OF PROGRAMMING NOT MENTIONED IN Q.3b, ASK:)

- 3c. Did you also feature (INSERT EACH PROGRAMMING TYPE NOT MENTIONED) from these stations in your 1989 advertising and promotion to attract or retain subscribers or not? (RECORD BELOW UNDER Q.3c, "AIDED")
- 3d. You said you used (READ ALL PROGRAMMING TYPES CHECKED IN Q.3b or 3c) from the stations I mentioned in 1989 subscription and retention advertising and promotion. Which of these do you feel is the most important to feature in subscription and retention advertising and promotion? Which is the <u>next most</u> important? Which is <u>least</u> important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

				<u>Q.30.</u>	
	Q.3b.	Q.3c.		mportan	t
	<u>Unaided</u>	<u>Aided</u>	Most	<u>2nd</u>	Least.
Movies	1	1	1	1	1
Live professional and college sports	2	2	2	2	2
Syndicated shows and series	3	3	3	3	3
News and public affairs	4	4	4	4	4
PBS, educational and other					
programming carried by*	5	5	5	5	5
Devotional / religious programming	6	6	6	6	6
Canadian programming carried by					
* (excluding (National					
Hockey League and Major League					
Baseball games and U.Sproduced					
programs and series)	7	7	7	7	7
Other (SPECIFY BELOW)					
	9	9	9	9	9
	10	10	10	10	10
	11	11	11	11	11

*(INSERT CALL LETTERS OF PTV / CTV STATION. ASK ONLY IF PTV / CTV STATION LISTED IN Q.2.)

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4a. Finally, I would like you to estimate the <u>relative</u> value to your cable system of each type of programming carried on the stations I mentioned, other than any national network programming from ABC, CBS and NBC. That is, how much do you think each such type of programming is worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers. The stations we are interested in are, again, (INSERT STATION CALL LETTERS FROM Q.2a, REMOVING ANY DISCONTINUED STATIONS [Q.2b.] AND ADDING ANY NEW STATIONS [Q.2c.])

Again thinking back to 1989, assume you have a fixed dollar amount to spend on the non-network programming carried on these stations; in other words, a programming budget. Please think in terms of what percentage, if any, of the fixed dollar amount you would spend for each type of programming. I'll read all the program types that appear on the stations to give you a chance to think about them and then reread the program types a second time to get your estimates. (READ PROGRAM TYPES IN ORDER OF RANDOM SEQUENCE NUMBER.)

What percentage, if any, of the fixed dollar amount would have been spent on (READ FIRST PROGRAM TYPE)? And what percentage, if any, would have been spent on (READ NEXT PROGRAM TYPE)? (COMPLETE LIST IN THIS MANNER.)

Random

Seauence		Percentage
()	Movies	
()	Live professional and college sports	
()	Syndicated shows and series	······································
i i	News and public affairs	
()	PBS, educational and other programming carried by	
()	Devotional / religious programming	
()	Canadian programming carried by (excluding National Hockey League and Major League Baseball games and U.S. produced programs)	

PERCENTAGES MUST ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.
APPENDIX C. SURVEY INSTRUMENT

1992 SYSTEM OPERATOR PROGRAMMING QUESTIONNAIRE¹

System Name:	
City / State:	
Subscribers:	Remit Number
Respondent's Name:	
Position:	
Telephone Number:	
Date:	
Interviewer:	·

(ASK TO SPEAK WITH SYSTEM MANAGER. IF UNAVAILABLE, CONFIRM HE / SHE IS PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS AND ARRANGE CALL BACK. IF NOT, ASK TO SPEAK WITH THE PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS.)

Hello, I'm ______ from Burke Marketing Research. We are conducting a short national survey among randomly selected cable systems regarding the programming they carry. I only have a few questions.

1. Are you the person at your system most responsible for programming decisions made by your system during 1992 or not?

Yes	1
No	2

ASK TO SPEAK WITH PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS. REPEAT INTRODUCTION AND Q.1.

¹This questionnaire reflects that used in the year in 1993 for the subject year 1992. Very slight differences exist in the wording of questions on surveys completed in 1992. Individual questionnaires were also modified to reflect differing signal carriage characteristics (e.g., if no network affiliate stations were carried, references to "other than... ABC, CBS and NBC" were deleted). In 1992, various "versions" of questionnaires were computer generated to simplify such modifications from the interviewers perspective.

2a. Industry data indicate that during 1992 your system carried the following broadcast stations from other cities:

Call Letters	Com/ Non/ <u>Can</u>	<u>Affil</u>	<u>City</u>
•		·	

INSERT DISTANT SIGNAL CALL LETTERS, CITY AND AFFILIATION

2b. Thinking back to 1992, what types of programming broadcast by these stations, other than any national network programming from ABC, CBS and NBC, do you think were most popular with your subscribers? (DO NOT READ LIST; RECORD ALL PROGRAMMING TYPES MENTIONED)

Movies	1
Live professional and college team sports	2
Syndicated shows, series and specials	3
News and public affairs programs	4
PBS and all other programming broadcast by noncommercial station	5
Devotional and religious programming	6
All programming broadcast by Canadian station	7
Other (SPECIFY)	8

3a. Did you feature any programming broadcast by the stations I mentioned, other than any national network programming from ABC, CBS and NBC, in your 1992 advertising and promotional efforts to attract and retain subscribers or not?

3b. What types of programming broadcast by these stations did you feature in your subscriber acquisition and retention advertising and promotion? (DO <u>NOT</u> READ LIST--RECORD BELOW UNDER Q.3b, "UNAIDED")

(FOR EACH TYPE OF PROGRAMMING NOT MENTIONED IN Q.3b, ASK:)

3c. Did you also feature (INSERT EACH PROGRAMMING TYPE NOT MENTIONED) broadcast by these stations in your 1992 advertising and promotion to attract and retain subscribers or not? (RECORD BELOW UNDER Q.3c, "AIDED")

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3d. You said you used (READ ALL PROGRAMMING TYPES CHECKED IN Q.3b or 3c) from the stations I mentioned in 1992 subscription and retention advertising and promotion. Which of these do you feel was the <u>most</u> important programming type to feature in subscriber acquisition and retention advertising and promotion? Which was the <u>next most</u> important programming type ? Which programming type was <u>least</u> important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

Rar	nd	om	Q.3b.	Q.3c.	Ir	Q.3d. nportant	
<u>Sec</u>	<u>ju</u>	ence	Unaided	Aided	Most	2nd	Least
()	Movies	1	1	1	1	1
()	Live professional and college				-	·
		team sports	- 2	2	2	· 2	2
()	Syndicated shows, series and specials	3	3	3	3	3
()	News and public affairs programs	4	4	4	4	4
()	PBS and all other programming				-	·
		broadcast by noncommercial					
		station	5	5	5	5	5
()	Devotional / religious programming	6	6	6	6	6
()	All programming broadcast by		-	-	• .	•
		Canadian station	7	7	7	7	7
		Other (SPECIFY BELOW)			-	•	•
			8	8	8	8	8
			9	9	9	9	9
			10	10	10	10	10
						· •	· •

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4a. Now, I would like you to estimate the <u>relative</u> value to your cable system of each type of programming actually broadcast by the stations I mentioned during 1992, other than any national network programming from ABC, CBS and NBC. That is, how much do you think each such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers. We are only interested in U.S. commercial station(s) ______, U.S. non-commercial station(s) ______.

I'll read all the program types that were broadcast by these stations to give you a chance to think about them; please write the categories down as I am reading them. (READ PROGRAM TYPES IN ORDER OF RANDOM SEQUENCE NUMBER.) Assume you had a fixed dollar amount to spend in order to acquire all the non-network programming actually broadcast during 1992 by the stations I listed. What percentage, if any, of the fixed dollar amount would you spend for each type of programming? Please write down your estimates, and make sure they add to 100 percent.

What percentage, if any, of the fixed dollar amount would you spend on (READ FIRST PROGRAM TYPE)? And what percentage, if any, would you spend on (READ NEXT PROGRAM TYPE)? (COMPLETE LIST IN THIS MANNER.)

Random

Seq	uer		Percent
()	Movies broadcast by the U.S. commercial stations I listed.	
()	Live professional and college team sports broadcast by the U.S. commercial stations I listed.	
()	Syndicated shows, series and specials distributed to more than one television station and broadcast by the U.S. commercial stations I listed.	
()	<u>News and public affairs programs</u> produced by or for any of the U.S. commercial stations I listed, for broadcast only by that station.	
()	PBS and all other programming broadcast by U.S. noncommercial station	·····
()	Devotional and religious programming broadcast by the U.S. commercial stations I listed.	
()	All programming broadcast by Canadian station	
TOT	AL		
	CE	NTAGES MUST AND TO 100 PERCENT PROMPT RESPONDENT I	

PERCENTAGES MUST ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.

4b. Now I'm going to read back the categories and your estimates. (REREAD CATEGORIES AND RESPONSES IN RANDOM SEQUENCE ORDER TO ALLOW RESPONDENT TO REVIEW THE ESTIMATES.)

Are there any changes you would like to make? (RECORD ANY CHANGES BY CROSSING OUT ORIGINAL RESPONSE AND WRITING IN REVISED RESPONSE NEXT TO IT. PERCENTAGES MUST STILL ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.)

Thank you for your time and cooperation.

APPENDIX D. STATISTICAL ESTIMATION PROCEDURES

In both the 1989 and 1992 studies, two different methodologies were used in making estimates for all systems based on the sample responses. For question 4 (valuation by program type), a ratio estimation methodology was used. This methodology weights responses by another variable. In this case, the responses (valuation of each type of programming) were weighted by total royalty. Larger systems with greater royalty payments were given a greater weight compared with smaller systems in determining the average value of each type of programming. For the sample systems, the total royalty and percent of value by program type was known. For all other systems not in the sample, total royalties were also known. Statistically, knowledge of royalties for the total universe of systems improves the reliability of the estimates by reducing the uncertainty in this component of the estimation methodology.

For questions 2 and 3, the focus was not on value but rather on subscriber and advertising preference. In this case, there was no other supplemental variable available which related to preference for all systems, including those not in the sample. Therefor, the ratio estimation methodology did not apply to making estimates based on responses to these questions and a more straightforward method was applied in which all sample stations carried an equal weight after accounting for different sample sizes by strata.

Formulas for calculating these statistics are set forth below.

Statistical estimation procedures for question 4:

- Let h = stratum index,
 - Pih = proportionate value of program type x estimated by <u>sample system</u> i in stratum h from guestionnaire,
 - t_{ih} = total revenue of <u>sample system</u> i in stratum h.
 - T_h = total royalty of <u>all</u> (sample and nonsample) systems in stratum h,

 $x_{ih} = p_{ih}t_{ih} = value$ of program type x to system i in stratum h,

n_h = number of <u>sample systems</u> responding in stratum h,

 $N_h = \underline{total}$ number of systems in stratum h,



 estimated total value of program type x,

= sample variance of value of program type x in stratum h,

 sample variance of royalty in stratum h,

- ratio estimate of proportionate value of program type x for stratum h,
- Pearson's correlation coefficient between x_h and t_h in stratum h,
- = variance of estimate of total value of program x.

- $R_{h} = \frac{\prod_{i=1}^{n_{h}} x_{ih}}{\prod_{i=1}^{n_{h}} \sum_{i=1}^{n_{h}} x_{ih}}$
- $r_{h} = \frac{\prod_{i=1}^{n} x_{i} t_{i} \sum_{i=1}^{n} x_{i} t_{i} \sum_{i=1}^{n} t_{i}}{\prod_{i=1}^{n} x_{i} x_{i} \sum_{i=1}^{n} t_{i}}$
- $V(T_{\chi}) = \sum_{1}^{4} \frac{N_{h}}{n_{h}^{-1}} (N_{h} n_{h}) (s_{\chi h}^{2} s_{th}^{2} R_{h}^{2} 2R_{h} r_{h} s_{\chi h} s_{th})$

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Statistical estimation procedures for Questions 2 and 3.

Let h = stratum index,

- n_h = number of <u>sample systems</u> responding in stratum h,
- $N_h = total$ number of systems in stratum h.
- N = total systems in sample <u>frame</u>,
- t_{xh} = total <u>number of positive answers</u> for given cell for question x in stratum h,

then
$$P_X = \sum_{h=1}^4 P_{xh} N_h N_h$$

$$V(P_{X}) = \frac{1}{N^{2}} \sum_{h=1}^{4} \frac{N_{h}}{n_{h}^{-1}} (N_{h}^{-n} N_{h}^{)} P_{xh}^{-(1-p_{xh})}$$

- estimated proportion positive answers for given cell for question x,
- = variance of estimated proportion P_x.



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	1990	4/

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INTRODUCTION

Over a period of more than 15 years, the Joint Sports Claimants (JSC) have commissioned a number of surveys of cable operators in connection with the cable royalty distribution proceedings. Other parties, including the National Association of Broadcasters (NAB), public broadcasters and the Canadian claimants, have also conducted cable operator surveys.

The purpose of all of these surveys was to determine how cable operators valued different categories of distant signal non-network programming. The methodologies employed had several similarities including the use of constant sum questions, in which cable operators themselves placed relative values on different program types. Testimony presented by Dr. Len Reid of the University of Georgia in the 1989 Proceeding discussed constant sum in further detail. This well recognized market research tool (which is used in a variety of contexts for assessing comparative valuation) allowed respondents to address the same task that confronted the Copyright Royalty Tribunal (CRT) and now the Copyright Arbitration Royalty Panel (CARP) -- to allocate a fixed amount among several program categories based upon the relative value of these categories.

All market research by its nature is imperfect and subject to criticism. Each survey was in fact criticized by the Motion Picture Association of America (MPAA). The CRT accepted many of those criticisms in deciding the weight to be accorded the surveys. The surveys conducted for JSC were continually refined and improved to meet the concerns raised in the proceedings by the CRT and the MPAA.

Notwithstanding the methodological differences in the surveys, the survey results over the past 15 years have been quite consistent. Respondents have continued to value sports and movie programming most highly over the years, followed by syndicated programming and news/public affairs. Cable operators have generally allocated at least one-third of their distant signal program budgets to sports. The most recent surveys have resulted in increasing allocations to sports.

This report reviews survey research findings of 12 separate studies relative to copyright royalty distribution, beginning with a report prepared by the Batten, Barton, Durstine & Osborne, Inc. (BBDO) Research Department for the 1978 Proceeding and continuing forward to a study completed by Bortz & Company, Inc. for 1993. Research methodology and results are summarized for each study, followed by a brief review of the major criticisms of the research. The results of the key allocation question in each of these surveys are set forth on Table 1.

V

		Mean Programming Value Allocation															
							B	BDO 979			550	Bort	z &		_		
	1978	MSOs	Man-	1980	1983	1983	1986	1090	Burke	<u> </u>	ntz & Compa	ny					
Live professional and college team sports	\$ 27	\$35.00	\$33.98	\$32.95	\$35.66	36.1%		34.2%	37.2%	36.3%	38.8%	43.4%					
Movies	66	38.00	42.98	37.76	25.02	30.2	25.1	31.2	30.1	25.7	25.6	23.4					
Syndicated shows, series and specials	5	10.57	10.62	11.76	15.84	18.6	17.5	16.9	14.5	15.6	16.0	14.4					
News and public affairs programs	2	9.40	6.21	12.62	13.33	12.1	11.3	11.8	11.9	14.8	12.4	12.6					
Devotional and religious programming	NA	NA	NA	NA	7.24	NA	3.5	4.3	3.6	4.3	3.9	4.0					
PBS and all other public television programming	NA	7.03	6.21	4.91	2.51	3.1	4.1	1.3	2.7	2.9	3.0	2.0					
Canadian programming	_NA_	NA	<u>NA</u>	<u>NA</u>	0.40	<u>NA</u>	0.1	0.2		0,5	0.3	0.2					
Total	\$ 100	\$100.00	\$100.00	\$100.00	\$100.00	100.1%*	100.1%*	99.9%*	100.0%	100.1*%	100.0%	100.0%					
Note: Category definition significantly.	s, the nu	mber of cate	gories addre	ssed and the	research me	thodology c	f the individ	ual surveys	summarized a	above varied,	in some cas	es 					
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TABLE 1. SUMMARY OF CABLE OPERATOR DISTANT SIGNAL PROGRAMMING VALUE ALLOCATIONS, 1978-1993

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In March 1980, the Research Department of advertising agency Batten, Barton, Durstine & Osborne, Inc. (BBDO) completed a study entitled <u>Cable System Operators'</u> <u>Attitudes Toward Distant Signal Programming</u>. This study, commissioned by the Joint Sports Claimants, was submitted to the Copyright Royalty Tribunal in the 1978 Cable Royalty Distribution Proceeding.

<u>Methodology</u>

BBDO conducted telephone interviews among a national sample of marketing and programming executives associated with the 20 largest cable multiple system operators (MSOs).

BBDO used a constant sum technique. Respondents were asked how they would allocate a specific sum (\$100) to purchase various categories of distant signal programming.

Interviews were completed with 16 MSO executives from among the 20 largest U.S. cable system operators. Eleven of the 16 executives answered the constant sum question.

<u>Key Findings</u>

The respondents provided the following mean allocation across the four categories of programming about which they were asked:

Category	Mean Allocation			
Movies	\$ 66			
Live professional sports	27			
Syndicated TV shows	5			
Local news and public affairs	2			
	\$ 100			

The survey also identified movies, specials and live professional sports as programs most often used in subscription campaigns, with over half of the respondents reporting using both movies and sports on an unaided basis. Including aided responses, all respondents featured movies, while 14 (or 88 percent) featured sports. Movies were considered most important to feature in subscription campaigns, followed by sports.

<u>Criticisms</u>

In its Final Determination for 1978, the Copyright Royalty Tribunal generally questioned the methodology and findings of the BBDO study but did not provide any specific criticisms.¹ During the proceeding, however, a number of concerns were raised by MPAA and other claimants with respect to the study:

- Sample size and composition. The BBDO survey was not designed to be statistically representative of the cable system universe and thus the results were not projectable to that universe. Moreover, the constant sum valuations reflected the views of only 11 respondents.
- Survey timing and questionnaire design. The "1978" study was conducted in March 1980, some 15 months after the end of 1978. The survey design was such that respondents were asked to express "current" opinions, suggesting that they were actually addressing the 1980 (rather than 1978) time period.
- Focus on distant signals. Respondents were instructed to think in terms of distant signal programming categories only in the allocation question. Preceding questions addressed overall programming and subscription marketing decisions.
- Programming categories. Public television programming, Canadian programming and devotional/religious programming were not addressed in the survey. Moreover, respondents were not instructed to exclude broadcast network programming in making their allocations of programming value.
- Station listings. Although providing system by system carriage summaries to MSO respondents would have been impractical, no attempt was made to inform respondents of the distant signals to which their responses applied.
- Programming definitions. Programming category definitions provided to respondents were limited.

¹<u>Federal Register</u>, Vol. 45, No. 186, September 23, 1980, p. 63038.

The Joint Sports Claimants requested BBDO to conduct a study for use in the 1979 cable royalty distribution proceeding.¹

<u>Methodology</u>

The second BBDO study made several modifications which sought to address concerns expressed with regard to the survey for 1978:

- The number of MSO executives surveyed was expanded to incorporate the 50 largest MSOs and was supplemented by a separate survey of managers of individual cable systems;
- Survey questions were modified to distinguish between "cable-originated" programming and distant signal programming;
- The key allocation question was modified to include consideration by respondents of programming's value in retaining current subscribers as well as acquiring new subscribers;
- Respondents were instructed to rule out broadcast network programming in their assessments of comparative value;
- □ PBS programming was included as a category; and
- □ Respondents were asked to focus on the year 1979.

Telephone interviews were completed with senior marketing and/or programming executives at 31 of the top 50 MSOs. Additionally, from a random sample of 108 cable systems, interviews were completed with 53 system managers.

<u>Key Findings</u>

When asked to allocate \$100 to reflect the comparative value of different types of distant signal programs actually carried in 1979, MOO and system level respondents provided the following allocations:

	Mean Allocation				
Category	MSO Executives	Cable System Managers			
Movies	\$ 38.00	\$ 42.98			
Live non-network sports	35.00	33.98			
Syndicated television shows	10.57	10.62			
News and public affairs	9.40	6.21			
PBS and other educational station programming	7.03	6.21			
Total	\$ 100.00	\$ 100.00			

¹BBDO Research Department, <u>Cable System Operators' Attitudes Toward 1979 Distant Signal</u> <u>Programming as Reflected by Interviews with Multiple System Operator Executives and with Cable System</u> <u>Managers</u>, May 1981.

In comparison with BBDO's initial study, movies were accorded a substantially lower valuation, while all other categories increased in relative importance. BBDO attributed this shift to the effort made to more effectively distinguish between HBO-type movie services and distant signal movie programming.

In other survey questions, respondents indicated that sports and movies on distant signal stations were most often used in promotions; would be missed most if taken away from subscribers; and would be carried most substantially in a schedule arranged by operators themselves.

<u>Criticisms</u>

The Tribunal's 1979 Final Determination did not comment on specific methodological aspects of the BBDO survey, except to note certain of the improvements cited above.² During the proceeding, MPAA and others raised various concerns about the BBDO study. These included:

- Sample size and composition. The MSO executive survey was not statistically representative of the cable system universe. The cable systems in the survey were randomly selected, but responses were obtained from less than half of the systems sampled and only 42 respondents (39 percent of systems sampled) answered the allocation question. Further, no attempt was made to weight the system responses in relation to the amount of royalties they paid during 1979.
- Survey timing. A "recall" issue remained, in that the study was conducted in April and May 1981 -- 16 to 17 months after the end of 1979.
- Programming categories. Although public TV programming was added for consideration in the 1979 study, Canadian and devotional/religious programming were not accounted for.
- Station listings. No information regarding the distant signal stations actually carried in 1979 was provided to either MSO or system respondents.

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²Federal Register, Vol. 47, No. 45, March 8, 1982, p. 9882.

SECTION III. BBDO, 1980

At the request of the Joint Sports Claimants, BBDO's Research Department conducted a third study in conjunction with the 1980 Copyright Royalty Distribution Proceeding.¹

<u>Methodology</u>

In its study for 1980, BBDO limited its research to MSO executive interviews, while otherwise maintaining a nearly identical approach to that undertaken in 1979. Telephone interviews were completed with senior marketing and/or programming executives at 34 major cable multiple system operators.

<u>Key Findings</u>

MSO respondents allocated the value of distant signal non-network programming in the following manner for 1980:

Category	MSO Executives Mean Allocation		
Movies	\$ 37.76		
Live non-network sports	32.95		
News and public affairs	12.62		
Syndicated television shows	11.77		
PBS and other educational station programming	4.91		
Total	\$ 100.01*		

*Does not add to 100.0 percent due to rounding.

As in prior BBDO studies, responses to other survey questions were consistent with the allocated values. Sports and movies on distant signal stations were most often used in promotions; would be missed most if taken away from subscribers; and would be carried most substantially in a schedule arranged by operators themselves.

<u>Criticisms</u>

The Tribunal's 1980 Final Determination made only limited reference to the BBDO survey, but did attach importance to the consistency of results achieved over three separate surveys conducted for three different years.² Given the similarities in approach, criticisms of the BBDO study for 1980 mirror those evident in 1979.

¹BBDO Research Department, <u>Cable System Operators' Attitudes Toward 1980 Distant Signal</u> <u>Programming as Reflected by Interviews with Multiple System Operator Executives</u>, September 1982. ²<u>Federal Register</u>, Vol. 48, No. 45, March 7, 1983, p. 9565.

For the 1983 Proceeding, two surveys of cable operators were presented to the Tribunal.¹ This section describes the research performed by the ELRA Group and commissioned by the National Association of Broadcasters.² A study prepared by Browne, Bortz & Coddington, Inc. and commissioned by the Joint Sports Claimants is reviewed in Section V.

<u>Methodology</u>

The ELRA Group selected a sample of 400 cable systems at random from among the systems that filed 1983 "Form 3" Statements of Account with the Copyright Office. Telephone interviews were completed with 286 respondents, qualified to be cable system management personnel familiar with 1983 programming decisions. Similar to the BBDO approach, respondents were asked to allocate \$100 among different types of distant signal programming based on their relative values in attracting and keeping subscribers in 1983.

ELRA included seven programming categories: live sports; news and other programs produced by commercial television stations; syndicated series; movies; religious programming; public broadcasting programs; and Canadian station programs. Respondents were read a list of the distant signal stations carried by their system during 1983, and were only asked to allocate value to the public broadcasting and Canadian categories if their system carried a PBS or Canadian distant signal in 1983. Broadcast network programming was excluded.

Key Findings

Category	Average Allocation
Sports programs	\$ 35.66
Movies	25.02
Syndicated series	15.84
Station produced programs	13.33
Religious programs	7.24
Public broadcasting programs	2.51
Canadian station programs	0.40
Total	\$ 100.00

Mean programming value allocations obtained in the ELRA survey were as follows:

¹A third study, conducted for PBS by McHugh and Hoffman, included a constant sum question but is not reviewed in this report since it made no attempt to distinguish programming types other than public television programming.

²The ELRA Group, <u>The Value of Distant Station Programming to Cable Operators</u>, April 30, 1985. It should be noted that ELRA also conducted a companion study of cable subscribers for 1983. This study, which does not directly relate to cable operator valuation of programming, is not discussed in this report.

In addition to obtaining allocations for additional program categories, a major difference between these results and the results of the BBDO surveys is that, for the first time, sports' allocation was greater than movies.

Criticisms

The Tribunal accepted the ELRA cable operator study as "adequate in design and methodology."³ However, certain criticisms were identified:⁴

- Like the earlier BBDO surveys, conducting the 1983 research in April 1985 was believed to create a "recall problem" for respondents.
- Although program definitions were given, the Tribunal believed that "there probably existed confusion among the cable operators about the proper categorization of program types."
- The Tribunal commented that "asking an operator to allocate \$100 renders the task just an exercise and does not sufficiently focus the operator on the hard business decisions that he or she makes."
- Finally, the Tribunal questioned the practice of automatically allocating a zero value to PBS and Canadian signals in instances where they were not carried. This judgement was based on the notion that a particular signal might be valued by an operator yet not be carried because its price (i.e., the cost of carrying it) exceeded its perceived value. In this example, a positive value would go unrecorded in the ELRA allocation question.

In addition to these criticisms, the ELRA study did not attempt to weight survey responses based on the amount of royalties paid by sample cable systems. Moreover, the survey respondents included a substantial percentage of individuals not occupying general, marketing or programming management positions; only 132 respondents or 46 percent of the total served in these capacities. As mentioned in Section IV, a second cable operator survey was presented in the 1983 Proceeding. The study was prepared by Browne, Bortz & Coddington, Inc. (BBC) at the request of the Joint Sports Claimants.¹

<u>Methodology</u>

The BBC study was conceptually similar to that performed by the ELRA Group in several respects, but also contained certain key differences:

- A statistically valid random sample of 182 cable systems was selected. A stratified sampling design with ratio estimation was utilized to allow the responses of systems to be weighted based on their royalty payments for the second period of 1983. As a result, the weighted valuation estimates obtained were projectable to the universe of Form 3 cable systems. Cable system operators, rather than MSO executives, were selected because of their more detailed knowledge of programming value at the local level.
- Similar to the ELRA study, respondents were asked to evaluate non-network programming only on the distant signal stations actually carried by their system during 1983. Individual stations were identified for each respondent based on the Statements of Account for the second half of 1983 filed with the Copyright Office.
- In the key valuation question, a constant sum technique such as that used in the ELRA Group and prior surveys was used. However, respondents were asked to allocate 100 percent of the total value of the programming on distant signals. This approach responded to CRT concerns regarding earlier studies and recognized that the actual amount paid for distant signal programming varied from system to system, with a percentage distribution having equal relevance for both small and large systems.
- □ Four or five program categories were used, depending upon whether or not respondent's cable system carried a distant PBS/educational station in 1983: "movies", "live professional and college sports", "syndicated shows and series", "news and public affairs" and "PBS and educational programming". If no PBS station was carried, the operator was not asked to value this program type. Program categories were read once, so that the respondent had a chance to think about them, then reread to get the operator's valuation estimates. The program types were randomly ordered to prevent ordering bias.

¹Browne, Bortz & Coddington, Inc., <u>Cable Operator Valuation of Distant Signal Non-Network</u> <u>Programming, 1983</u>, May 13, 1985.

Telephone interviews were conducted during March 1985. Completed interviews were obtained with representatives of 169 of the 182 Form 3 cable systems in the sample frame, for a response rate of 93 percent. Over 90 percent of respondents occupied either general, marketing or programming management positions.

Key Findings

As with the independently-conducted ELRA study, the BBC study showed that local cable operators valued live professional and college sports above all other nonnetwork program classifications in terms of its ability to attract and retain subscribers, according sports 36 percent of the total value of all distant signal programming carried in 1983:

Category									Perc Tota	cent of I Value
Live professional and college sports Movies				I		!			3 3	6.1% 0.2
Syndicated shows and series		I	I	I	I	1	1		1	8.6
New and public affairs		ĺ	ĺ	İ	ĺ				1	2.1
PBS, educational and other public tele	evi	sio	n	Ι		1	i	;	10	<u>3.1</u> 0.1%*

*Does not equal 100.0 percent due to rounding.

Other BBC survey results supported operators' ranking of live professional and college sports as the most valued category of 1983 distant signal non-network programming. Sports programming, for example, was mentioned as the most popular distant signal non-network programming with subscribers at almost two-thirds of Form 3 systems compared with 42 percent of systems for movies and 19 percent of systems for syndication, the next highest rated categories. Similarly, of the systems which used distant signal programming for 1983 marketing, more than 90 percent featured sports; sports was the most important distant signal non-network programming from a marketing perspective at almost two-thirds of such systems. Movies rated in second position following sports as a marketing tool.

<u>Criticisms</u>

The Tribunal accepted the BBC study as "adequate in design and methodology".² However, like the ELRA survey and earlier studies, the BBC study was criticized with regard to the respondent recall problem. Again similar to ELRA, criticism was also made of the practice of according PBS a zero value if no public television signal was carried by a particular cable system. The BBC study was also criticized for failing to include the devotional/religious and Canadian programming categories, and for failing to provide sufficient programming definitions. Finally, concerns were raised over the use of a stratified random sample.

²<u>Federal Register</u>, Vol. 51, No. 72, April 15, 1986, p. 12809.

SECTION VI. BORTZ & COMPANY, 1986

Bortz & Company, Inc. was retained by the Joint Sports Claimants to conduct a cable operator survey for 1986. (Bortz & Company principals were members of Browne, Bortz & Coddington, Inc. and oversaw the BBC study for 1983.)

Methodology

The 1986 Bortz & Company study was conceptually similar to the 1983 BBC study. However, certain modifications were made to address concerns expressed by the Tribunal in the 1983 Proceeding:

- Programming categories. In order to include all claimants party to the CRT proceeding, categories were added for "devotional/religious programming" and "Canadian programming." Addition of the new categories had only a minimal impact on overall study results.
- Nonstratified sample. A random sample of all Form 3 cable systems was selected for the 1986 study, rather than the stratified sampling approach used in the study for the 1983 proceeding. Although both approaches provide statistically reliable estimates, the nonstratified sample was employed to address concerns raised during the 1983 proceeding regarding the use of a stratified sample.

Telephone interviews were conducted during June and July of 1988. Completed interviews were obtained from 192 of the 245 cable systems in the sample frame, for a response rate of 78.4 percent.

<u>Key Findings</u>

Cable operators would have allocated 38.5 percent of a 1986 distant signal non-network programming budget to live professional and college sports, ranking this program category above all other classifications:

	Percent of Total Value
Live professional and college sports	38.5%
Movies	25.1
Syndicated shows and series	17.5
News and public affairs	11.3
PBS, educational and other public television	4.1
Devotional/religious programming	3.5
Canadian programming	0.1
Total	100.1%*

*Does not equal 100.0 percent due to rounding.

Responses to two other survey questions confirmed cable operators' ranking of live professional and college sports as the most valued category of 1986 distant signal non-network programming. In terms of popularity with subscribers in 1986, sports programming was cited as among the most popular distant signal non-network programming at 72 percent of Form 3 systems. By comparison, the next most frequently mentioned categories were movies (43 percent of systems) and syndicated shows and series (29 percent of systems). Moreover, among cable systems which used distant signal non-network programming in their 1986 advertising and promotional efforts, 90 percent featured sports programming as part of these efforts. Movies were utilized in marketing efforts by 61 percent of operators. Almost two-thirds of operators considered sports the most important programming type from a marketing perspective; movies again ranked second following sports.

Criticisms

A settlement was reached regarding the distribution of 1986 copyright royalties and therefore no 1986 Tribunal proceeding was conducted. However, certain criticisms leveled at prior surveys remain applicable to the 1986 study. These include the respondent recall problem, the lack of program definitions and the practice of automatically allocating a zero value to PBS and Canadian signals in instances where they were not carried.

In addition, it is our opinion that the stratified sampling approach used in the 1983 BBC study is the most appropriate design for the task of allocating copyright royalty payments among competing interests since it weights responses by the amount of royalties actually paid. The simple random sampling design used for 1986 -- while statistically valid -- is less directly applicable to copyright royalty distribution decision making.

SECTION VII. BORTZ & COMPANY, 1989

The Joint Sports Claimants again retained Bortz & Company to conduct a survey addressing cable operator valuation of distant signal non-network programming for 1989.¹

<u>Methodology</u>

The Bortz & Company study for 1989 endeavored to combine the key strengths of the 1983 BBC study and the 1986 Bortz & Company survey, while also addressing certain CRT concerns with earlier studies. A stratified random sampling approach was used to develop statistically projectable estimates of respondent's valuations. The key valuation question in the 1989 study was modified so that the respondent allocated a fixed program budget among the various alternative programming types -- the same task performed in distributing copyright royalties. Additional program categories (Canadian and devotional/religious) were added to insure representation of all claimants. Based on the signal data available at the time the survey was conducted, respondents were provided information as to distant signals carried in the second half of 1988 and were then asked if any carriage changes had occured in 1989.

The 1989 survey was conducted near the end of 1989 (between December 4, 1989 and March 8, 1990) to address the respondent recall issue raised regarding all prior cable operator surveys submitted in copyright royalty distribution proceedings.

Interviews were completed with 198 respondents among the 237 cable systems in the sample. The key constant sum question was answered by 187 respondents. The 79 percent response rate to the constant sum question provided program valuation estimates with a high degree of statistical validity. 89 percent of the respondents occupied general, marketing and/or programming management positions.

<u>Kev Findings</u>

Cable operators valued the 1989 sports programming they carried more highly than any other category of distant signal non-network programming. Survey results indicated that all Form 3 cable operators in the United States would have allocated 34.2 percent of a 1989 distant signal non-network programming budget to live professional and college sports:

Category	Percent of Total Value
Live professional and college sports	34.2%
Movies	31.2
Syndicated shows and series	16.9
News and public affairs	11.8
Devotional/religious programming	4.3
PBS, educational and other public television	1.3
Canadian programming	_0.2
Total	99.9%*

*Does not equal 100.0 percent due to rounding.

¹Bortz & Company, Inc., <u>Cable Operator Valuation of Distant Signal Non-Network Programming, 1989</u>, August 1991. The Canadian claimants also conducted a constant sum study for 1989 which was withdrawn when they settled prior to the 1989 proceedings.

Similar to prior studies, responses to two other survey questions confirmed operators' ranking of live professional and college sports as the most valued category of 1989 distant signal non-network programming. In terms of popularity with subscribers in 1989, sports programming was cited as among the most popular distant signal nonnetwork programming by 73 percent of Form 3 systems. By comparison, the next most frequently mentioned categories were movies (45 percent of systems) and syndicated shows and series (30 percent of systems). Moreover, among cable systems which used distant signal non-network programming in their 1989 advertising and promotional efforts, 90 percent featured sports programming as part of these efforts. Movies and syndicated shows and series were utilized in marketing efforts by 73 and 45 percent of operators, respectively. More than 60 percent of operators considered sports the most important programming type from a marketing perspective; movies again ranked second following sports.

<u>Criticisms</u>

In its Final Determination, the Tribunal acknowledged that "the high standards of procedure obtained in the 1983 survey were again followed in the 1989 survey".² Moreover, it concluded that "the Bortz survey has taken important steps to improve the validity and reliability of its results".³ In particular, the effort to address the recall issue was considered important, as were the modifications to the valuation question and the addition of program categories. As a result, the Bortz survey was considered valid, and formed a key part of the CRT determination.⁴

Even so, certain criticisms were identified with regard to the survey:⁵

- The Tribunal remained concerned about program category definitions.
- Concern regarding the zero value allocation to the PBS and Canadian categories when these signals were not carried remained. Also, concern was expressed about the fact that the PBS and Canadian categories competed with more alternatives when these signals were carried.
- The Tribunal concluded that a recall issue remained in the sense that respondents could not recall all of the distant signal programming carried in 1989 and were therefore responding based on a dominant impression of what was broadcast that year.
- Among the respondent group, 11 percent were judged to have been unqualified. In addition, concern was expressed that for the remaining 89 percent no qualifying question was asked about budget preparation or knowledge.

²<u>Federal Register</u>, Vol. 57, No. 81, April 27, 1992, p. 15300. ³<u>Ibid</u>. ⁴<u>Ibid.</u> p. 15301. ⁵<u>Ibid</u>.

- The Tribunal accepted an argument by the MPAA that separating movies and syndicated programming into two categories contributed to a lower aggregate response for those programming types.
- Finally, the brief time period (five to 10 minutes) in which respondents answered the survey questions was acknowledged as potentially affecting survey results (i.e., relative to the "real world" decisionmaking process in which options and value would be considered and debated at length).

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SECTION VIII. BURKE MARKETING RESEARCH, 1990

The Joint Sports Claimants retained Burke Marketing Research (which had executed prior cable operator surveys under BBC and Bortz & Company supervision) to conduct the cable operator valuation study for 1990.

<u>Methodology</u>

Burke Marketing Research used the same questionnaire developed by Bortz & Company for 1989, and also the same sample which had been selected for 1989. Signal carriage data were updated to reflect distant stations carried in 1990.

The Burke study was conducted prior to release of the Tribunal's 1989 Final Determination and, therefore, could not take account of concerns raised in that decision. The questionnaire design employed by Burke for the 1990 study was essentially the same as that used in the 1989 study and therefore did take account of questionnaire-related concerns raised with regard to pre-1989 studies. In addition, signals actually carried in 1990 were identified to respondents, and therefore respondents were not asked whether their signal complement had changed.

The key constant sum question was answered by 173 of 216 systems included in the sample frame, reflecting an 80 percent response rate. Of those responding, 84 percent held general, marketing or programming management positions.

Key Findings

Results of the Burke survey indicated that cable operators would have allocated 37 percent of a 1990 distant signal programming budget to live professional and college sports:

Category	Percent Allocation
Live professional and college sports	37.2%
Movies	30.1
Syndicated shows and series	14.5
News and public affairs	11.9
Devotional and religious	3.6
PBS, educational and other public television	2.7
Canadian	
Total	100.0%

These budget allocations were supported by responses to questions regarding programming popularity and use in advertising and promotional efforts. Operators at 73 percent of systems cited sports programming as among the most popular with sub-

scribers. Movies were mentioned by 43 percent of systems and syndicated shows and series by 24 percent. Among cable systems which used distant signal non-network programming in their 1990 advertising and promotional efforts, 92 percent featured sports programming as part of these efforts. Movies were used by 55 percent and syndicated programming by 19 percent. Sports was considered the most important programming type from a marketing perspective by 69 percent of these operators.

Criticisms

Given the similarities in questionnaire design and overall study approach in 1989 and 1990, the same criticisms applicable to the 1989 survey hold for the 1990 study. These include: limited programming definitions; zero value allocations to PBS and Canadian categories when no such signals were carried; PBS and Canadian categories competing with more alternatives; the inability of respondents to recall all distant signal programming carried in 1990; a portion (in this instance 16 percent) of the respondent base lacking sufficient qualification; the separation of movies and syndicated programming categories; and the brief time period in which survey questions were answered.

In addition, the signal carriage information provided to approximately one-fifth of the respondents mistakenly omitted certain (most often network) signals carried on a distant basis. This and other administrative problems with the 1990 survey suggest that individuals executing the survey may not have been sufficiently briefed and supervised.

The 1990 study used the same sample of systems as the 1989 study (excluding 28 systems for which signal carriage data could not be obtained). The study thus shows how the responses of those systems changed. However, there are questions about whether reusing the 1989 sample produced a representative sample for 1990.

SECTION IX. BORTZ & COMPANY, 1991

At the request of the Joint Sports Claimants, Bortz & Company conducted a survey addressing cable operator valuation of distant signal non-network programming for 1991.

<u>Methodology</u>

Bortz & Company's 1991 study was conducted prior to the release of the Tribunal's 1989 Final Determination and, therefore, could not take account of concerns raised in that decision. The methodology employed was essentially the same as that used in the 1989 study and did take account of concerns raised with regard to the pre-1989 studies. In addition, signals actually carried in 1991 were identified to respondents. Completed interviews were obtained with 198 of 221 sample systems; 196 or 89 percent answered the key allocation question. 89 percent of the respondents occupied general, marketing or programming management positions.

Kev Findings

Cable operators valued the sports programming they carried more highly than any other category of distant signal non-network programming. Survey results indicated that all Form 3 cable operators in the United States would have allocated 36 percent of a 1991 distant signal programming budget to live professional and college sports:

Category	Percent Allocation
Live professional and college sports	36.3%
Movies	25.7
Syndicated shows and series	15.6
News and public affairs	14.8
Devotional and religious	4.3
PBS, educational and other public television	2.9
Canadian	0.5
Total	100.1%*

*Does not add to 100.0 percent due to rounding.

Once again, responses to two other survey questions confirmed operators' ranking of live professional and college sports as the most valued category of 1991 distant signal non-network programming. In terms of popularity with subscribers in 1991, sports programming was cited as among the most popular distant signal non-network programming by 74 percent of Form 3 systems. By comparison, the next most frequently mentioned categories were movies (30 percent of systems) and syndicated

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shows and series (23 percent of systems). Moreover, among cable systems which used distant signal non-network programming in their 1989 advertising and promotional efforts, 90 percent featured sports programming as part of these efforts. Movies and syndicated shows and series were utilized in marketing efforts by 53 and 48 percent of operators, respectively. More than 70 percent of operators considered sports the most important programming type from a marketing perspective; movies again ranked second following sports.

<u>Criticisms</u>

Given the similarities in methodology and procedure in 1989 and 1991, the same criticisms applicable to the 1989 survey hold for the 1991 study. These include: limited programming definitions; zero value allocations to PBS and Canadian categories when no such signals were carried; PBS and Canadian categories competing with more alternatives; the inability of respondents to recall all distant signal programming carried in 1991; a portion (in this instance 11 percent) of the respondent base lacking sufficient qualifications; the separation of the movies and syndicated programming categories; and the brief time period in which survey questions were answered.

SECTION X. BORTZ & COMPANY, 1992

At the request of the Joint Sports Claimants, Bortz & Company conducted another cable operator survey for 1992.

<u>Methodology</u>

The Bortz & Company survey for 1992 remained conceptually similar to prior Bortz & Company surveys, incorporating the key elements of those surveys. However, the 1992 survey reflected improvements made in response to CRT concerns expressed in its 1989 determination as well as in earlier proceedings. The specific improvements are described in greater detail in the testimony of Paul Bortz, which is being submitted separately to the CARP in the 1990-92 cable royalty distribution proceeding.

<u>Kev Findings</u>

In the 1992 Bortz & Company study cable operators valued sports programming more highly than any other category of distant signal non-network programming. Survey results indicate that all Form 3 cable operators in the United States would have allocated 39 percent of a distant signal non-network programming budget to the sports category:

	Percent Allocation
Live professional and college team sports	38.8%
Movies	25.6
Syndicated shows, series and specials	16.0
News and public affairs programs	12.4
Devotional and religious programming	3.9
PBS and all other public television programming	3.0
Canadian programming	0.3
Total	100.0%

Responses to two other survey questions confirm operators' ranking of sports as the most valued category of distant signal non-network programming. In terms of popularity with subscribers, sports programming was cited as among the most popular distant signal non-network programming by respondents representing 76 percent of Form 3 systems. By comparison, the next most frequently mentioned categories were movies (41 percent of systems) and syndicated programming (23 percent of systems). Moreover, among cable systems which used distant signal non-network programming in their advertising and promotional efforts, 96 percent featured sports programming as part of these efforts. Movies and syndicated programming were utilized in marketing efforts by 50 and 38 percent of operators, respectively. More than two-thirds of operators considered sports the most important programming type from an advertising and promotional perspective; movies again ranked second following sports, with 19 percent of respondents considering this category most important.

Criticisms

Certain criticisms that were raised regarding prior surveys can also be raised regarding the 1992 survey. These include: zero value allocations to PBS and Canadian signals when no such signals are carried; PBS and Canadian categories competing with more alternatives; survey respondents cannot base their value allocations on specific knowledge of each individual program carried during the year in question; the separation of the movies and syndicated programming categories; and the fact that any program definitions, including those used in 1992, allow for the possibility of improper categorization of certain "fringe" programming by respondents.

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SECTION XI. BORTZ & COMPANY, 1993

At the request of the Joint Sports Claimants, Bortz & Company conducted a study addressing cable operator valuation of 1993 distant signal non-network programming.

<u>Methodology</u>

The methodology employed for the 1993 study was essentially the same as that used in the 1992 study. Completed interviews were obtained with 132 of 194 sample systems; 121 or 62 percent answered the key allocation question. 92 percent of the respondents occupied general, marketing or programming management positions.

<u>Key Findings</u>

Cable operators would have allocated 43.5 percent of a 1993 distant signal programming budget to live professional and college team sports, ranking this category substantially above all other programming types:

Category	Percent Allocation
Live professional and college team sports	43.5%
Movies	23.4
Syndicated shows, series and specials	14.4
News and public affairs programs	12.6
Devotional and religious programming	4.0
PBS, educational and other public television programming	2.0
Canadian programming	0.2
Total	100.1%*

*Does not add to 100.0 percent due to rounding.

Relative rankings were confirmed by responses to other survey questions. Sports programming was cited as among the distant signal non-network programming most popular with subscribers at nearly three-fourths of Form 3 systems, followed by movies (mentioned by nearly two-fifths of systems) and both syndicated shows, series and specials and news/public affairs (one-fifth of systems). Among cable systems which used distant signal non-network programming in their 1993 advertising and promotional efforts, sports and movies were each reported as being featured by more than four-fifths of respondents. Sports was believed most important to feature in advertising and promotion by 46 percent of these respondents, with movies considered most important by 42 percent.

<u>Criticisms</u>

Given the methodological similarities to the 1992 study, the same criticisms applicable to that study are also applicable for 1993. These include zero value allocations to PBS and Canadian programming when no such signals were carried; PBS

and Canadian categories competing against more alternatives; the separation of the movies and syndicated programming categories; potential respondent uncertainty regarding categorization of "fringe" programming; and the inability of respondents to recall all distant signal programming actually carried in 1993.

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In addition, the response rate for 1993 was lower than in prior years. Although the larger percentage nonresponse increases the potential for any such difference to impact study results, there is no reason to believe that nonrespondents would allocate value any differently than respondents. Based on our experience, the 62 percent response rate to the key allocation question is higher than that achieved for most market research studies.

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Appendix A describes the methodology used in questionnaire design, sampling and interviewing for the 1990 cable operator survey conducted by Burke Marketing Research, as well as providing statistical evaluation of survey results. The 1990 survey instrument is set forth in Appendix E.

<u>Questionnaire Design</u>

The survey instrument was drafted by Burke Marketing Research, relying on the earlier Bortz & Company survey instrument developed for 1989. Data as to carriage of distant signal broadcast stations by cable operators were compiled by Burke from 1990-1 Statements of Account which were filed with the Copyright Office.

Cable System Sampling

The Burke study utilized the same sample selected by Bortz & Company for the 1989 study. The sampling plan for that study is discussed in the testimony of Paul Bortz in this proceeding.

<u>Survey</u>

Telephone surveying was completed by Burke Marketing Research, one of the largest market research firms in the United States, from their facility in Cincinnati, Ohio. Only interviewers specializing in surveying professional and managerial personnel were utilized.

Dates during which surveys were completed are as follows: December 26, 1990 to March 26, 1991. Calls were placed between 8:30 a.m. and 4:30 p.m. Central Standard Time. Interviewers were instructed to call back as often as necessary to obtain a completed interview or refusal.

Interviewers were not told the name of the client or given any information, other than that on the survey form, regarding the nature of the study.

Survey Completion

Interviews were completed with 80 percent of cable systems included in the sample frame:

	Questionnaires	Surveys	Response	Response
	Administered	Completed	Rate	Rate to Q4
1990	216	179	82.9%	80.0%

Interviewers were instructed to ask first for the system general manager and to confirm that the manager was the person at the system "most familiar with programming carried" by the system. If the general manager did not fit the description, the interviewer was instructed to ask for the person who was most familiar with programming carried. In all cases, the eventual survey respondent, whether or not the system manager, was required to affirmatively answer the qualifying question. Respondents were typically individuals with general management, marketing or programming responsibilities:

				Number of Respon-						Percent of Total
Job Title		_				uento	- i			
General Manager/Regional Manager/President/CEO		 :	:		1	68	1	1		38.0%
VP Marketing/Marketing Director/Marketing Manager		 i	i	i	i	73	I	ļ		40.8
VP Programming/ Programming Director/ Programming Manager		 	 	 	 	 10	1	1	-	5.6
Marketing Coordinator/Assistant				1		7				3.9
Office Manager/Business Manager/ Government Affairs		:	i		i	7				3.9
Sales Manager/Representative		I.	1	I.	1	5	;	÷	;	2.8
Assistant General Manager/ Assistant Vice President						3				1.7
Operations Manager/Chief Technician						· 3				1.7
Programming Coordinator						: 1:				0.6
Other						2			:	1.1
Total		 				179				<u>100.1%</u> *

*Does not equal 100.0 percent due to rounding.

Estimation Procedures

Bortz & Company tabulated the survey results obtained by Burke. Two different methodologies were used in making estimates for all systems based on the sample responses. For question 4 (valuation by program type), a ratio estimation methodology was used. This methodology weights responses by another variable. In this case, the responses (valuation of each type of programming) were weighted by total royalty. Larger systems with greater royalty payments were given a greater weight compared with smaller systems in determining the average value of each type of programming. For the sample systems, the total royalty and percent of value by program type was known. For all other systems not in the sample, total royalties were also known. Statistically, knowledge of royalties for the total universe of systems improves the reliability of the estimates by reducing the uncertainty in this component of the estimation methodology.

For questions 2 and 3, the focus was not on value but rather on subscriber and advertising preference. In this case, there was no other supplemental variable available which related to preference for all systems, including those not in the sample. Therefore, the ratio estimation methodology did not apply to making estimates based on responses to these questions and a more straightforward method was applied in which all sample stations carried an equal weight after accounting for different sample sizes by strata.

Formulas for calculating these statistics are set forth below.

Statistical estimation procedures for question 4:

- = proportionate value of program type x estimated by sample system i P_{ih} in stratum h from questionnaire,
- = total revenue of <u>sample system</u> i in stratum h. t_{ih -}
- = total royalty of <u>all</u> (sample and nonsample) systems in stratum h, Th
- = $p_{ih}t_{ih} = value$ of program type x to system i in stratum h, ×_{ih}

= number of <u>sample systems</u> responding in stratum h, n_h

Nh = total number of systems in stratum h,

$$T_{x} = \sum_{h=1}^{4} \frac{\sum_{i=1}^{n_{h}} T_{h}}{\sum_{i=1}^{n_{h}} T_{h}}$$

$$s_{xh}^{2} = \sum_{1}^{n_{h}} x_{ih}^{2} - \frac{(\sum_{i=1}^{n_{h}} x_{ih})^{2}}{n_{h}} / n_{h}$$

$$s_{xh}^{2} = \sum_{1}^{n_{h}} x_{ih}^{2} - \frac{(\sum_{i=1}^{n_{h}} x_{ih})^{2}}{n_{h}} / n_{h}$$

$$s_{ih}^2 = \sum_{1}^{n_h} x_{ih}^2 - \frac{(\sum_{1}^{n_h})^2}{n_h} / n_h$$

$$R_{h} = \frac{\sum_{i=1}^{n_{h}} x_{ih}}{\sum_{i=1}^{n_{h}} x_{ih}}$$

- = estimated total value of program type x,
- = sample variance of value of program type x in stratum h,
- = sample variance of royalty in stratum h.
- = ratio estimate of proportionate value of program type x for stratum h,

$$r_{h} = \frac{\frac{n_{h} \sum_{i=1}^{n_{h}} x_{i} t_{i}}{\frac{1}{n_{h}} \sum_{i=1}^{n_{h}} x_{i} t_{i}} \sum_{i=1}^{n_{h}} x_{i} t_{i}}{\frac{n_{h}^{2} x_{h} x_{i}}{n_{h}} x_{i} t_{i}}}$$

$$V(T_{X}) = \sum_{1}^{4} \frac{N_{h}}{n_{h}^{-1}} (N_{h} - n_{h}) (s_{xh}^{2} + s_{th}^{2} F_{h}^{2} - 2R_{h}^{r} h_{h}^{s} x_{h}^{s} t_{h})$$

 Pearson's correlation coefficient between x_h and t_h in stratum h,

= variance of estimate of total value of program x.

Statistical estimation procedures for Questions 2 and 3.

- n_b = number of <u>sample systems</u> responding in stratum h,
- $N_h = total$ number of systems in stratum h,
- N = total systems in sample frame,

 $p_{xh} = t_{xh} / n_h = estimated <u>proportion of positive answers</u> for given cell$ for question x in stratum h,

then
$$P_{X} = \sum_{h=1}^{4} P_{xh} N_{h} N_{h}$$

 $V(P_{X}) = \frac{1}{N^{2}} \sum_{h=1}^{4} \frac{N_{h}}{n_{h}^{-1}} (N_{h} \cdot n_{h}) p_{xh} (1 \cdot p_{xh})$

- estimated proportion positive answers for given cell for question x,
- = variance of estimated proportion P_{x} .

Evaluation of Survey Estimates

The 95 percent confidence intervals for the estimates obtained in the 1990 study are set forth below.

Category	Percent Allocation	Absolute Confidence Interval*
Live professional and college sports	37.2%	±2.4
Movies	30.1	2.1
Syndicated shows and series	14.5	1.1
News and public affairs	11.9	1.4
Devotional and religious	3.6	0.5
PBS, educational and all other public		
television	2.7	1.2
Canadian		
Total	100.0%	

Question 4. Operator Programming Allocation

*These and subsequent confidence intervals expressed as percentage points.

Question 2. Distant Signal Programming Popularity Among Subscribers

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	72.5%	±9.0
Movies	43.0	9.7
Syndicated shows and series	23.8	8.3
News and public affairs	14.6	7.0
PBS, educational and all other public		
television	1.6	2.7
Canadian	0.5	1.0
Devotional and religious		
Other	1.6	2.7

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Question 3a. Use of Distant Signal Programming for Advertising/Promotional Purposes

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Category	Percent Allocation	Absolute Confidence Interval
Yes	33.9%	±8.8
No	<u>66.1</u>	
Total	100.0%	:

Question 3b/3c. Combined Aided/Unaided Advertising/ Promotional Use of Distant Signal Programming by Type

Category			Percent Allocation	Absolute Confidence Interval	
Live professional and college sports Movies Syndicated shows and series News and public affairs			92.4% 55.3 19.2 15.0	±10.5 19.1 14.5 11.5	
PBS, educational and all other public television Devotional and religious Canadian Other	· ·	1	2.8 • • 0.2 •- 5.9	3.5 0.4 4.7	

Question	3d.	Most I	mportant	Distant	Signal	Program	ming
	for	Advert	ising/Pror	notional	l Purpo	ses	

Category		- - -			Percent Allocation	Absolute Confidence Interval	
Live professional and college sports Movies		I	I	I	69.3% 19.0	±18.0 16.1	
Syndicated shows and series		I.	1	1	6.6	10.4	
PBS, educational and all other public television		1	I	1	1.5	2.5	
News and public affairs		1		1	: . 		
Devotional and religious			Ι				
Canadian							
Other					1.5	2.5	
Don't know/no response	:	1	1	1	<u>2.0</u> 99.9%•	3.1	
IUlai				-		مرابقا المراجع والمتحدين والمتحدثين والمتحد والم	

*Does not equal 100.0 percent due to rounding.

APPENDIX B. METHODOLOGY, 1991

Appendix B describes the methodology used in questionnaire design, sampling and interviewing for the 1991 cable operator survey conducted by Bortz & Company, as well as providing statistical evaluation of survey results. The 1991 survey instrument is set forth in Appendix E.

<u>Questionnaire</u> Design

The survey instrument was drafted by Bortz & Company, giving consideration to earlier Bortz & Company survey instruments. Data as to carriage of distant signal broadcast stations by cable operators were compiled by Bortz & Company from 1991-1 Statements of Account which were filed with the Copyright Office.

Cable System Sampling

The cable system operator sampling plan was developed by Dr. George E. Bardwell, Consultant in Mathematics and Statistics, and Professor of Mathematics and Statistics at the University of Denver, with sample selection conducted by Dr. Bardwell.

A stratified random sampling approach was utilized, with the stratification based on copyright royalty payments. Only Form 3 systems were surveyed; royalty data were obtained from Statements of Account filed with the Copyright Office. The sampling plan was designed to provide a statistically valid predictor for allocation of royalty payments; proportionately more systems with large royalty payments were sampled relative to systems with small royalty payments.

The sample design included four strata of royalty classes, one of which (largest royalty payers) required that all systems within that stratum be included in the sample. The boundaries of the remaining three strata were constructed using the 'cum square root of f rule' applied to a frequency distribution of royalty payments in \$500 increments. This rule gives reasonable assurance the calculated stratum boundaries are maximally effective in reducing the sampling error for a given sample size. Neyman's allocation formulas provide an optimum allocation of the total sample to each stratum so as to achieve minimum sampling error in the overall survey estimates.

The required stratification and certain associated statistics for the study are summarized below:

Royalty Stratum	Number of Systems	Mean Royalty	Percent of Total Royalties	Royalty Standard Deviation	Sample Size
Less than \$22,000	1,140	\$ 11,000	15.2%	\$ 4,950	57
\$22,000-59,999	538	37,000	24.1	11,300	42
\$60,000-249,999	297	120,000	43.1	49,500	85
\$250,000 or more	<u>38</u>	386,000	<u> 17.7</u>	156,060	<u>_38</u>
Total/Average	2,013	40,449	100.1%*		222 ¹

*Does not equal 100.0 percent due to rounding.

¹The sample initially included 222 systems. One system was discarded due to a lack of complete signal data as a result of Statements of Account which could not be located at the Copyright Office at the time of the survey.

Sample systems were randomly selected from each stratum in accordance with the sample size requirements given in the foregoing table. Random selections of systems were made by Dr. Bardwell.

Survey

Telephone surveying was completed by Burke Marketing Research, one of the largest market research firms in the United States, from their facility in Cincinnati, Ohio. James M. Trautman, Vice President of Bortz & Company, and Paul I. Bortz, President, oversaw selection and training of interviewers. Only interviewers specializing in surveying professional and managerial personnel were utilized. Mr. Trautman listened to interviews over the initial phases of the study to ensure that interviewers understood the subject matter, were communicating properly with survey respondents and were accurately recording the information supplied by the respondents.

Dates during which surveys were completed are as follows: March 4, 1992 to May 7, 1992. Calls were placed between 8:30 a.m. and 4:30 p.m. Central Standard Time. Interviewers were instructed to call back as often as necessary to obtain a completed interview or refusal.

Interviewers were not told the name of the client or given any information, other than that on the survey form, regarding the nature of the study.

Survey Completion

Interviews were completed with 90 percent of cable systems included in the sample frame provided to Burke Marketing Research:

	Questionnaires	Surveys	Response	Response
	Administered	Completed	Rate	Rate to Q4
1991	221	198	89.6%	88.7%

Interviewers were instructed to ask first for the system general manager and to confirm that the manager was the person at the system "most familiar with programming carried" by the system. If the general manager did not fit the description, the interviewer was instructed to ask for the person who was most familiar with programming carried. In all cases, the eventual survey respondent, whether or not the system manager, was required to affirmatively answer the qualifying question. Respondents were overwhelmingly individuals with general management, marketing

or programming responsibilities:

Job Title	Number of Respondents	Percent of Total
General Manager/Regional Manager/President/CEO	127	64.1%
VP Marketing/Marketing Director/Marketing Manager	47	23.7
Business Manager/Office Manager/ Government Affairs	10	5.1
VP Programming/ Programming Director/ Programming Manager	3	1.5
Public Relations Director/Community or Promotions Manager	3	1.5
Operations Manager/Chief Technician	3	1.5
Marketing Coordinator/Assistant	2	1.0
Programming Coordinator	1	0.5
Assistant General Manager/ Assistant Vice President	1	0.5
Other	1	0.5
Total	198	100.0%

Estimation Procedures

Two different methodologies were used in making estimates for all systems based on the sample responses. For question 4 (valuation by program type), a ratio estimation methodology was used. This methodology weights responses by another variable. In this case, the responses (valuation of each type of programming) were weighted by total royalty. Larger systems with greater royalty payments were given a greater weight compared with smaller systems in determining the average value of each type of programming. For the sample systems, the total royalty and percent of value by program type was known. For all other systems not in the sample, total royalties were also known. Statistically, knowledge of royalties for the total universe of systems improves the reliability of the estimates by reducing the uncertainty in this component of the estimation methodology.

For questions 2 and 3, the focus was not on value but rather on subscriber and advertising preference. In this case, there was no other supplemental variable available which related to preference for all systems, including those not in the sample. Therefore, the ratio estimation methodology did not apply to making estimates based on responses to these questions and a more straightforward method was applied in which all sample stations carried an equal weight after accounting for different sample sizes by strata.

Formulas for calculating these statistics are identical to those in Appendix A.

Evaluation of Survey Estimates

The 95 percent confidence intervals for the estimates obtained in the 1991 study are set forth below.

Question 4. Operator Programming Allocation

Category				Percent Allocation	Absolute Confidence Interval*
Live professional and college sports Movies	I	I	I	36.3% 25.7	±1.9 1.8
Syndicated shows and series	ł		ł	15.6	1.3
News and public affairs	I		I	14.8	1.6
Devotional and religious				4.3	0.7
PBS, educational and all other	-	ł	ł	29	09
	1		I	0.5	0.4
				100.1%**	
IOTAI				100.170	فتنكر سيعمد إستخصير متباذرها بتباسيهم

*These and subsequent confidence intervals expressed as percentage points. **Does not add to 100.0 percent due to rounding.

Question 2. Distant Signal Programming Popularity Among Subscribers

Category		418-64	Percent Allocation			Absolute Confidence Interval	
Live professional and college sports Movies	İ	İ	ļ	İ	73.6% 29.8		±8.0 7.7
Syndicated shows and series	1	1			23.4		7.6
News and public affairs					20.7	ļ	7.2
PBS, educational and all other	ł	-		ł			
public television					5.3		3.8
Devotional and religious					i •† ! !	į	! ! ! =
Canadian							*-
Other					2.5		2.6

Question 3a. Use of Distant Signal Programming for Advertising/Promotional Purposes

Category	Percent Allocation	Absolute Confidence Interval
Yes	38.8%	±8.2
No	<u>_61.2</u>	
Total	100.0%	

Question 3b/3c. Combined Aided/Unaided Advertising/ Promotional Use of Distant Signal Programming by Type

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	89.9%	±10.6
Movies	53.0	15.9
Syndicated shows and series	47.5	16.2
News and public affairs	16.9	11.7
PBS, educational and all other		
public television	3.4	3.9
Devotional and religious	3.2	3.1
Canadian	1.8	2.8
Other	7.0	8.1

Question 3d. Most Important Distant Signal Programming for Advertising/Promotional Purposes

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	72.1%	±14.6
Movies	13.2	11.2
Syndicated shows and series	10.1	10.6
News and public affairs	2.1	2.9
PBS, educational and all other		
public television	1.4	2.8
Devotional and religious		
Canadian		
Don't know/no response	<u> </u>	NA
Total	100.0%	

Appendix C describes the methodology used in questionnaire design, sampling and interviewing for the 1993 cable operator survey conducted by Bortz & Company, as well as providing statistical evaluation of survey results. The 1993 survey instrument is set forth in Appendix E.

<u>**Questionnaire**</u> Design

The survey instrument was drafted by Bortz & Company, giving consideration to earlier Bortz & Company survey instruments (especially that used in the 1992 study). Data as to carriage of distant signal broadcast stations by cable operators were compiled by Bortz & Company from 1993-1 Statements of Account which were filed with the Copyright Office.

Cable System Sampling

The cable system operator sampling plan was developed by Dr. George E. Bardwell, Consultant in Mathematics and Statistics, and Professor of Mathematics and Statistics at the University of Denver, with sample selection conducted by Bortz & Company professional staff based on parameters established by Dr. Bardwell.

A stratified random sampling approach was utilized, with the stratification based on copyright royalty payments. Only Form 3 systems were surveyed; royalty data were obtained from Statements of Account filed with the Copyright Office. The sampling plan was designed to provide a statistically valid predictor for allocation of royalty payments; proportionately more systems with large royalty payments were sampled relative to systems with small royalty payments.

The sample design included four strata of royalty classes, one of which (largest royalty payers) required that all systems within that stratum be included in the sample. The boundaries of the remaining three strata were constructed using the 'cum square root of f rule' applied to a frequency distribution of royalty payments in \$500 increments. This rule gives reasonable assurance the calculated stratum boundaries are maximally effective in reducing the sampling error for a given sample size. Neyman's allocation formulas provide an optimum allocation of the total sample to each stratum so as to achieve minimum sampling error in the overall survey estimates.

The required stratification and certain associated statistics for the study are summarized below:

Royalty Stratum	Number of Systems	Mean Royalty	Percent of Total Royatties	Royalty Standard Deviation	Sample Size
Less than \$22,000	1,271	\$ 10,858	16.2%	\$ 4,984	37
\$22,000-59,999	581	36,074	24.6	10,330	39
\$60,000-249,999	327	111,420	42.7	46,123	82
\$250,000 or more	<u>38</u>	370,739	<u>16.5</u>	119,649	_38
Total/Average	2,217	38,467	100.0%		<u>196¹</u>

¹The sample initially included 1% systems. One system was discarded due to a lack of complete signal data as a result of a statement of account which could not be located at the Copyright Office at the time of the survey. A second was discarded since only a public television distant signal was carried.

Sample systems were randomly selected from each stratum in accordance with the sample size requirements given in the foregoing table.

Survey

Telephone surveying was completed by Burke Marketing Research, one of the largest market research firms in the United States, from their facility in Cincinnati, Ohio. James M. Trautman, Vice President of Bortz & Company, and Paul I. Bortz, President, oversaw selection and training of interviewers. Only interviewers specializing in surveying professional and managerial personnel were utilized. Mr. Trautman listened to interviews over the initial phases of the study to ensure that interviewers understood the subject matter, were communicating properly with survey respondents and were accurately recording the information supplied by the respondents.

Dates during which surveys were completed are as follows: January 10, 1994 to May 25, 1994. Calls were placed between 8:30 a.m. and 4:30 p.m. Central Standard Time. Interviewers were instructed to call back as often as necessary to obtain a completed interview or refusal.

Interviewers were not told the name of the client or given any information, other than that on the survey form, regarding the nature of the study.

Survey Completion

Interviews were completed with 68 percent of cable systems included in the sample frame provided to Burke Marketing Research:

	Questionnaires	Surveys	Response	Response
	Administered	Completed	Rate	Rate to Q4
1993	194	132	68.0%	62.4%

Interviewers were instructed to ask first for the system general manager and to confirm that the manager was the person at the system "most responsible for programming decisions made" by the system. If the general manager did not fit the description, the interviewer was instructed to ask for the person who was most responsible for programming decisions. In all cases, the eventual survey respondent, whether or not the system manager, was required to affirmatively answer the qualifying question. Respondents were overwhelmingly individuals with general management, marketing

or programming responsibilities:

Job Title	Number of Respondents	Percent of T <u>otal</u>
General Manager/Regional Manager/President/CEO	99	75.0%
VP Marketing/Marketing Director/Marketing Manager	19	14.4
VP Programming	4	3.0
Business Manager/Office Manager/ Business Development	З	2.3
Public Affairs Director	2	1.5
Operations Manager/Chief Technician	2	1.5
VP Sales	2	1.5
Manager Research/Analysis	1	<u> 0.8</u>
Total	132	100.0%

Estimation Procedures

Two different methodologies were used in making estimates for all systems based on the sample responses. For question 4 (valuation by program type), a ratio estimation methodology was used. This methodology weights responses by another variable. In this case, the responses (valuation of each type of programming) were weighted by total royalty. Larger systems with greater royalty payments were given a greater weight compared with smaller systems in determining the average value of each type of programming. For the sample systems, the total royalty and percent of value by program type was known. For all other systems not in the sample, total royalties were also known. Statistically, knowledge of royalties for the total universe of systems improves the reliability of the estimates by reducing the uncertainty in this component of the estimation methodology.

For questions 2 and 3, the focus was not on value but rather on subscriber and advertising preference. In this case, there was no other supplemental variable available which related to preference for all systems, including those not in the sample. Therefore, the ratio estimation methodology did not apply to making estimates based on responses to these questions and a more straightforward method was applied in which all sample stations carried an equal weight after accounting for different sample sizes by strata.

Formulas for calculating these statistics are identical to those in Appendix A.

Evaluation of Survey Estimates

The 95 percent confidence intervals for the estimates obtained in the 1993 study are set forth below. Ť. 1 1 1 1 1

Question 4. Operator Programming Allocation

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Category	Percent Allocation	Absolute Confidence Interval*
Live professional and college team sports	43.5%	±4.0
Movies	23.4	2.5
Sundiasted chows series and specials	14.4	. 2.0
Syndicated shows, series and specials	12.6	2.2
Devotional and religious programming	4.0	0.8
programming	2.0	1.0
Canadian programming	0.2	0.3
Total	100.1%**	· · · ·

*These and subsequent confidence intervals expressed as percentage points. **Does not add to 100.0 percent due to rounding.

Question 2. Distant Signal Programming Popularity Among Subscribers

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college team sports Movies	73.8% 38.8	±11.3 12.2
Syndicated shows, series and specials News and public affairs programs	19.4 17.9	9.8 8.6
programming	4.3	3.5
Devotional and religious programming	0.9	
Other	1.9	2.5

Question 3a. Use of Distant Signal Programming for Advertising/Promotional Purposes

Category	Percent Allocation	Absolute Confidence Interval
Yes	22.8%	±10.1
No	_77.2	
Total	100.0%	

Question 3b/3c. Combined Aided/Unaided Advertising/ Promotional Use of Distant Signal Programming by Type

Category	Percent Allocation	Absolute Confidence Interval
Movies	84.7%	±10.2
Live professional and college team sports	83.5	24.1
Syndicated shows, series and specials	34.5	29.8
News and public affairs programs PBS and all other public television	17.0	24.1
programming		
Devotional and religious programming		
Canadian programming		
Other	1.1	1.7

Question 3d. Most Important Distant Signal Programming for Advertising/Promotional Purposes

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college team sports	46.4%	±30.1
Movies	41.9	30.1
Syndicated shows, series and specials	11.5	22.9
News and public affairs programs PBS and all other public television	0.2	0.4
programming		
Devotional and religious programming		
Canadian programming		
Total	100.0%	

APPENDIX D. SURVEY INSTRUMENTS: 1990, 1991 AND 1993

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1990

SYSTEM OPERATOR PROGRAMMING QUESTIONNAIRE

System Name:	
City / State:	
Subscribers:	Remit Number
Respondent's Name:	
Position:	
Telephone Number:	
Date:	
Interviewer:	

(ASK TO SPEAK WITH SYSTEM MANAGER. IF UNAVAILABLE, CONFIRM HE / SHE IS PERSON MOST FAMILIAR WITH PROGRAMMING CARRIED BY THE SYSTEM DURING 1990 AND ARRANGE CALL BACK. IF NOT, ASK TO SPEAK WITH THE PERSON MOST FAMILIAR WITH THE PROGRAMMING CARRIED BY THE SYSTEM DURING 1990.)

Hello, I'm ______ from Burke Marketing Research. We are conducting a short national survey among randomly selected cable system operators (or programming officials as appropriate) regarding the programming carried by your system. I only have a few questions.

1. Are you the person at your system most familiar with programming carried by your system during 1990 or not?

Yes	1	
No	2	ASK TO SPEAK WITH PERSON MOST TAMILIAN
•••••		WITH PROGRAMMING CARRIED DT THE OTOTEM
		DURING 1990. REPEAT INTRODUCTION AND C.

2a. Industry data indicate that during 1990, your system carried the following broadcast stations from other cities:

Call Letters	City	Affil	, I L	NS ET	EP TE	RT RS	DI 5. C	ST	AN ⁄ A	SIC Al	GNAL CAL FILIATE	_L
						1		1				
······							-	-				
			1	1	1	1	1	1	1		1	

2b. During 1990, what types of programming on the stations mentioned previously, other than any national network programming from ABC, CBS and NBC, do you think were most popular with your subscribers? (DO NOT READ LIST)

Movies	
Live professional and college sports	
Syndicated shows and series	
News and public affairs	
PBS, educational and other programm	ing carried by *
Devotional / religious programming	
Canadian programming carried by	* (excluding National
Hockey League and Major League Ba	seball games and U.S.
produced programs)	
Other (SDECIEV)	

*(INSERT CALL LETTERS OF PTV / CTV STATION. ASK ONLY IF PTV / CTV STATION LISTED IN Q.2.)

3a. Did you feature any programming available on the stations I mentioned, again, other than any national network programming from ABC, CBS and NBC, in your 1990 advertising and promotional efforts to attract and retain subscribers or not?

3b. What types of programming on these stations did you feature in your advertising? (DO NOT READ LIST--RECORD BELOW UNDER Q.3b, "UNAIDED")

(FOR EACH TYPE OF PROGRAMMING NOT MENTIONED IN Q.3b, ASK:)

3c. Did you also feature (INSERT EACH PROGRAMMING TYPE NOT MENTIONED) from these stations in your 1990 advertising and promotion to attract or retain subscribers or not? (RECORD BELOW UNDER Q.3c; "AIDED") 3d. You said you used (READ ALL PROGRAMMING TYPES CHECKED IN Q.3b or 3c) from the stations I mentioned in 1990 subscription and retention advertising and promotion. Which of these do you feel was the most important to feature in subscription and retention advertising and promotion? Which was the <u>next most</u> important? Which was <u>least</u> important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

				<u>Q.3d.</u>	
	Q.3b.	Q.3c.	<u> </u>	<u>mportan</u>	t
	<u>Unaided</u>	<u>Aided</u>	<u>Most</u>	<u>2nd</u>	<u>Least</u>
Movies	1	1	1	1	1
Live professional and college sports	2	2	2	2	2
Syndicated shows and series	3	3	3	3	3
News and public affairs	4	4	4	4	4
PBS, educational and other programming carried by*	5	5	5	5	5
Devotional / religious programming	6	6	6	6	6
Canadian programming carried by * (excluding (National Hockey League and Major League Baseball games and U.Sproduced programs and series)	7	7	7	7	• 7
Other (SPECIFY BELOW)	·				
	9	9	9	9	9
	10	10	10	10	10
	11	11	11	11	11

*(INSERT CALL LETTERS OF PTV / CTV STATION. ASK ONLY IF PTV / CTV STATION LISTED IN Q.2.)

4a. Finally, I would like you to estimate the <u>relative</u> value to your cable system of each type of programming carried on the stations I mentioned, other than any national network programming from ABC, CBS and NBC. That is, how much do you think each such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers. The stations we are interested in are, again, (INSERT STATION CALL LETTERS FROM Q.2a).

Thinking of 1990, assume you had a fixed dollar amount to spend on the nonnetwork programming carried on these stations; in other words, a programming budget. Please think in terms of what percentage, if any, of the fixed dollar amount you would spend for each type of programming. I'll read all the program types that appear on the stations to give you a chance to think about them and then reread the program types a second time to get your estimates. (READ PROGRAM TYPES IN ORDER OF RANDOM SEQUENCE NUMBER.) What percentage, if any, of the fixed dollar amount would have been spent on (READ FIRST PROGRAM TYPE)? And what percentage, if any, would have been spent on (READ NEXT PROGRAM TYPE)? (COMPLETE LIST IN THIS MANNER.)

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Random Sequence						1		Ē	<u>'erc</u>	ent	tag	e	
	Movies Live professional and college sports	I	1	1		:			 			i.	
()	Syndicated shows and series	I	I	ļ	ļ	ļ	ļ	1					
()	News and public affairs PBS. educational and other programming	1	1	1	1	1	ł	:				-	1
	carried by	Í	i	l	Ì	Ì	ļ	1				1	
$\left(\right)$	Devotional / religious programming	,	1						;			ł	1
()	(excluding National Hockey League and								Ì	Ì	Ì		i
	Major League Baseball games and U.S. produced programs)	1	-	i	i	ļ	ļ						
	• • •					;	÷						

PERCENTAGES MUST ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.

1991

SYSTEM OPERATOR PROGRAMMING QUESTIONNAIRE

System Name:	
City / State:	
Subscribers:	Remit Number
Respondent's Name:	
Position:	
Telephone Number:	
Date:	
Interviewer:	

(ASK TO SPEAK WITH SYSTEM MANAGER. IF UNAVAILABLE, CONFIRM HE / SHE IS PERSON MOST FAMILIAR WITH PROGRAMMING CARRIED BY THE SYSTEM DURING 1991 AND ARRANGE CALL BACK. IF NOT, ASK TO SPEAK WITH THE PERSON MOST FAMILIAR WITH THE PROGRAMMING CARRIED BY THE SYSTEM DURING 1991.)

Hello, I'm ______ from Burke Marketing Research. We are conducting a short national survey among randomly selected cable system operators (or programming officials as appropriate) regarding the programming carried by your system. I only have a few questions.

1. Are you the person at your system most familiar with programming carried by your system during 1991 or not?

Yes No	1 2	ASK TO SPEAK WITH PERSON MOST FAMILIAR WITH PROGRAMMING CARRIED BY THE SYSTEM DURING 1991. REPEAT INTRODUCTION AND Q.1.

 Industry data indicate that during 1991, your system carried the following broadcast stations from other cities:

Call Letters	City	Affil		INS	EF	٦F	DI	ST	AN	IT	SI	GN		\L L
	هم المستخدم بين يتحدين الميبينين والمترجين المربوع المربوع المربوع المربوع المربوع المربوع المربوع المربوع الم يوم المستجدين المربوع المربوع المربوع المربوع المربوع المربوع المربوع المربوع المربوع المربوع المربوع المربوع ال	······································	•	LET	TE	ERS	6, C		YA	NE.		FF	LIAIE	
			•	I.	I.	1	4			÷	ł	Ì		
		اسم النام هذه بریون خوانی و می 												
		,	-											

Thinking back to 1991, what types of programming on these stations, other than any national network programming from ABC, CBS and NBC, do you think were most popular with your subscribers? (DO NOT READ LIST)

Movies	ז 2
Syndicated shows, series and specials	3 4
News and public attairs PBS and all other programming carried by public television station	5
Devotional / religious programming (excluding National	5
Hockey League and Major League Baseball games	- 7
Other (SPECIFY)	8

1

3a. Did you feature any programming available on the stations I mentioned, again, other than any national network programming from ABC, CBS and NBC, in your 1991 advertising and promotional efforts to attract and retain subscribers or not?

Yes 1 No 2 GO TO Q.4

3b. What types of programming on these stations did you feature in your advertising? (DO NOT READ LIST--RECORD BELOW UNDER Q.3b, "UNAIDED")

(FOR EACH TYPE OF PROGRAMMING NOT MENTIONED IN Q.3b, ASK:)

- 3c. Did you also feature (INSERT EACH PROGRAMMING TYPE NOT MENTIONED) from these stations in your 1991 advertising and promotion to attract or retain subscribers or not? (RECORD BELOW UNDER Q.3c, "AIDED")
- 3d. You said you used (READ ALL PROGRAMMING TYPES CHECKED IN Q.3b or 3c) from the stations I mentioned in 1991 subscription and retention advertising and promotion. Which of these do you feel was the <u>most</u> important to feature in subscription and retention advertising and promotion? Which was the <u>next most</u> important? Which was <u>least</u> important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

				<u>Q.3d.</u>	
	Q.3b.	Q.3c.		mportan	t
	Unaided	<u>Aided</u>	<u>Most</u>	<u>2nd</u>	Least
Movies	1	1	1	1	1
Live professional and college team sport	s 2	2	2	2	2
Syndicated shows, series and specials	3	З	3	3	3
News and public affairs	4	4	4	4	4
PBS and all other programming carried by public television	E	E	E	r	E
station	5	5	5	5	5
Devotional / religious programming	6	6	6	6	6
Canadian programming carried by (excluding (National Hockey League and Major League Baseball games a U.Sproducedprograms and series)	 nd 7	7	7	7	7
Other (SPECIFY BELOW)	8	8	8	8	8
	ğ	g	9	ğ	g.
	10	10	10	10	10

4. Finally, I would like you to estimate the <u>relative</u> value to your cable system of each type of programming actually carried during 1991 on the stations I mentioned, other than any national network programming from ABC, CBS and NBC. That is, how much do you think each such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers during 1991. The stations we are interested in are, again, (INSERT STATION CALL LETTERS FROM Q.2).

Assume you have a fixed dollar amount to spend in order to acquire all the nonnetwork programming actually carried on these stations during 1991. Please think in terms of what percentage, if any, of the fixed dollar amount you would spend for each type of programming. I'll read all the program types that appear on the stations to give you a chance to think about them and then reread the program types a second time to get your estimates. (READ PROGRAM TYPES IN ORDER OF RANDOM SEQUENCE NUMBER.)

What percentage, if any, of the fixed dollar amount would you spend on (READ FIRST PROGRAM TYPE)? And what percentage, if any, would you spend on (READ NEXT PROGRAM TYPE)? (COMPLETE LIST IN THIS MANNER.)

Random

PERCENTAGES MUST ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.

1993

SYSTEM OPERATOR PROGRAMMING QUESTIONNAIRE

۰.

System Name:	
City / State:	Remit Number
Respondent's Name:	
Position:	
Telephone Number:	
Date:	
Interviewer:	

(ASK TO SPEAK WITH SYSTEM MANAGER. IF UNAVAILABLE, CONFIRM HE / SHE IS PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS AND ARRANGE CALL BACK. IF NOT, ASK TO SPEAK WITH THE PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS.)

Hello, I'm ______ from Burke Marketing Research. We are conducting a short national survey among randomly selected cable systems regarding the programming they carry. I only have a few questions.

1. Are you the person at your system most responsible for programming decisions made by your system during 1993 or not?

Yes No	1 2	ASK TO SPEAK WITH PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS, REPEAT INTRODUCTION AND Q.1.
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2a. Industry data indicate that during 1993 your system carried the following broadcast stations from other cities:

Call Letters	Com/ Non/ <u>Can</u>	<u>Affil</u>	<u>City</u>	INS LE	SEF	RT ERS	Di S, C	IST CIT	TAN Y A	IT NI	SI D _i A		NAL ILIA		LL N (1
·····									i	i	•	1	1			
· · · · · · · · · · · · · · · · · · ·			· :				ŗ	ŗ	ı	ı	:	•				
	ی میں بینے میں میں میں ہیں۔ کر اور میں میں ایک میں اور اور میں میں اور اور میں میں اور اور اور اور اور اور اور اور اور اور															
				 	1			1				- - -				
Thinking back other than any think were mos ALL PROGRA	to 1993, w / national n st popular v MMING TYI	hat type etwork p vith your PES MEI	s of prog programm subscribe NTIONED	ramr ing:f ers?)	nin ron (D	g b n A O	BC NC	ado C, C DT I	ast CBS RE/	b Sa AD	y tl nd Ll	hes NI ST	se s BC, ; RE	tatior do y ECOF	ns, rou RD	

Movies		a a b	
Live professional and college team	n sports	·····	
Syndicated shows, series and spe	ecials		
News and public affairs programs	••••••		
PBS and all other programming br	oadcast by noncom	mercial station	
Devotional and religious program	ming	a - a - b	
All programming broadcast by Can	adian station		•••••
Other (SPECIFY)	8 a. a. a. a.		

3a. Did you feature any programming broadcast by the stations I mentioned, other than any national network programming from ABC, CBS and NBC, in your 1993 advertising and promotional efforts to attract and retain subscribers or not?

3b. What types of programming broadcast by these stations did you feature in your subscriber acquisition and retention advertising and promotion? (DO NOT READ LIST--RECORD BELOW UNDER Q.3b, "UNAIDED")

(FOR EACH TYPE OF PROGRAMMING NOT MENTIONED IN Q.3b, ASK:)

56

2b.

- 3c. Did you also feature (INSERT EACH PROGRAMMING TYPE NOT MENTIONED) broadcast by these stations in your 1993 advertising and promotion to attract and retain subscribers or not? (RECORD BELOW UNDER Q.3c, "AIDED")
- 3d. You said you used (READ ALL PROGRAMMING TYPES CHECKED IN Q.3b or 3c) from the stations I mentioned in 1993 subscription and retention advertising and promotion. Which of these do you feel was the <u>most</u> important programming type to feature in subscriber acquisition and retention advertising and promotion? Which was the <u>next most</u> important programming type ? Which programming type was <u>least</u> important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

-				0.0-		Q.3d.	
Ran	dom		Q.30. Unaided	Q.3C. Aided	Most	2nd	Least
Ded	uent		ondided	<u>/////////////////////////////////////</u>	MOON	<u></u>	<u></u>
()	Movies	1	1	1	1	1
()	Live professional and college					
-		team sports	2	2	2	2	2
()	Syndicated shows, series and specials	3	3	3	3	3
()	News and public affairs programs	4	4	4	4	4
()	PBS and all other programming broadcast by noncommercial					
		station	5	5	5	5	5
()	Devotional / religious programming	6	6	6	6	6
()	All programming broadcast by Canadian station	7	7	7	7	7
		Other (SPECIFY BELOW)					
			8	8	8	8	8
			9	9	9	9	9
			10	10	10	10	10

4a. Now, I would like you to estimate the <u>relative</u> value to your cable system of each type of programming actually broadcast by the stations I mentioned during 1993, other than any national network programming from ABC, CBS and NBC. That is, how much do you think each such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers. We are only interested in U.S. commercial station(s) ______, U.S. non a nd Canadian station(s) ______, and defined to the station of t

I'll read all the program types that were broadcast by these stations to give you a chance to think about them; please write the categories down as I am reading them. (READ PROGRAM TYPES IN ORDER OF RANDOM SEQUENCE NUMBER.) Assume you had a fixed dollar amount to spend in order to acquire all the programming actually broadcast during 1993 by the stations I listed. What percentage, if any, of the fixed dollar amount would you spend for each type of programming? Please write down your estimates, and make sure they add to 100 percent.

What percentage, if any, of the fixed dollar amount would you spend on (READ FIRST PROGRAM TYPE)? And what percentage, if any, would you spend on (READ NEXT PROGRAM TYPE)? (COMPLETE LIST IN THIS MANNER.)

Seque	enc	e de la constante de la constante de la constante de la constante de la constante de la constante de la constan El constante de la constante de la constante de la constante de la constante de la constante de la constante de	Pe	erc	<u>ənt</u>		
()	Movies broadcast during 1993 by the U.S. commercial stations I listed					
()	Live professional and college team sports broadcast during 1993 by the U.S. commercial stations I listed.		!			
()	Syndicated shows, series and specials distributed to more than one television station and broadcast during 1993 by the U.S. commercial stations I listed.					
()	<u>News and public affairs programs</u> produced by or for any of the U.S. commercial stations I listed, for broadcast during 1993 only by that station.			!		
().	PBS and all other programming broadcast during 1993 by U.S. noncommercial station		, 	هن انگانیز	1	ı
()	Devotional and religious programming broadcast during 1993 by the U.S. commercial stations I listed.					
()	All programming broadcast during 1993 by Canadian station	, 				
TOTAL	_						
		TAGES MUST ADD TO 100 PERCENT PROMPT RESPONDENT IF THE	Y	T	;	i	i.

PERCENTAGES MUST ADD TO 100 PERCENT; PROMPT RESPONDENT I DO NOT.

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4b. Now I'm going to read back the categories and your estimates. (REREAD CATEGORIES AND RESPONSES IN RANDOM SEQUENCE ORDER TO ALLOW RESPONDENT TO REVIEW THE ESTIMATES.)

Are there any changes you would like to make? (RECORD ANY CHANGES BY CROSSING OUT ORIGINAL RESPONSE AND WRITING IN REVISED RESPONSE NEXT TO IT. PERCENTAGES MUST STILL ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.)

Thank you for your time and cooperation.

Testimony of David W. Clark, Ph.D.

My name is David W. Clark. I previously have had the opportunity to testify on behalf of the Devotional Claimants concerning distribution of Cable Copyright Royalties, and it is a privilege to have an opportunity to do so now, for the first time, before the first Copyright Arbitration Royalty Panel. As indicated on the attached statement of my background and qualifications, I am the president of KMC Media, an entity which assists and advises predominantly religious programmers on the placement of their T.V. programs in broadcast media. I have a Ph.D. in Speech Communication, emphasizing communication research, from the University of Iowa. I serve on the Executive Committee of the Board of National Religious Broadcasters, and was its immediate past chairman. As such, I have long been intimately involved in and acquainted with the market circumstances that apply to religious programming.

Based on my educational and professional background, I have previously testified about the market for retransmission of religious programming on distant signals, the validity of various studies and market surveys that have been presented in Cable Copyright Royalty proceedings as measures of value and benefit to cable operators, and about the harm incurred by religious programmers from cable retransmission of their programs.

I am testifying here about the special characteristics that apply in the marketplace for Devotional programs, and how the marketplace benefit and value to cable operators of distant signal retransmission of this programming may appropriately be measured. It remains my opinion that ratings do not reflect the value of Devotional programming to cable systems on these signals because when cable systems retransmit distant signals, they are concerned primarily with attracting and retaining cable *subscriptions*, not with advertising revenues. As such, I believe that the Bortz and Co. surveys for 1990, 1991 and 1992, introduced in these proceedings by Joint Sports Claimants, provide the appropriate measure of marketplace benefit and value.

In addition, with regard to the "harm" criteria established in prior proceedings, I am also testifying, as I have in the past, that carriage of religious programming on distant signals harms Devotional programmers, as it harms all programmers, because it takes away their right to control use and licensing of their copyrighted works. The compulsory license also results in harm that is specific to religious broadcasters because of the unique characteristics of religious programming. These include upward pressure on fees Devotional programmers are charged for purchasing air time in the broadcast market, and loss of donations that results when donors perceive, incorrectly, that the ministry spent excessively to purchase air time for the multiple rebroadcasts they see on cable.

1. Marketplace Value

It is my testimony that owing to the unique characteristics that apply in the marketplace for religious programs, "viewership" or "ratings" data does not appropriately reflect the value of religious programming to cable operators. There are two reasons for this. First, when they carry distant signals cable operators are concerned with selling *subscriptions*, not advertising. Second, viewers of religious programs have unusually intense loyalty to and interest in religious programming, and their decisions to purchase cable subscriptions are strongly influenced by their desire to obtain religious programs. Thus, when cable operators offer Devotional programming, they are attracting and retaining an important niche in the market of potential cable subscribers.

I have consistently testified in the past that "ratings" are not the right measure of benefit or marketplace value of religious programming on distant signals. Cable operators sell subscriptions using these signals. They attempt to maximize the number of their subscribers by providing a programming mix that will have special appeal to discrete portions of the universe of their potential subscribers, including those interested in religious programming. This "narrowcasting" technique permits cable operators to attract subscriptions from diverse groups by providing programming that can command the loyalty of even a relatively small group of subscribers. As such, ratings data do not determine cable operator decisions to carry a particular distant signal because, in the words of the Copyright Royalty Tribunal, the ability to attract and retain subscribers is often unrelated to the volume of viewing.¹

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¹ In its 1989 Final Determination, 57 Fed. Reg. 15286, the Tribunal stated that "cable's goal is to attract and retain subscribers, and will offer 'niche' services, often unrelated to the volume of viewing, to induce segments of the population to subscribe. Consequently, the Tribunal has often made allocation decisions far removed from the raw Nielsen data." 57 Fed. Reg. at 15301.

Because of the reliability of the Bortz survey, Devotional Claimants are seeking an award based upon its showing in that survey for the years 1990 - 1992.

2. The Devotional Award

In its 1989 award determination, the Copyright Royalty Tribunal recognized that cable's goal is to attract and retain subscribers, that it would offer "niche" services that were not related to the volume of viewing to induce segments of the population to subscribe, and that Devotional programming was just such a niche.³ Even so, although the Tribunal set the Devotional award somewhat above that which had been reflected in the MPAA study for Devotional programmers for that year,⁴ it nevertheless set it well below that which was reflected in the Bortz survey.

My understanding is that the Tribunal offered two reasons for this departure from Bortz. First, the Tribunal stated "that the price of such [Devotional] programs is much less than what the cable operator is willing to spend;" and second, the Tribunal felt that explanation of harm Devotional Claimants experience from cable retransmission required additional development.⁵ Dr. Salinger, other Devotional witnesses, and I will address the first issue concerning price determinations that would attain in a hypothetical cable programming market for broadcast programs; and I will elaborate further on the discussion of the harm to programming of Devotional Claimants. However, before I address those specific issues, I want to emphasize that I do not believe that either of the Tribunal's reasons justify the low awards Devotional Claimants have received over the years. Instead, I believe that the low awards have resulted because they have been tainted by continuing affects of an "arbitrariness" and "unexplained vengeance" exhibited against the content of religious programming since the earliest days of these proceedings.

Given my experience with the marketplace for religious programming, and the value I know that is accorded to that programming in the marketplace, I could not conceive how, in the absence

⁴ Id.

⁵ Id.

³57 Fed. Reg. at 15303.

The Bortz Survey. It continues to be my opinion that the marketplace value and benefit to cable systems of religious programs carried on distant signals from 1990 through 1992 are best measured by the survey conducted by Bortz & Company, Inc. ("Bortz") for those years. This survey measures marketplace benefit and value as determined by the cable operators themselves, who are in the best position to evaluate the extent to which religious programming plays a part in their programming decisions. In my opinion, the Bortz survey is far superior to any other measure of value that has previously been presented in these proceedings.² Based on my education and experience, I continue to conclude that the Bortz study measures the correct variable to be considered when attempting to determine marketplace value and benefit to cable programmers. By contrast, I do not believe that viewer ratings provide nearly as accurate a measure of marketplace value to cable operators. As such, and based on the testimony to be provided by Dr. Michael Salinger, an economist who also will be testifying on behalf of the Devotional Claimants, the Devotional Claimants.

The Bortz studies show that from 1990 to 1992 cable operators valued programs with a religious theme such that they would spend between 3.6 and 4.3% of a fixed programming budget for these programs. Though, as might be expected, the value accorded to Devotional programming is less than that reported for the Sports or Motion Picture categories, for instance, the value reported for Devotional programs is still very significant, and far from nominal. (Devotional Claimants Exhibit _ graphically depicts how cable operators allocated value to devotional/religious programs and to other program categories for 1990 - 1992.) In the four separate surveys of cable operators from 1989 - 1992, the fixed sum percent allocated to devotional and religious programming has been consistent, averaging just in excess of 4 percent. From the fact that in four different surveys this number has remained relatively stable with little variation, we can infer that cable operators consistently view this amount as the value of such programming. As this percentage remains consistent across surveys, the level of confidence we may have in this number increases.

² I hereby incorporate my written and oral testimony in the 1989 proceeding in that regard.

of prejudice, the Copyright Royalty Tribunal awarded Devotional Claimants a zero award in the first Copyright Royalty proceeding, for 1979 royalties. In fact, when I recently reviewed that and the subsequent 1980 decisions, I was surprised to find an express statement by the Tribunal that it made its decisions on the grounds of the *content* of religious programming. In my opinion, the Devotional Claimants never really succeeded in breaking free from the effects of the original hostility to religious programming.

In the 1978 and 1979 proceedings, syndicators of religious programs were part of the category represented by the Motion Picture Association of America ("MPAA"). The religious programmers were able to settle the matter in 1978, but in 1979 were forced to a Phase II hearing to fight for a share of the royalties awarded to MPAA in Phase I. In March 1982, the Tribunal issued a decision denying *any* award to the religious programmers.⁶ They were forced to appeal to the District of Colombia Circuit Court of Appeals to seek relief.

A year later, prior to any ruling by the Court of Appeals in their appeal of the 1979 case, the Tribunal again refused to award any royalties to the religious programmers for 1980, who had by then been separated into a separate Phase I category known as the "Devotional Claimants." In its decision, the Tribunal noted that the Devotional Claimants had argued they were similar to PBS in that they were both noncommercial and both sought financial support from the public. However, in rejecting this argument the Tribunal displayed a palpable hostility to the views and message of religious programmers: it stated that it would continue to refuse to award any royalties to Devotional Claimants because it could

find no real similarity [between PBS and the religious programmers]. The devotional claimants conduct a Christian ministry. Even their more entertainment types of program formats are designed to provide a Christian ministry. In contrast public broadcasting is a programming institution supported by a broadly based coalition of government, corporations, foundations, and individuals which presents a wide range of programming, much of which is not available on commercial television.⁷

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⁶ 47 Fed. Reg. 9879, 9896 (1982).

⁷ 48 Fed. Reg. 9552, 9568 (1983).

Several months later, the District of Columbia Circuit Court of Appeals agreed that the zeroaward of 1979 royalties was groundless and rejected it, characterizing it as based on a supposed "fundamental distinction" between the religious claimants and others that had the "texture of quicksilver." The court found that the religious claimants were the victims of the Tribunal's "arbitrariness," "unevenness," and "unexplained vengeance," and remanded the decision to the Tribunal.⁸ Even so, on remand the Tribunal's 1979 award was only nominal – 0.50% of the Program Suppliers Phase I share.⁹ And for 1980, even after its decision to refuse any award to religious programmers was vacated, the Tribunal continued to show hostility not only to religious claimants and their views, but now also to the Court of Appeals' attempt to ensure even-handedness between the religious and secular programmers. The Tribunal stated that it could not

leave unanswered the Court's language that 'we are troubled by the unexplained vengeance' with which the Tribunal is said to have applied the 'negative harm' test to the Devotional Claimants.... This conclusion is not motivated by 'vengeance' but by our analysis of the record. We leave 'vengeance' to another authority. [Citing Romans XII 19].¹⁰

With this snide reference to biblical language and teachings, the Tribunal again made only a nominal award of 0.35% of the entire royalty fund to the religious programmers, which essentially left its 1979 award unaltered.¹¹

Once again, religious programmers sought relief from the Court of Appeals. However, by the time that the Court ruled on the remand awards for 1979 and 1980, the Tribunal had issued a

⁸ Christian Broadcasting Network, Inc. v. Copyright Royalty Tribunal, 720 F.2d 1295, 1309-1312 (D.C.Cir. 1983).

¹⁰ *Id.* at 20050.

¹¹ 49 Fed. Reg. 28090, 28090-1 (1984).

⁹ 49 Fed. Reg. 20048, 20051 (1984).
determination about 1982 royalties, and had increased the award to religious programmers to 1%.¹² In light of this increase, the court declined to overrule the Tribunal.¹³

Although the Tribunal's awards to the religious claimants have increased marginally since that time, my opinion is that its awards have not reflected the copyright value of this religious programming; but instead they continue to be infected by the hostility to religious programming that resulted in the initial 1979 and 1980 awards. My understanding is that the Tribunal used the 1979 and 1980 awards as the starting point to arrive at its 1982 award determinations; and that the Tribunal required all claimants to show "changed circumstances" to warrant subsequent modification of these awards. As recently as the Tribunal's award determination for 1989 royalties, the Devotional Claimants received an award only equal to about one-fourth the value of their showing in the Bortz study for that year. When compared to awards made to other claimant groups, in my opinion it seems clear that the vestiges of "unexplained vengeance" and "arbitrariness" remain from the Tribunal's early awards.

As shown by the Bortz study and the other evidence the Devotional Claimants present this year to the Panel, continued reliance on these past awards is unjustified, particularly in light of the reasons Devotional awards were set so low in the early years of these proceedings. These moorings should be abandoned in recognition that the Bortz survey measures the correct variable -- value to cable operators -- and thus provides the best evidence of marketplace benefit and value. As such, the Devotional Claimants seek basic and 3.75% fund awards of 3.5%, 4.2% and 3.8%, respectively, from the 1990, 1991 and 1992 cable copyright royalty funds.

<u>Pricing For Devotional Programming in the Cable Market</u>. Based on my experience in the devotional broadcast and cable markets, I continue to believe that there are significant differences between the factors that influence how Devotional programmers behave, or would behave, in the broadcast and cable markets. As I have testified in the past, some Devotional programmers purchase

¹² 49 Fed. Reg. 37653 (1984).

¹³ National Association of Broadcasters v. Copyright Royalty Tribunal, 772 F.2d 922, 939 (D.C. Cir. 1985).

broadcast air time to ensure that their programming is free of commercial interruption. However, because of different conditions in the cable market, Devotional programmers would not view a cable retransmission market in the same way. Cable companies are not permitted to substantially modify the broadcast signals they retransmit. Hence, while Devotional programmers may pay some broadcasters to obtain their goal of having commercial-free programming, that goal is already attained where cable market retransmission is concerned. Contrary to the assumption stated by the Tribunal in its 1989 royalty determination, there is no reason to expect that Devotional programmers, or any other programmers, would charge less than cable operators would be willing to pay for the rights to retransmit their distant signal programming. To the contrary, from years of personal experience I can testify that because Devotional programmers use their revenues for ministry purposes, and because they are increasingly sophisticated about financial stewardship of ministry assets, they will negotiate carefully to obtain a market price, whether as a consumer or seller of goods or services. They participate as consumers of air time in the broadcast market, because advertising would undermine their programming. However, if a cable market were to exist, where the advertisement-free Devotional program is faithfully retransmitted on the cable system, there is every reason to believe Devotional programmers would negotiate with the cable operator to obtain the best market price available. Because of the existence of the loyal and avid niche market for Devotional programs I have already described, Devotional programmers would expect to be able to negotiate price based on the value those potential subscribers confer on the cable system.

Intensity. Further, it is my understanding that in its 1989 decision the Tribunal determined that it would give substantial weight to the Bortz results where corroborating evidence existed to sustain that a program category had an intense viewership.¹⁴ For that reason, I wish to bring to the Panel's attention various evidence of intensity.

First, intensity is demonstrated by the significant financial support contributed by viewers in support of the Devotional programming. The very fact that viewers of Devotional programming will donate sufficient amounts to maintain a religious program is in itself a demonstration of the

¹⁴ 57 Fed. Reg. at 15301.

intensity of viewership and commitment to this form of programming. It is exceedingly difficult to get viewers to become donors to a program. My experience in researching donor behavior for several different religious broadcasters has shown that it takes an average of a year of regular viewing before a gift is given. This means that donors closely scrutinize a ministry over an extended period of time before any donation is made. Those who do go to the effort and expense of sending a gift certainly are demonstrating intensity in their viewing preference. By contrast, the Panel may consider whether viewers of sitcom reruns, such as *Married, With Children* or *Three's Company* would be likely to contribute their financial support to keep those programs on the air, or even whether viewers would buy an advertised product, like a Coke or a Pepsi, for the purpose of keeping a program on the air.

Second, other objective indicators confirm that the intensity of viewer interest, which is reflected in the Bortz study results, accurately depicts the market value of Devotional programming to cable broadcasters. As Pat Robertson, President of Christian Broadcasting Network, testified previously, and as I understand he will testify in this proceeding, Telecommunications, Inc. (TCI), the largest multi-systems cable operator in the country, purchased 16% of The Family Channel for tens of millions of dollars. In so doing, TCI entered into a ten year contract starting in early 1990, to carry The Family Channel, with its religious and family programs, at subscriber rates that have increased each year. During the years 1990 - 1992, the religious programming carried on The Family Channel included The 700 Club, the Reverend Charles Stanley, the Reverend D. James Kennedy, Dr. Ben Hayden, Lloyd Ogilvie, Larry Jones, Oral Roberts, Zola Levitt, Praise the Lord, Leary Lea, Today with Marilyn, James Robison, Superbook, Miracles Today, It is Written, and Jewish Voice. Further, the VISN Network, carrying predominantly Devotional programming, is now in over 22 million homes. Cable operators pay both the Family Channel and the VISN Network a monthly fee per subscriber for the right to carry their programming. In short, not only are cable operators willing to pay for Devotional programs as indicated in the Bortz study, they are paying for a Devotional cable channel.

Third, this year Devotional Claimants are also presenting the testimony of Thomas H. Engel, a cable operator and long-time veteran of the cable television industry, who will testify about the

value of religious programming to cable systems and cable operators, and the specific and consistent demand of cable subscribers for religious programming.

Fourth, Devotional Claimants again will be introducing, through Mr. Tom Larson of Cable Data Corporation, objective evidence showing that cable systems incur significant expense for the right to retransmit religious "specialty stations" – stations that carry religious programs a minimum of one-third of the time, including at least one-third of prime time. This study is not being introduced for the purpose of establishing an allocation formula, nor even is it offered as a "time plus fee generation" study that has previously been introduced in these proceedings. Instead, cable retransmission of these specialty stations is offered as objective evidence that cable operators have determined that these religious specialty stations reflect an intensity of viewership that translates into increased subscriber revenues, valuable enough for the cable systems to pay significant levels of cable royalty fees.

This is especially remarkable because, based on my knowledge of the industry, I can testify that even though specialty stations may broadcast some programs that are not religious or Devotional, cable operators carry them for their religious programming. For instance, WPCB of Greensburg, Pennsylvania, and WCFC of Chicago, Illinois, both broadcast some non-Devotional programming along with their Devotional programming. In each case, however, the cable systems that carry this programming clearly do so because of the religious programming available on these stations. Of course, this study does not measure the value of religious programs on non-specialty stations carried as distant signals -- the Bortz study is the best measure of total value. What the study does is to confirm that cable operators know that religious programs have value to their subscribers, and that these operators act accordingly.

Fifth, again this year we will present the Tribunal with evidence of intensity of viewership through the testimony of a cable viewer, Mrs. Deborah Brackett, who will testify about the importance of religious programming to her. From my personal experience in religious broadcasting as Chairman of the Board of National Religious Broadcasters and in the various other positions I have held, I have testified in the past and reassert here that such testimony is representative of the intensity of interest and loyalty on the part of Devotional program viewers for programming which not only entertains, but which they believe speaks to their most central personal and spiritual needs. Sixth, we have introduced various other corroborating evidence in past proceedings as to the benefit of Devotional programming, which strongly suggests that our programming is far more valuable to cable programmers than reflected in viewership surveys. I have already testified, as I have testified in previous years, that in my experience there is a significant, core constituency of viewers with intense interest in religious programming that is unique to religious programming, and cable operators respond to that intensity. Devotional Claimants have shown that cable systems use religious programs as a marketing tool, 1982 Devotional Claimants Exhibit #9; provided evidence from cable operators that religious programs benefit their systems, 1979 Exhibit CBN-3 and testimony of E. Harold Munn, Jr. and Victor C. Bossinger, 1983 Devotional testimony; and provided evidence from a cable viewer who testified concerning her intense loyalty to Devotional programs, the significant impact such programs have on her life, and that she would cancel her cable subscription if the religious programs available to her on cable were to be discontinued, Testimony of Myrtle Huggins, 1989 Devotional testimony. That testimony is incorporated here, by reference.

Together with the evidence provided in the specialty station study being introduced by the Devotional Claimants, this evidence corroborates and is confirmed by the answers of cable operators in question 4 of the Bortz study, and justifies an award based on that study.

3. Harm.

I reaffirm my testimony in the 1983 and 1989 proceedings that the Devotional Claimants experience significant harm resulting from cable retransmission of their programs.¹⁵ Compulsory carriage of religious programming harms Devotional programmers, as it harms all programmers, because it takes away their right to control, use and license their copyrighted works. However, compulsory license also results in harm that is specific to religious broadcasters because of the unique characteristics of religious programming, in at least two ways. First, the loss of control over program scheduling results in duplicative programming, with two negative effects: (1) it encourages broadcasters to increase the fees for broadcast time which they charge to religious programmers, to

¹⁵ That testimony, which appears at pages 8-9 of my direct testimony in the 1983 case, and pages 10 - 13 of my testimony in the 1989 case, is incorporated here by reference.

offset perceived losses in advertising income from declines in viewership for "lead-in" and "exit" audiences of duplicative programming; and (2) duplicative programming undermines donor confidence in the competence and integrity of broadcast ministries, which results in decreased financial support.

(1) Increased Fees for Broadcast Time. As I testified previously, fragmentation of the viewing audience would result from duplicate programming in a local market, and this would result in increased broadcast air time charges to Devotional programmers. Because a local broadcaster is attempting to maximize his broadcast revenues as a whole, for an entire daypart, and not just for a particular time slot, the broadcaster is very concerned with audience flow. By definition, broadcasters charge the Devotional programmer an amount equal to or greater than the net revenue they believe they can receive from other programming during that period, adjusted further according to whether viewership for the Devotional programming slots in that daypart. However, the presence of duplicated programming, owing to cable importation of distant signals, will necessarily fragment the Devotional programming audience. The broadcaster, who unlike cable operators is very sensitive to ratings, thus faces a smaller lead-in or exit audience, with potential negative impact for advertising revenues. As a consequence, the real net revenues from the Devotional air time purchase decrease, and the purchase price for clearing air time would increase.

(2) <u>Decreased Financial Support</u>. I have already alluded to the intense loyalty of Devotional viewers for religious programming, because of the spiritual impact which many people experience. The relationship a Devotional programmer has with its viewers and donors is developed over time and based on trust that the ministry is well-managed, and that funds are used carefully to produce the program and purchase air time. This is undermined if the viewer believes that the religious programmer is not being prudent in its expenditures — being a good steward, if you will. Many Devotional program viewers are also donors to the various ministries, and are highly sensitive to what they may perceive as profligate expenditures in buying air time. From my experience at KMC Media, I can testify confidently that over-exposure of a signal or solicitation will result in loss of some significant segment of donors, not merely because of duplication, but because the donor feels that his contributed dollars are being unwisely spent. (All of us have a similar experience when we

receive multiple charitable solicitations, even from a reputable source, within a limited time frame.) The Devotional programmer maintains control over this exposure through targeted purchases of air time in the broadcast market.

However, there is no control over duplication or over-exposure that occur from cable retransmission without ministry consent, or even knowledge. Multiple airings of a program would certainly raise questions about the competence of the leadership of a TV ministry, especially if the airings occur at the same time on several channels. This in fact does happen. The imported program runs at the same time as a local program. At best, this could raise doubts about competence. At worst, it could raise questions about the truthfulness of the appeals for financial support. Recent, highly publicized examples of poor stewardship among a limited number of religious programmers -- such as the PTL debacle -- have resulted in precipitous decline in their support. Will harm result if the viewers of Devotional programming perceive that the ministry engages in poor stewardship? Absolutely.

Like most other claimants in the 1989 proceedings, the Devotional Claimants received no credit for harm caused by cable retransmission of their programming.¹⁶ It is my understanding that, as early as its 1979 award determination, the Tribunal decided that harm is of "limited utility" in allocating royalty fees among claimants.¹⁷ I agree that in the marketplace it is difficult to assign relative value or weight to "harm," apart from being able to observe a measurable financial impact. I am unaware of how other categories of claimants may attempt to describe or measure the harm they experience by virtue of the cable compulsory license. However, the Panel should take into account that Devotional Claimants are susceptible to a type of harm that is unique to organizations relying on donated funds, and which purchase air time. Further, I believe that all claimants are harmed by the loss of their right to control or license their copyrighted properties. As such, Devotional

¹⁶In this decision, the Tribunal refused to allow, credit for harm on the basis of evidence submitted by the National Association of Broadcasters, Non-Commercial Broadcasters (PBS), and the Devotional Claimants. Although the Tribunal stated that, for Program Suppliers, "quantifiable evidence is still lacking," it allowed Program Suppliers a "continuing credit for harm." 57 Fed. Reg. at 15302,15303.

¹⁷ 47 Fed. Reg. 9879, 9892 (March 8, 1982).

Claimants should receive no less credit for harm than that accorded to any other category of claimants, unless those claimants are able to submit truly objective evidence of the harm that is caused, which can be shown to outweigh the harm experienced by Devotional Claimants.

Conclusion

Based on the reliability of the Bortz study, the benefit and marketplace value of Devotional programming to cable operators, the intensity of viewer response to Devotional programming, and the harm arising from distant retransmissions of Devotional programming, it is my conclusion that the Bortz study generally should be given great weight by the Panel, and that the Devotional Claimants should receive full credit for their showing in that study.

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DECLARATION

I declare under penalty of perjury that the foregoing testimony is true and correct to the best of my knowledge, information and belief.

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Background and Qualifications of David W. Clark, Ph.D.

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1. My graduate educational background is as follows: I received a Ph.D. in Speech Communication, emphasizing communication research, from the University of Iowa in 1972, a Master of Arts degree from the University of Iowa in 1970, and a Master of Divinity degree in 1966 from Northern Baptist Seminary in Oak Brook, Illinois.

an assistant

2. From 1972 to 1977, I was professor of broadcasting at Bowling Green State University in Ohio, where I primarily taught graduate level courses in public communications policy and research. In 1977, I became Dean of the Graduate School of Communication at Regent University, a position which I held until 1981. Also, from 1978 to 1981, I was President of Communication Analysts, Inc., a private communication marketing research and consulting firm.

3. From 1981 to early 1982 I was Director of Research, and from 1982 to 1987, Vice President of Marketing, for The Christian Broadcasting Network, Inc. In 1987, I became federal bankruptcy trustee for the Heritage USA Bankruptcy Case (a/k/a PTL), a position I held until June 1988. From 1988 to 1991, I was Dean of the College of Communications at Regent University in Virginia Beach, Virginia.

4. Since 1991, I have served as founding president of KMC Media, a media strategy, production, and placement subsidiary of Killian McCabe Associates, located in Dallas, Texas. Our clients include a number of religious broadcasters. I am also the immediate past Chairman of the Board of the National Religious Broadcasters, an association of over 900 religious organizations and broadcasters, and I continue to serve on the Executive Committee of the Board.

5. As a result of my years of education, training, and teaching experience, and administration in the fields of communication research, marketing, and broadcasting, I believe that I am qualified as an expert in evaluating communication survey research and television rating data, such as the research involved in this proceeding.

6. I am well-versed in the study, analysis, and application of statistical and marketing concepts, including research design, non-parametric cross-tabulation, and inferential statistics.

REBUTTAL TESTIMONY OF ROBERT W. CRANDALL

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February 15, 1996

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I. QUALIFICATIONS

I have been a Senior Fellow in Economic Studies at the Brookings Institution since 1978.¹ Prior to that I was the Acting Director, Deputy Director, and Assistant Director of the Council of Wage and Price Stability in the Executive Office of the President, and in 1974-75 I was an adviser to Commissioner Glen Robinson of the Federal Communications Commission. I was an Assistant Professor and Associate Professor of Economics at MIT between 1966 and 1974. I have written widely on telecommunications policy, the economics of broadcasting, and the economics of cable television. I am the co-author of two books to be released early this year by the Brookings Institution: <u>Talk is Cheap: The Promise of Telecommunications Reform in North America</u> (with Professor Leonard Waverman) and <u>Cable Television: Regulation or Competition?</u> (with Harold Furchtgott-Roth). A copy of my curriculum <u>vitae</u> is attached.

I testified before the Copyright Royalty Tribunal on behalf of the Joint Sports claimants in the 1989 cable royalty distribution proceeding. In that proceeding, I addressed Dr. Stanley Besen's criticism that a study by Bortz and Company did not provide a valid measure of the marginal value of programming to cable operators. I also discussed the applicability of those criticisms to the cable-viewing study submitted by the Motion Picture Association of America (MPAA).

¹ The views expressed in this testimony are my own and should not be taken to reflect the views of the Brookings Institution, its Trustees, or its other staff members.

II. SUMMARY

I have been asked by the Joint Sports claimants to evaluate the new study provided by Dr. Besen in this 1990-92 proceeding. Dr. Besen studies the relationship between changes in royalty payments and changes in viewing hours for various categories of programming - as those viewing hours are affected by changes in the distant signals carried by the cable system operator. Dr. Besen contends that his new study conveys estimates of actual cable-operator valuations of the different kinds of distant-signal programming. He also argues that his estimates are superior to those provided by the Bortz study because his study is based on data on actual cable-operator market behavior while the Bortz study relies on a survey of cable operators. While I agree with Dr. Besen that it is generally desirable to study actual market behavior, his methodology is so flawed that it provides no reliable information about relative program values. Moreover, I show that by simply replicating Besen's estimated equation for various partitions of his own sample, one gets very different results that are often totally implausible. As a result, I am forced to conclude that his approach provides no useful information on the relative value of various types of distant-signal programming. In the absence of convincing estimates of these values based on cable-operator market activities, I continue to believe that the best evidence on such relative values are the results of the Bortz survey of cable-operator valuations of the various programming categories.

III. THE BESEN STUDY

In testimony submitted in this proceeding, dated August 15, 1995, Stanley Besen has provided estimates of the "value" of distant-signal programming imported by cable operators in

the period 1988-92. These estimates are derived from a regression analysis of the changes in royalty payments made by certain cable operators who changed their distant-signal complements during any accounting period between 1988-I and 1992-II.

Besen limits his analysis to <u>changes</u> in royalty payments for systems as they relate to <u>changes</u> in distant signals carried by the cable system operator. Therefore, he does not analyze the behavior of cable systems that do not adjust their distant-signal imports during an accounting period. Instead, he estimates a simple regression equation (his "basic" equation):

(1)
$$R' = aS' + bM' + cL' + dD'$$

where R' is the percentage change in royalty payments in each accounting period, and S', M', L', and D' are the percentage changes in the hours of sports, movies/syndicated series, local programming, and devotional programming, respectively, on the imported distant signals. Besen acknowledges that all hours in each category are not equal; therefore, he weights the hours of each programming type by its share of total cable household viewing hours of that program type as estimated by A.C. Nielsen in a study performed for the Motion Picture Association of America. Besen suggests that the estimated coefficients – a, b, c, and d – from this equation provide reasonable estimates of the "value" of each type of programming to cable operators since the estimates reflect the outcome of cable-system operators' decisions to pay additional copyright fees to obtain additional (weighted) hours of each type of programming. The basic results show that each 1 percentage point change in movies/syndicated series result in a 0.82 to 0.92 percent change in royalties. Local and devotional programs are worthless – indeed, they have negative value according to Besen's results – but he utilizes arbitrary adjustments to assign them value despite the fact that their coefficients are never significantly different from zero.



IV. ANALYSIS OF THE BESEN APPROACH

Any quantitative economic study must satisfy a number of criteria for it to provide valid estimates of the variables in question: (1) it must be based on a consistent theory or model of the economic agents' behavior; (2) it must include the most important variables that affect this behavior; (3) these variables must be measured correctly; and (4) it must provide consistent results when estimated over different data or various subsets of the same data. Besen's study fails all of these tests.

First, Besen's study is not based on any cogent theoretical model of cable-operator behavior and therefore cannot be said to produce estimates of cable operators' valuation of the various program categories on imported distant signals. Second, there are a number of variables that are omitted from the model that are crucial to any estimate of cable-operator's demand for programming. Third, his explanatory variables are not properly measured because his weighting scheme utilizes total cable viewing hours. And, finally, his basic equation provides wildly different estimates of the "value" of distant-signal programming from different subsamples of his own final sample of cable-operator changes in distant signal imports. Thus, one cannot even replicate his results for different groups within his own sample, a critical failing for any scientific methodology.

Before delving into these problems with Besen's conceptual approach, it is useful to compare his results with the actual behavior of the cable operators in his study. During the 1988-92 period, these cable operators were reducing their reliance on imported distant signals. However, as they did so they dropped signals that were relatively heavily weighted with movies

and syndicated series and tended to add signals, such as WGN, that had a relatively large proportion of sports programming. <u>Table 1</u> lists the stations that appear as dropped or added distant signals in Besen's sample. Note the large number of stations that appear as dropped signals only. In fact, there are 207 instances of a cable system dropping a signal, but only 69 cases of a signal being added. Of these 69 added signals, 33 are instances of the addition of WGN, a signal with a relatively large amount of sports programming. Another 9 are instances in which WTBS, another superstation with a relatively large amount of sports, is added. Thus, 61 percent of the added signals are these two relatively sports-intensive stations. In fact, as <u>Table 2</u> shows, the share of the weighted sports hours on signals that were added was 17.0 percent of the total weighted hours; the share of sports on those signals that were dropped was only 7.2 percent. Most of the cable systems that Besen studies were reducing their reliance on imported distant signals in the study period. Besen's results are therefore based largely on cable operators that were deciding to drop signals, and the signals dropped had a relatively high concentration of movies and syndicated series.

Further evidence of the importance of sports programming to cable operators may be deduced from a closer look at those instances in which the cable operators in Besen's study were adding, dropping, or simply swapping signals. Of the 189 instances in which cable operators chose to drop a signal, and for which Besen has provided sufficient data to make the comparison, 136 (or 72 percent) were occasions in which the cable operator chose to drop the signal that had the least sports of any imported distant signal in his line-up.² Of the 69 instances in which a signal was added, 57 (or 83 percent) had more hours of sports than the average of all imported distant signals in Besen's sample. Finally, in those 34 cases in which one distant signal was swapped for another, 30 reflect instances in which the cable operator added a signal with more sports than on the one that it replaced. Thus, Besen's own sample suggests that cable operators were adjusting

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Besen has not provided the raw hours data for all of the signals carried by the cable systems in his study.

Table 1

Distant Signals in Besen's Sample That Are Added, Dropped, Or Both

Signals Added Only	No. of Adds
KSBW	1
KTLA	1
WGBS	1
WJBK	1
WTOV	1

Signals Added and Dropped	No. of Adds	No. of Drops
WGN	33	14
WTBS	9	5
WWOR	5	36
WPHL [*]	4	4
WSBK	3	8
KUSA	2	1
WTXF	2	8
KCNC	1	1
KCRA	1	3
KSDK	1	1
KTXL	1	8
KXTX	1	2
WPIX	1	10

Signals Dropped Only	No. of Drops
KUTV	7
KSL	6
KTVX	6
WDCA	6
WTTG	6
WKBD	5
KGO	3
KGW	3
KTTV	3
KTVT	3
KWGN	2
	2
WDAL	2
WDFF WU77	
WJZ	
WLVI	
WMAR	3
КВНК	2
KICU	$\frac{2}{2}$
KOIN	2
KSHB	2
<u>KTVU</u>	2
WFLD	2
WNYW	2
WPGH	2
KATU	1
KCOP	1
KFMB	1
KGTV	1
КНЈ	1
KMEX	1
KMSP	1
KXAS	1
WABC	1
WCAU	1
WGNO	1
WGNX	1
WGR7	$\frac{1}{1}$
WIAR	1
WPRI	1
WDVI	1
WPAI	
WSTM	1
WOIN	
WUAD	<u>1</u>
W V I WI	
WW2B	
WYTV	1 1

Table 2

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Percentage Shares of Weighted Program Hours for Dropped and Added Signals (based on four-cycle data)

Signal Groups	Movies/Series	Sports	Devotional	Local
Dropped Signals (N=207)	84.1	7.2	0.4	8.2
Added Signals (N=69)	76.1	17.0	0.3	6.5

their menus of distant signals to increase the amount of sports offered to subscribers, a result at odds with the low "value" that Besen ascribes to sports in his analysis.

1. Inadequacy of the Besen Model

Any attempt to estimate cable-operator valuations of distant signal programming from actual market data must begin with a valid theory of cable-operator demand for such programming. Cable operators realize most of their revenues from the sale of subscriptions; the value of another program channel is therefore directly related to its ability to attract subscriptions, not to total viewing hours. But Besen proceeds to construct his model on the assumption that cable operators value programs in proportion to the viewing hours that these programs attract.

Furthermore, Besen assumes that cable operators adjust their imported signals so that the value of the additional programs imported is just equal to the additional cost of royalty payments. But this supposes that each cable system can find distant signals with precisely the mix of programming the cable operator desires to meet his or her subscribers' demands. In fact, the cable operator cannot "mix" the programming of several different stations to obtain the optimal mix for his system. As a result, when a cable operator adds a distant signal, the value of the programming on that distant signal is likely to be substantially greater than the additional royalty payment incurred. Besen's analysis, however, treats the value of the additional programming as equal to the additional royalty payment incurred. Besen's analysis, therefore, undervalues the distant signals added by cable operators.

For example, a cable system may want to import WGN (Chicago) because it offers, say, 25 Bulls games per year, but it cannot add to this offering of Bulls games by importing other

distant signals. Thus, the value of WGN to a cable operator might be as much as 5 percent of revenues or more; but the operator might only have to pay 0.6 percent of its basic revenues in copyright royalties for this signal. Were "another WGN" available that offered some of the other 57 Bulls games, the cable operator might import that one also even if its royalty payments rose to the maximum level of 3.75 percent of basic revenues. Unfortunately, the cable operator cannot find such a second station to import, and he or she might find that other distant signals are simply not worth even 0.6 percent of basic revenues.

If a cable operator desires more movies or syndicated programming, he or she may simply import another distant signal to obtain a different line-up of nationally-distributed programming of these types. However, the cable operator may simply not be able to add to the types of sports programs that his or her cable system's viewers would value highly. As a result, the "equilibrium" for the cable operator may be one in which the value of the imported programs on an added distant signal is far above their contribution to the cost of royalty payments, a result not allowed for in Besen's regression estimation. On the other hand, the value of programs on a signal that is dropped may be substantially less than the change in copyright royalties – after all, that is why it was dropped. To the extent that Besen's analysis provides any measure of the values of various types of programming to cable operators, it generates a biased estimate of these values because he assumes that the values of added or dropped signals are always precisely equal to the copyright royalties added or subtracted.

2. Omitted variables

Even if Besen's basic equation were an approximation of a demand relationship, it would suffer from its omission of crucial explanatory variables. A cable operator's demand for this programming depends importantly on the channel capacity of his or her system, the other types of

programming available, the availability of local broadcast signals, the penetration of VCRs in his or her local market, the probability that additional cable subscribers will subscribe to other non-basic cable services, and the demographics of the local cable market. These variables are not in Besen's equation; therefore, Besen has not estimated a structural demand relationship, but rather is estimating an <u>ad hoc</u> equation whose coefficients are not likely to have much meaning and surely do not provide reliable estimates of cable operators' willingness to pay for such programming.

Besen defends his omission of these variables by pointing out that he is studying the effect of changes in imported distant signals on changes in copyright fees. Presumably, he is claiming that the other variables in the demand equation do not change in as short a period as six months. In a rapidly changing industry like cable television, such an assumption is simply not justified. The number of basic cable networks changes almost monthly. Channel capacity has increased dramatically on some systems, and these changes can easily occur within a six-month period. A local broadcast station may start up or cease operation in an accounting period. VCR ownership has grown rapidly over the past ten years. A local factory or military base may close, leaving hundreds or thousands of workers temporarily unemployed and less willing to subscribe to cable television. Because Besen controls for none of these influences, he cannot claim to have estimated a <u>demand</u> relationship. In fact, he may have simply estimated no more than the relationship between the average share of each program type on distant signals and the copyright royalty rate as it is specified in the statute. This relationship is not a demand relationship, and it confers no information on the relative values of various types of programming on these imported distant signals.

3. Improperly-Measured Variables

Besen admits that the value to cable operators of various programs within each category is likely to vary substantially. Unfortunately, he uses A.C. Nielsen estimates of total cable household viewing hours for each program category relative to total cable household viewing hours for all programming on the distant signal to "weight" program hours in each category for their relative values. As I explained in my testimony in the 1989 proceeding, the value of programming to cable operators is not reflected in total viewing hours, but rather in whether the programming induces households to <u>subscribe</u> to the cable service. Sports programming that attracts only a modest number of viewing hours may, nevertheless, be the reason that a substantial share of households subscribe to cable at all. Many cable operators might be willing to pay the entire royalty fee for a given distant signal just for one season's offering of a team's games because these games would induce a substantial increase in cable subscriptions. Besen's weighting scheme fails to account for such a possibility.

Even if viewing hours were somehow a measure of the relative value of various programs, Besen's use of total national viewing hours data cannot capture the appeal of any given type of programming in a given cable operator's franchise area. Robert Sieber, a WTBS executive, testified in this proceeding that the viewing audience for the Atlanta Braves and SEC football broadcasts on his station varies substantially across the country.³ In such instances, Besen's weighting with national cable viewing shares will understate the value of the imported station in some markets and overstate it in others.

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Written testimony, August 18, 1995, pp. 14-15.

In his oral testimony in this proceeding, Dr. Besen defended his use of national cable household viewing hours data to weight his program categories, arguing that viewing hours were intended to weight individual programming within each category, <u>i.e.</u>, sports, movies/syndicated series, local programs, and devotional programs, but not to assign different weights across categories.⁴ This is contrary to the description he provides in his written testimony in which he states that "When weighted hours are used in the analysis, a <u>program category</u> that attracts a disproportionately large amount of viewing will be specified as containing a larger proportion of programming 'inputs' than its proportion of program hours."⁵ (emphasis supplied)

Using viewer weights to adjust the changes in program hours also creates an "errors in variables" problem in Besen's estimates of his basic equation. When a variable on the right-hand side of Besen's basic equation is measured imprecisely, the estimate of its coefficient is biased towards zero.⁶ In Besen's case, the measurement errors in his weighted sports variables are greater than the measurement errors for movies and syndicated programming in the 1990-92 data. Therefore, the downward bias in the coefficient of sports is likely to be greater than the bias in the estimated coefficient of movies and syndicated programming.⁷ Besen does not address this point, and absent the estimated standard errors for the 1988-89 data, it is not possible to determine the precise impact of measurement error on Dr. Besen's estimated coefficients.

⁴ Testimony on January 24, 1996, tr. 6260-66.

⁵ Written testimony, August 15, 1995, p. 22.

⁶ See Jan Kmenta, <u>Elements of Econometrics</u>, 2d. edition, New York: Macmillan, 1986, Chapter 9.

⁷ A. C. Nielsen data for 1990-92 submitted by the MPAA in response to discovery in this proceeding show that the estimated standard errors are a larger percentage of the estimated viewing shares for sports than for movies and syndicated series.

Another source of measurement error in Besen's analysis is his inclusion of Form 2 systems in his analysis. For some reason, Besen includes both Form 2 and Form 3 systems in the sample he uses to estimate his basic equation. Of the 208 observations, 30 are for Form 2 systems. Besen's equation surely does not hold for Form 2 systems because the royalties paid by those systems are not tied to increases or decreases in the number of signals. The effects of including Form 2 systems therefore is simply to add noise to the data and to reduce the precision of the estimated coefficients. Thus, adding these systems creates another errors-in-variables problem that is likely to bias the estimated coefficients downward.

4. Instability of the Resulting Estimates

A key test of any regression analysis is whether the results are consistent across various subsamples of the data. The results presented by Besen do not pass that test. His approach derives substantial differences in the results for dropped signals versus added signals, as well as for various other subsamples. Those differences in the results have important implications regarding the validity of the Besen approach.

Dropped versus Added Signals

As noted, to the extent that Besen's equation estimates cable-operator value of imported signals at all, it under-estimates the value of added programming and over-estimates the value of dropped programming. To demonstrate the effect of allowing for possible differences in coefficient values of added or dropped signals, I have re-estimated Besen's equation, dividing the 208-unit sample into three separate samples – the 33 instances in which there was a net addition to

imported distant signals; the 141 cases in which there was a net <u>reduction</u> in distant signals; and the 34 cases in which there was no change. The results are shown in <u>Table 3</u>.

The most obvious outcome of this trifurcation of the Besen sample is that the results are vastly different across the three samples, suggesting that his basic equation is unreliable as an explanation of cable-operator behavior. The estimated "value" of sports is much larger in the systems adding signals than in those reducing them or making no net changes. In systems adding to their total number of signals, sports is "valued" at 55 percent of the additional royalty payments while movies and syndicated programs are "valued" at minus 22 percent of the additional royalties. In systems dropping signals, movies and syndicated series have an apparent value of 44 percent of the additional royalty payments while sports have an apparent value of minus 4 percent. In systems that are making no net change to the number of imported distant signals, movies/syndicated series are apparently "valued" at 102 percent of the additional royalty payments and sports at only 4 percent. This wide range in coefficient estimates across the three samples demonstrates that one cannot assume - as Besen does - that his equation holds equally for systems adding and dropping signals. Indeed, given these results, one must to reject the hypothesis that the three estimated equations are the same.⁸ To the extent that these equations represent a demand relationship, they obviously cannot be lumped together and estimated as a single, homogeneous relationship as Besen does in estimating his single "basic" equation.

⁸ The standard test for determining whether estimated equations across different subsets of a sample are the same is the Chow test. The critical value of the F-statistic for rejecting the hypothesis that the three subsamples are drawn from a population in which the overall regression holds is 2.41 at the 99-percent confidence level. The Chow test provides an F-statistic of 4.00 in this instance, requiring us to reject the theory that the three estimated equations are the same.

Table 3

Estimates of Besen's Equation for Those Cable Systems Adding Signals and for Those Dropping Signals

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Sample	Constant	M'	S'	D'	L'	Adj. R Sq.
Full Sample	0.0394	0.8628	0.0774	-0.0025	-0.0138	0.2997
(N=208)	(t=0.861)	(t=6.453)	(t=1.672)	(t=-0.236)	(t=-0.418)	
Net Adds Only	0.5218	-0.2168	0.5483	-0.0522	0.0395	0.0384
(N=33)	(t=1.495)	(t=-0.341)	(t=2.148)	(t=-0.532)	(t=0.449)	
Net Drops Only	-0.1014	0.4453	-0.0399	0.0052	0.0814	0.0484
(N=141)	(t=-1.623)	(t=2.533)	(t=-0.726)	(t=0.331)	(t=0.906)	
No Net Change	-0.0541	1.0216	0.0425	0.0013	0.0123	0.1223
(N=34)	(t=-1.503)	(t=2.707)	(t=1.728)	(t=0.368)	(t=0.422)	

To account for the difference in coefficient values for sports that are added versus those that are dropped, I re-estimated Besen's basic equation with one slight modification. I allowed the coefficient for the sports programming variable to vary for systems adding signals, dropping signals, or making no net change in the number of imported distant signals. The results are reported in <u>Table 4</u>. In this variant, the coefficient for sports in those systems adding signals is virtually identical to the movies/syndication coefficient, 54 percent versus 56 percent. However, the coefficient for sports in those cases where the number of signals is being reduced is not significantly different from zero. According to Besen's methodology, this suggests that the value of sports in systems adding signals is far greater than sports' estimated value when signals are being reduced.⁹ The result shows once again that even if one accepts the premises of Besen's analysis, the coefficients of his "basic" equation are simply not stable or "robust" in the statistician's parlance, <u>i.e.</u>, they are not reliable.

I also re-estimated Besen's equation allowing the coefficients of all four of the distantsignal programming categories – movies/series, sports, local, and devotional – to vary across systems dropping signals, adding signals, or maintaining the same number of imported distant signals. The estimated equation has only two significant coefficients – sports for systems <u>adding</u> signals and movies/syndicated series for systems <u>dropping</u> signals. All other weighted programhours variables are statistically insignificant. Thus, to the extent that Dr. Besen's methodology captures value to the cable system, this result suggests that value is related most importantly to adding sports programming and to dropping motion pictures and syndicated series. It also shows that Besen's basic equation does not provide consistent estimates of the value of program categories across all observations in his sample.



⁹ The improvement in the statistical fit to Besen's equation from adding the three dummy variables is statistically significant. The F-statistic for testing this improvement is 11.38, compared to a critical value of 4.71 at the 99-percent confidence level. One must reject the theory that the coefficients of the sports variables are equal.

Table 4

Estimates of Besen's Equation with Interaction Terms for Sports Programming Reflecting Systems Adding (A), Dropping (R), or Maintaining Same Number (M) of Distant Signals

Sample	Constant	М'	S'	S'*A	S'*R	S'*M	D'	L'	Adj. R Sq.
Full (N=208)	0.0394 (t=0.861)	0.8628 (t=6.453)	0.0774 (t=1.672)				-0.0025 (t=-0.236)	-0.0138 (t=-0.418)	0.2997
Full (N=208)	-0.0625 (t=-1.279)	0.5643 (t=3.848)		0.5364 (t=5.021)	-0.0300 (t=-0.334)	0.0292 (t=0.522)	0.0004 (t=0.037)	0.0010 (t=0.033)	0.3647

Note: S'*A is equal to S' times A, a dummy variable equal to one if the system is adding distant signals and zero otherwise; S'*R is equal to S' times R, a dummy variable equal to one if the system is reducing distant signals and zero otherwise; and S'*M is equal to S' times M, a dummy variable equal to one if the system is maintaining the same number of distant signals and zero otherwise.

Form 2 versus Form 3

When Besen's basic equation is estimated for Form 2 and Form 3 systems separately, the results are again dramatically different. As Table 5 shows, the estimated coefficients for the equation estimated with Form 2 systems only are all statistically insignificant. The programming variables contribute nothing to explaining changes in royalty payments. For the sample of Form 3 systems, the coefficients of movies/syndicated series and sports rise as expected. However, these coefficients now sum to far more than unity. The size of the movies/syndicated programming coefficient implies that this programming alone is "worth" 150 percent of the additional royalty payments, clearly an implausible result. According to Besen, any value greater than 100 percent would mean that cable operators could gain more in value than the cost of the added royalty payments by continuing to import additional distant signals that are predominantly movies and syndicated series.¹⁰ But cable operators were not adding such distant signals during this period; on balance, they were dropping them. Indeed, <u>Table 2</u> shows that movies and syndicated programming comprised 84.1 percent of weighted hours on the dropped signals, surely a curious fact if adding such programming generally contributed 150 percent of the additional cost of royalty payments as Besen's results imply. In short, Besen's results run contrary to the actual behavior of cable operators.

Indeed, Besen argued in his 1993 testimony and again in oral testimony in this proceeding that each of the coefficients for the four program types should be less than 1.0.¹¹ But clearly the results for Form 3 systems alone – the only category of cable systems for which cable royalty

¹⁰ Testimony on January 24, 1996, Tr. 6240-43.

¹¹ Testimony on January 24, 1996, Tr. 6240-43.

Table 5

Estimates of Besen's Equation for Form 2 and Form 3 Systems Separately

Sample	Constant	M'	[,] S'	D'	L'	Adj. R Sq.
Full Sample (N=208)	0.0394 (t=0.861)	0.8628 (t=6.453)	0.0774 (t=1.672)	-0.0025 (t=-0.236)	-0.0138 (t=-0.418)	0.2997
Form 2 Systems (N=30)	0.1164 (t=2.358)	0.0549 (t=0.225)	-0.1026 (t=-1.001)	-0.0172 (t=-0.461)	0.0242 (t=0.306)	-0.0471
Form 3 Systems (N=178)	0.1426 (t=2.886)	1.5000 (t=9.902)	0.1014 (t=2.289)	-0.0080 (t=-0.815)	-0.0730 (t=-2.286)	0.4836

payments rise with additional imported signals – provide an estimated coefficient for movies/syndicated series of 1.5, an estimate that is more than three standard errors above 1.0. This result starkly demonstrates that Besen's methodology is fatally flawed, even by his own criterion.

Superstations versus Non-Superstations

Imported "superstations" account for approximately 80 percent of all copyright royalties paid, but Besen's sample includes a preponderance of observations that do not involve any of the major superstations. Of the 208 observations, there are 119 that do not involve the three most important superstations – WGN, WTBS, and WWOR. Nearly half of the observations (98) do not involve any of the seven stations normally classed as superstations. Once again, the estimated coefficients vary widely when one estimates the equation for subsamples involving changes in the three major superstations or the seven large superstations. (See <u>Table 6</u>.) For instance, when the sample is confined solely to those instances in which systems add or delete only the three major superstations, the movies/series coefficient is equivalent to 59 percent of additional copyright payments and the sports coefficient is equivalent to 28 percent. When the sample is expanded to the seven major superstations, the coefficients are equivalent to 72 and 21 percent of additional royalty payments, respectively. These results contrast with the estimated coefficients from the entire sample (Besen's basic equation) of 86 and 8 percent, respectively. Once again Besen's estimates vary across subsamples of his entire sample, this time between superstations and non-superstations.

Table 6

Sample	Constant	M'	S'	D'	L'	Adj. R Sq.
Full Sample (N=208)	0.0394 (t=0.861)	0.8628 (t=6.453)	0.0774 (t=1.672)	-0.0025 (t=-0.236)	-0.0138 (t=-0.418)	0.2997
Changes of Three Major Superstations (N=67)	0.1322 (t=1.060)	0.5908 (t=1.595)	0.2754 (t=1.601)	-0.0309 (t=-0.698)	0.0338 (t=0.459)	0.2511
Changes of Seven Major Superstations (N=89)	0.0760 (t=0.799)	0.7230 (t=2.640)	0.2122 (t=1.709)	-0.0165 (t=-0.442)	0.0181 (t=0.306)	0.2884

Estimates of Besen's Equation for Samples Involving Major Superstations Only

Note: Rows 2 and 3 include only those observations in which changes were made in major superstations only.

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V. CONCLUSION

Dr. Besen's statistical approach to measuring the "value" of the various types of programming on imported distant signals is seriously flawed. It is not supported by a complete theoretical model. His basic equation omits a variety of important variables. Most important, his results are extremely unstable with the values of various program types varying from negative numbers to more than 100 percent of the cost of additional royalty payments, depending upon the subsample being studied. Given the imprecision and instability of his results, one simply must conclude that he has been unable to measure the relative values of the various types of programming.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Caral 2/15/84

Robert W. Crandall

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STATEMENT OF DR. RICHARD V. DUCEY

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STATEMENT OF DR. RICHARD V. DUCEY

I. <u>BACKGROUND</u>.

I am the Senior Vice President of the NAB's Research and Information Group. I participated in Copyright Royalty Tribunal proceedings twice, testifying on behalf of NAB during Phase II of the 1986 cable royalty distribution proceeding and again during Phase I of the 1989 proceeding. My testimony from those proceedings has been incorporated into the record of this proceeding, but for ease of reference I repeat the summary of my qualifications here. My background and qualifications are described further in an attachment to this Statement.

Before joining NAB in September 1983, I was on the faculty of the Department of Telecommunication at Michigan State University. Prior to my stint at Michigan State, I worked as a cable system programmer and at radio stations as an announcer. Since coming to Washington, I have served as an adjunct faculty member for the University of Maryland and George Washington University. I have also done some independent consulting over the years.

I received my Ph.D. from Michigan State University in mass media, specializing in telecommunication marketing and research. I authored or co-authored over forty published research articles and papers in these areas, including work on explaining market segments in the cable industry. I serve on the editorial and review boards of several journals and organizations. I have taught both undergraduate and graduate courses and have conducted industry panels and seminars on research methodology, telecommunication technology and strategic marketing.

My work as a cable system programmer was at a system with approximately 13,000 subscribers in upstate New York. I held this position in 1978 and 1979 while the old syndicated exclusivity rules were still in effect. Part of my job was to black out certain syndicated programs on distant signals and to select programming from other distant signals as replacements. This earned me first hand experience in evaluating distant signal programs for the purpose of maximizing the appeal of our cable service to the system's subscribers. My current understanding about what is appealing to cable subscribers comes from talking directly with the system's subscribers and reviewing subscriber surveys, as well as from my later academic research and my general familiarity with other studies.

II. <u>OVERVIEW</u>.

NAB is making the claim for royalties for the "U.S. Commercial Television" category, which covers all of the station-produced programs broadcast by U.S. commercial stations that were carried as distant signals. Station-produced programs are ones produced by or for the station which were not broadcast on any

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other commercial television station during the year in question. Typical stationproduced programs include daily newscasts, public affairs talk shows, children's programs, news magazine and interview shows, sports programs, specials, documentaries, and other programs. They are retransmitted along with syndicated shows, movies, sports games, and/or devotional programs when the station is retransmitted by a distant cable system.

In this case, I understand that the Joint Sports Claimants will be submitting the results of cable operator surveys that show that, in 1990 through 1992, the value to cable operators of the news and public affairs programs they retransmitted on distant signals was between 11.9 percent and 14.8 percent of the value of all their non-network distant signal programming, in terms of attracting and retaining subscribers. This cable operator study is a direct measure of the relative value of the distant signal programs cable operators actually purchased in 1990 through 1992.

In the 1989 case, the Tribunal had similar evidence showing that the relative value of news and public affairs programs was 11.8 percent. Nevertheless, the Tribunal awarded NAB only 5.7 percent of the Basic and 3.75 funds for 1989. The Tribunal's award was not even as high as the level shown in MPAA's viewing study, as corrected. The Tribunal explained that "in relative terms, we still find that the viewer intensity is higher for the other Phase I

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claimants than for any that exist for NAB." It said that it awarded shares higher than viewing percentages for claimant groups that had shown "the intensity or avidity of [their] viewers." And it said that it gave greater weight to the cable operator survey results for program categories for which there was "corroborating evidence" of "intense viewership" or "valuable license fees."

My testimony in this case is focused on the Tribunal's reasoning. First, I address some of the reasons why the Panel, when it determines distant signal marketplace value for 1990-1992, should not rely on supposed "viewer intensity" and ignore the results of the cable operator valuation survey. It is, after all, the cable operators who make signal carriage decisions, not the subscribers. Second, even if the role of subscribers should somehow be factored into distant signal marketplace value determinations, a study reporting the gross amounts of viewing done by subscribers would not be the right way to do so. Such a study does not measure viewer avidity or intensity. Ratings are a measure of exposure to or consumption of television, and do not tell us anything about intensity of preference. Third, the evidence clearly shows a higher viewer intensity or preference for station-produced programs than its viewing percentage.

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III. SUBSCRIBER PREFERENCES ARE NOT A PROPER MEASURE OF MARKETPLACE VALUE.

The key element for valuation in the cable distant signal marketplace is that it is the cable operator, not the cable subscriber, who is the decisionmaker. This marketplace has both wholesale (sales of programming channels to cable operators) and retail (sales of channel packages to cable subscribers) elements. As in any wholesale market, the reseller will consider the demand for certain types of services at the retail level. This is reflected, along with other factors, in his or her decisions about what to purchase at the wholesale level of the marketing chain. But the judgments of cable operators will determine which distant signals they purchase, regardless of the extent to which they have accurately gauged their subscribers' ultimate preferences or have weighed other factors in addition to those preferences. Ignoring the cable operators' judgments and replacing them with supposed evidence about the preferences of subscribers would move the analysis one step further from the wholesale marketplace value the Panel is seeking to measure.

Subscriber preferences are only one factor that cable operators consider in making their decisions about distant signals. To the extent subscriber preferences <u>are</u> relevant, they are like an indicator rather than a final measure. For example, the weather in a farming region is an important indicator of crop yields, and

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knowing the weather, along with other factors, may allow a relatively good advance estimate of the ultimate yields. But if one is seeking to determine crop yields after the fact, the best measure will always be the direct measure of the actual yields, not a review of the weather patterns. By the same token, a direct measure of the relative values cable operators attach to the distant signal programs they actually carried is the best measure of their relative value, and evidence or beliefs about relative viewer avidity cannot improve on the cable operator survey results.

In the judgment of cable operators actually operating in the distant signal marketplace, station-produced news and public affairs programs <u>do</u> have significant value in terms of attracting and retaining subscribers. The Panel should not reject that essential judgment based on assumed differences in "viewer avidity."

IV. VIEWING DATA DO NOT MEASURE SUBSCRIBER PREFERENCES.

Even if subscriber preferences were relevant, viewing studies would be the wrong way to measure that phenomenon. Evidence about subscriber viewing does not even provide evidence of avidity. Ratings may be a direct measure of the relative value of programs in the broadcast marketplace, but the cable distant signal marketplace is fundamentally different. Cable operators have the incentive

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to purchase distant signals that will maximize their profits or otherwise enhance their business position when they repackage them for sale to cable subscribers. Since cable operators cannot "sell" distant signal audiences to advertisers, ratings do not measure program value. Cable operators want the greatest number of subscribers on a continuing basis, regardless of how many subscribers watch particular programs or the channels carrying them.

A station or program with a small audience base would likely prove unattractive to most advertisers, but if it attracted (or helped retain) subscribers and their monthly payments, it would be attractive to cable operators. If adding a new station or channel would help attract even 1% more subscribers than the next best choice, the rational cable operator would add that service, regardless of its ratings. Cable operators do not profit from higher ratings on distant signals, they profit from adding incremental subscribers to their customer base.

Based on my own experience, cable operators' own surveys typically do not even attempt the kinds of viewing measures produced by Nielsen or Arbitron. (In deciding which programs to insert in my job as a cable programmer, I never read a Nielsen or Arbitron ratings report.) Instead, they more typically focus on subscriber preference or satisfaction measures. And much of the subscriber research conducted by cable operators gauges subscriber interest in channels, not programs. While cable companies could readily attempt to produce household

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hour viewing estimates, they apparently find a different kind of study more useful in their determinations about which signals to carry. And even such information about subscriber preferences is only one factor in making their ultimate purchase decisions.

V. THE EVIDENCE ABOUT SUBSCRIBER PREFERENCES CORROBORATES THE CABLE OPERATORS' VALUATION OF STATION-PRODUCED PROGRAMMING.

The evidence shows that subscriber preferences for station-produced programs, like cable operators' preferences, is high, and is greater than the viewing share for those programs.

A. The 1983 Cable Subscriber and Cable Operator Surveys Provide Strong Evidence of the Kind of "Viewer Avidity" that the Tribunal Has Said Will Justify an Award <u>Higher than Viewing Share.</u>

The evidence presented to the Tribunal in the 1983 Distribution Proceeding permits a head-to-head comparison of subscriber viewing and subscriber value measures. In that proceeding, in which the Tribunal had comprehensive quantitative evidence on "viewer avidity" as well as viewership and cable operator valuations, the evidence showed that viewer avidity was even higher for station-produced programs than the cable operator valuations themselves. I have attached as Exhibit 1 a graphic depiction of the relative measures of value and viewing. The specific percentage results, as presented in various parties' exhibits and reported in the Tribunal's 1983 Final Determination, were as follows:

Program Type	MPAA Viewing Study <u>(Projected)</u>	JSC Operator <u>Survey</u>	NAB Operator <u>Survey</u> 1	NAB Subscriber <u>Survey</u> 1
Sports	10.01	36.1	35.7	25.4
Movies	24.48	30.2	25.0	26.2
Syndicated Series	51.87	18.6	15.8 ¹⁷ .	17.0
Station-Produced	7.24	12.1	13.3	17.1
PBS	4.61	3.1	2.5	5.8
Devotional	0.65	n/a	7.2	7.8

As these percentages show, there is strong consistent evidence, from different independent surveys, that both cable operators and cable subscribers value stationproduced programs proportionately higher than the viewing share of those programs, and that cable subscribers place an even higher relative value on station-produced programs than the cable operators do. On the other hand, cable subscribers and cable operators place a proportionally much lower value on the syndicated programming fare that forms the vast bulk of distant signal programming time and, hence, viewing. This clear and consistent pattern of the quantitative evidence strongly supports giving

¹ NAB's 1983 summary exhibit and the studies themselves are reproduced as NAB 1990-1992 Exhibit 2.



full credit to the cable operator survey results for station-produced programs, as well as for the other Phase I claimant categories.

These surveys are corroborated by more recent data from academic studies, which I discuss in the next section. In addition, a study presented by a representative of WTBS as part of the Program Suppliers' case to the Tribunal in 1993 reported a similar result. Among a sample of cable subscribers who received WTBS, the programming attributes of "keep you informed through frequent newsbreaks," "programs that make you think," and "late night news" ranked higher than many entertainment program attributes. The WTBS witness agreed that these survey results measured the avidity of the respondents for the programming attributes. They showed a relatively high level of avidity for the news, public affairs and other nonentertainment programs produced and broadcast by distant signal stations.

B. <u>News Programming in Particular Has Special Value to Viewers</u>.

Not all television viewing is equally important to viewers, and viewers tend to have a special relationship with television newscasts. One body of scholarly research, the "uses and gratifications" approach, has long tested and substantiated the theory that viewers actively seek use of television to satisfy different gratifications of varying importance to them.² As explained in one article published in 1986, motives for watching programs, according to the research,

"... can be grouped into two categories: instrumental motives are more active, goal directed and content oriented; ritualized motives are more passive, habitual and medium-oriented. Instrumental viewing typically means seeking television content to satisfy dreams for exciting entertainment and information. Ritualized viewing typically means watching television out of habit, when there's nothing else to do, or to pass the time."³

In other words, people can engage either in <u>instrumental</u> use or <u>ritualized</u> use of television programming, with important differences in their purpose and experience. Instrumental use is linked to "content gratification" (i.e., this specific program content is important to me; I will plan to watch it when it is on). Ritualized use is linked to "process gratification" (i.e., watching anything on television is better than the next best alternative).

The research also shows that the two kinds of television use are related to

different kinds of programming and different kinds of viewing patterns:

"Ritualized use is related to watching some entertainment types of programming, and even more to greater exposure to television itself (i.e., higher viewing levels). Instrumental use typically correlates with news, talk, and magazine types of program viewing, but not with higher television viewing levels."⁴

⁴ A.M. Rubin. (1986). "Uses, Gratifications, and Media Effects Research." In J. Bryant & D. Zillman (Eds), *Perspectives on Media Effects*, pp. 281-301, Hillsdale, NJ: Lawrence Earlbaum Associates.



² K.E. Rosengren, L.A. Werner and P. Palmgreen. (1985). Media Gratifications Research: Current Perspectives. Beverly Hills, CA: Sage.

³ A.M. Rubin, R.A. Powell, E. Perse. (1986). "Television News: The On-Air Family?" BPME Image (November/December 1986), pp. 15-18.

And the research establishes further that, when a viewer watches a program for ritualized or "pass the time" motives, he or she was less likely to report <u>satisfaction</u> with the program after viewing it, but a more instrumental motive regarding the content of a program was more likely to result in reported satisfaction.⁵ For our purposes here, it is significant to note that audience ratings cannot be used to distinguish instrumental from ritualized viewing. Therefore, it is inappropriate to use ratings as a measure of content satisfaction. It would be like using a barometer to measure temperature.

Other independent research focuses on the fact that the decision a cable subscriber makes to purchase cable programming is repeated on a monthly basis, and is thus heavily related to the subscriber's assessment of the value of the service and the programming as compared with his or her expectations. Thus, satisfaction with cable programming has been shown to be correlated with the likelihood of retaining a cable subscription, but the amount of viewing of the programming is not.⁶

Taken together, this research establishes that the instrumental viewing motive most related to news programming is also most related to the development of satisfaction with programming, which in turn is directly related to the likelihood of

⁵ E.M. Perse & A.M. Rubin. (1988). "Audience Activity and Satisfaction With Favorite Television Soap Opera." Journalism Quarterly (Summer 1988), pp.368-375.
⁶ R. LaRose & D. Atkin. (1988). "Satisfaction, Demographic, and Media Environment Predictors of Cable Subscription." Journal of Broadcasting and Electronic Media (Fall 1988), pp. 403-441.



continuing to subscribe to cable television. These diverse studies by independent media researchers demonstrate that viewers have an "avidity" for news programs that is meaningful for cable operators seeking to maximize their subscriber revenues. It supports giving full credit to the cable operator survey valuations, and awarding a larger share than the news viewing amount.

Beyond content gratification, research also shows that viewers tend to experience another dimension of involvement with television news. This is the formation of special relationships with the presenters in television newscasts. People relate to news anchors, reporters and personalities as their trusted friends. Much of the emotional value and preference for certain stations is premised on the viewer intensity born of this personal link between news programming and the viewers. Broadcasters are well aware of the viewer intensity with respect to their news programming, as this is documented in countless studies commissioned by stations around the country. Station-produced news programming is in fact a major determinant of the "personality" and general image of a station in the mind of the public.

In the academic literature, this phenomenon of viewers establishing personal relationships with television and mass media in general has been characterized as "parasocial interaction." It has been observed that station-produced news programs are designed to promote this kind of viewer involvement with newscasters. A 1986

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article reported finding a relation between instrumental viewing of local television news programs and the formation of parasocial interaction effects.⁷ This is another measure of the "avidity" of news viewers. The same research-supported phenomenon is also illustrated by some of the letters received by WGN in 1990-1992 from distant viewers commenting on their favorite personalities, which I discuss below. While not every viewer of station-produced news programming develops the same degree of involvement with the program, this dimension of the satisfaction viewers obtain from station-produced programs enhances the value of these programs beyond the mere amount of viewing that is done.

Stations know that the viewer avidity with respect to their news operations is important, because this can create a station loyalty effect which carries over into other aspects of station programming. Again, the letters received by KTVU, presented by Ms. Chang as part of her testimony, clearly illustrate the personal relationship even distant viewers feel with the station's newscasters. In the Mariposa situation she describes, the intensity of the interest of a number of cable subscribers went beyond merely viewing the program, to taking action to prevent its loss.

There have been other similar instances of subscriber action to prevent the loss of or restore distant signal news programming. After the reimposition of the syndicated exclusivity and network non-duplication rules, cable operators in several

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Rubin, Perse and Powell 1986.

communities, including South Lake Tahoe, California, and a number of communities in Western Wisconsin, dropped or threatened to drop distant signals from cities within the same state while continuing to carry local signals from a nearby city in an adjacent state. Cable subscribers and local government officials complained to their Congressional representatives about the loss of distant but in-state news programming, including newsbreaks, political debates, weather coverage and sports. Several bills have been introduced, in 1990 and since, to address the problem. In the Western Wisconsin communities, the cable operator arranged to carry the local news programming of the in-state distant signels, which it carried on a channel otherwise devoted to a cable network. Other cable systems (for example, in Washington and Massachusetts) also carry only the news programming from distant signals that provide coverage from the state's largest city or the state capital. All of these examples demonstrate the special avidity of subscribers for station-produced news programming on distant signals.

Interest in the kinds of stories reported in station news programs was so strong in the late 1980's and early 1990's that it helped spawn a new genre of programming, the "reality" show. As with these new programs, the subject matter of station newscasts is often of the engaging, personally involving type that produces intense viewer interest. The content-specific appeal of station-produced programs (associated with instrumental use) can take several forms. Programs may be appealing because of a focus on a geographical region in which cable audiences live and work. Programs can have appeal because of their genre (e.g., sports, outdoors, news, children's). Programs can also have appeal due to factors like superior production quality, personalities and talent, or specific topics covered in the course of a program. One academic study from 1980 listed the following reasons reported by cable subscribers who viewed the stationproduced news programs on a distant signal instead of the local station's news: the distant station's news was "more informative"; they were attracted by a weather or sports segment; the distant station's news program was of superior quality; they had a preference for a particular newscaster; and they had a desire for news of the distant city.⁸

C. Specific Examples Illustrate Why Subscribers and Cable Operators <u>Place a High Value on Station-Produced Programming.</u>

As in prior years, the 1990, 1991 and 1992 distant signal marketplaces saw the retransmission of hundreds of commercial stations broadcasting thousands of stationproduced programs. Collectively, U.S. commercial television stations produced and broadcast more than a thousand different news programs, including regularly scheduled live newscasts as well as investigative news specials, news magazine shows,

⁸ D.B. Hill & J.A. Dyer. (1981). "Extent of Diversion to Newscasts from Distant Stations by Cable Viewers." *Journalism Quarterly* (Winter 1981), pp. 552-555.



documentaries, news analysis and other informational programs. As discussed above, these programs were of a type for which viewers have an intense interest that goes beyond passive viewing.

In addition to news programming, stations produced and broadcast other programs that are similar in type to those represented by other claimant groups that have received awards in excess of their viewing percentages. For example, stations produced programming about professional and collegiate sports teams, including coaches shows, pre-game analyses, weekly updates and specials analyzing prospects for the season. These kinds of programs, like the games themselves, provide special value with which cable operators can attract and retain subscribers.

Similarly, stations in 1990 through 1992 produced children's programs, public affairs programs, documentaries and other programs similar in type to PBS programs. Stations also produced local devotional programs, which may be as appealing to certain cable subscribers as the syndicated devotional programs represented by the Devotional Claimants in this proceeding.

1. <u>Superstation Programming</u>.

I have listed some of the station-produced programs broadcast on the five most widely-carried superstations in 1990, 1991, and 1992 on Exhibit 3. On WTBS, for example, there were weekly programs like "U.S. Olympic Gold" and "Network Earth." The first was a sports information program about Olympic athletes in training, which included highlights from various qualifying events. "Network Earth" was a news magazine program featuring stories about environmental issues. WTBS also broadcast the weekly "Good News" program, featuring national and international news stories with a positive focus, during 1990 and 1991. Its "Between the Lines" program was a weekly discussion show, in which guests addressed such topics as health, legal issues, and children and education. And the station produced and broadcast a number of newsbreak segments that were broadcast frequently at various time during the day, entitled "News Watch," "Medical Watch" (a news update featuring medical research and medical discoveries), "Kids Beat" (a news update presented by young news anchors featuring news items of interest to kids), and "Sports Watch." WTBS also broadcast a number of programs about sports, including pre-game shows, wrestling programs and others. These programs were all of broad appeal, not limited to matters of interest only in the Atlanta market.

WTBS produced and broadcast these programs expressly to appeal to distant cable subscribers. In the 1990 distribution proceeding that was heard by the Tribunal in 1993, Robert Sieber, Vice President for Audience Development for Turner Entertainment Networks, testified about a research survey TBS Superstation commissioned in 1991. That study was designed to assist WTBS in programming and scheduling, and involved interviews with over 1,200 cable subscribers who received

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WTBS and were aware of the station. I have reproduced 1990 exhibits showing methodology and summary results sections of that study as Exhibit 4. Among the results of the survey that were presented in the hearing were tables that showed that programs that "keep you informed through newsbreaks" ranked near the top, as did "programs that make you think," "late night news," and other nonentertainment programs. "Programs that deal with environmental issues" ranked 21st out of 63 attributes, and "programs that deal with social issues" ranked 26th. These high favorable rankings support the conclusion that WTBS's station-produced newsbreaks, public affairs, environmental and other programs are valued by distant subscribers. Mr. Sieber agreed that it would be fair to say that the results were a measure of the avidity of interest of the responding cable subscribers.

WGN also produced and broadcast a variety of news, public affairs and other programs during 1990, 1991, and 1992. Its weekday news programs, at noon and 9:00 P.M., were available at earlier times to cable systems in the Rocky Mountain and Pacific time zones, providing alternatives that were not typically available locally. It presented numerous sports-related programs that would be appealing to fans of the Cubs, White Sox or Bulls, including the weekly "Instant Replay" program, pre-season specials on all three teams, and pre-game shows before the Cubs and Bulls games. In 1990, it produced a special on the All-Star Game played at Wrigley Field. In 1992, it presented a weekly interview program with Phil Jackson, the coach of the Bulls, as well as specials about the Bulls' playoff and championship series.

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WGN also broadcast a number of station-produced news specials and documentaries, interview programs (including one in Spanish), religious programs (including both talk shows and religious services) and a weekly game show called "The \$100,000 Fortune Hunt." These programs, some of which are listed in Exhibit 3, were based in Chicago, but were of broader interest. In Exhibit 5, I provide copies of a small number of the letters WGN received from distant cable subscribers regarding programs broadcast during 1990, 1991, and 1992. These letters illustrate that even distant subscribers express strong interest in WGN's news, public affairs and other station-produced programs. Among the letters presented here are examples that illustrate the strong personal attachment viewers can form with news personalities, the value of newscasts presented at earlier times because of time zone differences, and the value cable operators derive from the presentation of WGN's station-produced programming, including entertainment programs and sports programs. Some of the letters also comment about syndicated series, movies and sports programs.

WWOR and WPIX from New York both broadcast regularly scheduled newscasts. In addition, WPIX aired a weekday talk show called "Best Talk in Town" and a number of news and sports specials. WWOR broadcast a weekday magazine series, "9 Broadcast Plaza," which covered a wide variety of topics of general interest, from cooking to social issues to news. A weekly talk show, "The Joe Franklin Show," featured interviews and live performances. The station also continued to produce "Steampipe Alley," a weekly children's program for 9-14 year olds, which consisted of comedy sketches, games, guests, demonstrations and monologues with a moral.

WSBK, with the fifth highest number of distant Form 3 subscribers in 1990 through 1992, continued to be distributed mostly throughout New England. Its sports programs, including "Sports Beat" and "Sox Talk," were of obvious regional appeal. In addition, its weekly program "Hersey's Hollywood," of which I showed a taped excerpt in the 1989 distribution proceeding hearing, is a well produced program of broad interest and appeal.

2. <u>Non-Superstation Programming</u>.

In 1990 through 1992, more than 600 other commercial stations were also retransmitted as distant signals. These stations produced and broadcast more than a thousand different news programs. As discussed above, news programming had special value in general because of the intense preference of viewers for news program. Moreover, as discussed and illustrated later in my testimony, the vast majority of the non-superstations were carried as distant signals in 1990, 1991 and 1992 within a relatively close-in region, where programs about the stations' home markets are more likely to be of special interest. In 1990, 1991 and 1992, stations also produced a wide variety of other programs

in addition to newscasts. These included sports programs (such as coaches' shows, pre- and post-game shows, sports news programs, and sports analysis shows), children's programs, religious programs, "magazine"-type shows, documentaries and other specials and series. Following are a few examples of station-produced programs that were retransmitted on distant signals in 1990, 1991 and 1992, which illustrate in some degree the variety of shows stations produced:

"All Outdoors"

A weekly program produced with the Missouri Department of Conservation, showcasing public wildlife areas in the state of Missouri. (KPLR - St. Louis, Missouri)

"AM Northwest"

A daily live entertainment/talk show that includes news, interviews, and current issues segments. Guests include entertainers, inventors, and public figures. (KATU - Portland, Oregon)

"Atlanta Forum"

A weekly news program hosted by the station's news anchors, featuring interviews and in-depth discussions of current issues. Subjects discussed include the environment and unemployment and their effect on Atlanta and the surrounding region. (WGNX - Atlanta, Georgia)

"Banmiller On Business"

A weekly program with host Brian Banmiller presenting information and news analysis on business and finances. (KTVU - Oakland, California)



"Bay Area Back Roads"

A weekly magazine covering topics of interest to the Bay area. The program visits interesting locations in the area and highlights activities and personalities. (KRON - San Francisco, California)

"Championship Preview With Glenn Brenner"

A special sports program broadcast in 1990, previewing the NCAA basketball tournament. (WUSA - Washington, D.C.)

"Children's Hour"

A weekly program of entertainment, stories, and educational segments for children, broadcast during 1990 and 1991. (KXAS - Fort Worth, Texas)

"Colorado Getaways"

A weekly program that goes on location throughout Colorado to feature the natural beauty, cultural events, and special people and activities that can be enjoyed all around the state. (KCNC - Denver, Colorado)

"Come And Meet The Music"

A special program featuring the Philadelphia Orchestra in concert, in celebration of the orchestra's 90th season. (KYW - Philadelphia, Pennsylvania)

"Daybreak"

A one-hour daily news and information program in a magazine format. Segments include news and reports about health and business issues. (KATV - Little Rock, Arkansas)

"DFW Weekly"

A weekly program broadcast during 1990 and 1991, which covered social problems, medical, and educational issues. The program

included interviews and news and featured a host interviewing a variety of guests. (KXTX - Dallas, Texas)

"Diamond Of The Rockies"

A 1990 special showcasing the history and beauty of Rocky Mountain National Park. (KCNC - Denver, Colorado)

"First Baptist Church Service"/"First Methodist Church Service"

A religious service, alternating weekly between two churches. (WSFA - Montgomery, Alabama)

"Front Runners"

A twice weekly magazine program geared to general audiences regarding subjects and individuals of interest to people living in the Northwest. The program focuses on highly successful and innovative people -- people following their dreams. (KOMO - Seattle, Washington)

"FYI Pittsburgh"

A public affairs program with a guest/interview format, concentrating on issues of concern to the community and the area, including medical reports, political discussion, and book reviews. (WPGH - Pittsburgh, Pennsylvania)

"Good Company"

A daily talk and interview show hosted by a husband and wife team, featuring well-known personalities and subjects such as parenting, consumer tips, and cooking. (KSTP - Minneapolis/St. Paul, Minnesota)

"Good Day!"

A daily talk and variety show broadcast during 1990 and 1991, which included discussions of topics of national and local concern and segments such as cooking and travel. (WCVB - Boston, Massachusetts)



"Home Revision"

A weekly program broadcast during 1990, which offered remodeling instruction and advice. The program included interviews with experts and a "Tool Box" segment. (WIBW - Topeka, Kansas)

"Later Years"

A weekly program featuring a panel and guests, discussing topics of concern to the elderly. (WBAL - Baltimore, Maryland)

"Michiana Report"

A weekly program in which regional leaders discuss current topics including crime, health, education, and politics. (WNDU - South Bend, Indiana)

"No Doubt About It"

An overview of the Pittsburgh Pirates' 1990 season. (KDKA - Pittsburgh, Pennsylvania)

"Our Planet"

A series of informational programs concerning the environment, broadcast in 1990 and 1991. (KCAL - Los Angeles, California)

"Pennsylvania Outdoor Life"

A magazine show featuring hunting and fishing segments and focusing on the people and places associated with outdoor activities. (WNEP - Scranton, Pennsylvania)

"Phoenix File"

A weekly public affairs program focusing on a single topic, such as politics, the arts, and issues concerning women and the family. (KUTP -Phoenix, Arizona)

"Pistons Yearbook"/"Redwings Yearbook"

A series of pregame programs highlighting the players and coaches and discussing the Pistons' and Redwings' seasons. (WKBD - Detroit, Michigan)

"Popcorn"

A weekly program for children presented in a magazine-style format. The anchors and reporters are children, and the show features reports on a variety of subjects, including children's art and activities at individual schools. "Popcorn Covers The Earth" was a special program for children regarding environmental issues. (KATU - Portland, Oregon)

"Remembering Margo"

A 1992 special on violence against women, which grew out of a news story on the murder of a young woman by her estranged husband. (KCNC - Denver, Colorado)

"Sports Extra"

A weekly show highlighting the previous week's sports events, including commentary and interviews. (WTTG - Washington, D.C.)

"Sports Talk On T.V. / Notre Dame Pre-Game Show"

Programs preceding Notre Dame games, featuring live audiences, guests, and question and answer segments. (WNDU - South Bend, Indiana)

"Texas Nature Conservancy: Saving the Best of Texas"

A 1990 documentary on the wildlife and park areas in the state of Texas. (KXAS - Dallas/Fort Worth, Texas)

"Wake Up With Larry Richert"

A daily program featuring news and sports segments in a magazine format, which was broadcast in 1990 and 1991. (KDKA - Pittsburgh, Pennsylvania)



"Weekend Scoreboard"

A twice-weekly live show featuring game highlights, scores, and interviews. (WLVI - Cambridge, Massachusetts)

"32 This Week"

A weekly public affairs program, including interviews. Subjects discussed include caring for aging loved ones, fatherhood in the 90's, racism, and the crisis in education. (WFLD - Chicago, Illinois)

Besides illustrating the variety of program types stations produced in addition to newscasts, this list provides examples of the special regional appeal stationproduced programs, including news programs, had within the areas in which they were retransmitted as distant signals.

For each program, the following information is provided in Exhibits 7 through 33 (an index to the exhibits, which are arranged alphabetically by station call sign, is also attached to my statement for ease of reference):

a. A distant carriage listing, showing the locations of each of the Form 3 cable systems that carried the station as a distant signal in each accounting period of 1990, 1991 and 1992, according to Cable Data Corporation data. These lists also show whether the station was carried as a partiallydistant signal (which means that it was "local" to the remainder of the system's subscribers), and, for network affiliates, whether the system also carried a different affiliate of the same network. This latter information provides evidence that the appeal of the station was principally its non-network programming. The lists also show whether the station continued to be carried by the same system during periods when it filed a "Form 1/2" rather than Form 3 Statement of Account, and in such cases, whether the station was a distant or local signal according to an analysis reported in the Cable Data Corporation data.


b. A map showing the "ADI" in which the station is located, and the ADI in which each of the Form 3 cable systems that carried the station as a distant signal in the second half of 1990 is located. The ADI ranks are also indicated. (ADIs are mutually exclusive geographic television markets designated by the Arbitron Company so that each includes all counties within which the preponderance of viewing is to "home market" stations. ADIs are ranked in descending order by size, with the largest market ranked "1.") The map shows the distance of each distant cable system (by reference to 35-mile and 150-mile circles) from the city in which the station is located.

c. A map showing the extent of subscribership in 1990 to daily newspapers published in the community in which the station is located.

We selected the programs in order to provide good examples of variety in program type, station type (i.e., both network affiliates and independents), and geographic location. Each demonstrates that any presumption that station-produced "local" programs are unlikely to be the subject of high "viewer avidity" among the distant cable subscribers who actually receive them is incorrect. Rather than go through them all in detail, let me focus on a few.

"Front Runners." This program is well produced and interesting, and while it focuses on the lives of residents of the region, their stories will be of interest to cable subscribers anywhere. Exhibit 6 is a videotape that begins with a brief segment from one of the programs that aired during 1990.

As you will see from looking at the information provided in Exhibit 12, this program is retransmitted to five distant cable systems within a relatively nearby region. All are within 150 miles of Seattle. Although only one is within the Seattle ADI itself, the others are located in immediately adjacent smaller ADIs. One cable system, Astoria, reported KOMO as a "partially distant" signal, which means that it was considered a local signal for a portion of the system's subscribers. All of the cable communities in which KOMO is a distant signal are relatively smaller cities, for which Seattle is a regionally important central city. This can be seen in part through the extent of subscribership, shown on the next page of Exhibit 12, to the Seattle daily newspapers. We have also provided a listing of the other stations carried by the Form 3 cable systems which carried KOMO as a distant signal. It is apparent from the stations carried as "local" signals by those systems that the Seattle stations represent an important source of larger-market, higher production quality programming for their subscribers.

The program was syndicated by KOMO to other stations, beginning in September 1992. I have a brief segment of a tape of a Front Runners program that was broadcast in that month. As you will see, the general format and appeal of the program did not change when it was syndicated by the station to other markets.

"FYI Pittsburgh." This public affairs program was a talk/interview show that occasionally also went on location for investigative reports. Topics covered by the program during 1990, 1991, and 1992 included how to buy a used car, how to handle the effects of divorce on children, how to go into business for yourself, and a variety of health and medical issues such as arthritis, Alzheimer's Disease, AIDS in the

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workplace, diet, and organ transplants. As you will see from the map included in Exhibit 30, WPGH was carried by systems in numerous smaller communities in nearby western Pennsylvania and West Virginia, where Pittsburgh is an important regional center.

"<u>Sports Extra</u>." The focus of WTTG's weekly sports talk program is even more general. As the following video clip shows, it is a well-produced program that provides sports news and analysis that would be of interest to most sports fans.

The Tribunal has recognized the special appeal of sports programming in the cable marketplace. The sports programming produced by many stations is appealing for the same reasons. WTTG, like most other stations, also includes sports news and commentary in its evening newscasts. In the 1989 proceeding, NAB presented a witness who had been the manager of the cable system serving Henrico, Virginia, who testified that WTTG's station-produced news and sports programs were of special interest to his subscribers, both because WTTG offered a 10:00 news program and because its Redskins coverage was appealing to regional fans.

"<u>Michiana Report/Sports Talk on TV</u>." WNDU in South Bend, Indiana, was carried as a distant signal on systems clustered around the Michigan/Indiana border. Both its weekly current affairs program and its Notre Dame pre-game shows, to the extent they focus on news stories and sports of substantial interest to people within

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this region, will obviously be of substantial appeal to distant cable subscribers and operators.

"Pennsylvania Outdoor Life." While WNEP's carriage is more extensive than WNDU's, it is again clustered within a region in which shared interests make stationproduced programs valuable. Many of the distant cable systems are located within the station's ADI. All are located within the mountainous central region of the state in which hunting and fishing are common activities. Although the specific subject matter of a program such as "Pennsylvania Outdoor Life" might be less appealing to cable subscribers in distant states or in other regions of the country, the region in which it is actually retransmitted is one in which it will be of most intense interest.

"Weekend Scoreboard." I would also note the sports news and analysis show on WLVI from Boston. The loyalty of sports fans throughout New England to the Boston teams is legendary. As you will see from the maps provided as Exhibit 27, much of the distant carriage of WLVI occurs within the Boston ADI itself. The remainder occurs in contiguous smaller ADIs within New England. Moreover, you will see from the newspaper subscription map that there is substantial interest throughout the same region in the news of this regionally dominant urban area.

"<u>Popcorn</u>." The next videotape is an example of a children's program, from station KATU in Portland, Oregon. This opening segment, aired in 1992, shows the

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humor and appeal of the program for children, and illustrates some of the subject matter the program covers. It has regular segments on such topics as news, safety, Northwest history, endangered species, geography and karate. In its presentation and subject matter, it would have broad appeal to children in the mostly smaller cable communities in which it is carried as a distant signal.

"<u>Popcorn Covers the Earth</u>." The next videotape segment was a special program produced in 1990 as part of the Popcorn series. As you will see, it is a lively treatment of environmental issues that are of concern to people in the Pacific Northwest and elsewhere.

Station-produced children's programs, such as "Popcorn," can be both informative and entertaining. Since cable households, on average, have more children than non-cable households, appealing children's programs contribute substantially to the perceived value of the cable service. Especially for educational programs such as "Popcorn," the parents who make the cable subscription decisions will value the availability of such programs highly.

"<u>Come and Meet the Music</u>" The next program of which I have a tape excerpt, a one-time-only special rather than a regularly scheduled program, is a station production of a concert by the Philadelphia Orchestra. KYW in Philadelphia has periodically broadcast concert specials, but this program in March 1990 marked the 90th season of the Philadelphia Orchestra. I have included parts of the opening and ending of the program on the videotape.

Obviously, cable subscribers anywhere can enjoy the performance of this wellregarded orchestra. The cable subscribers who actually received the program on a distant signal basis, however, were within a relatively nearby region, close enough to Philadelphia to be able to attend live performances of the Orchestra themselves.

"<u>Remembering Margo</u>." The next videotape excerpt is of a serious program that addresses a serious issue, violence against women. In its opening, you will see brief excerpts of the grim news footage that set the stage for the broader questions the program investigates. This was an example of a station looking behind the shocking news story, and producing an in-depth program that attempts to help other women before it becomes too late for them. While the news event occurred in Denver, the station's treatment of the issue is of value to viewers anywhere.

"<u>Texas Nature Conservancy: Saving the Best of Texas</u>." The next videotape segment is of the opening of a documentary describing the natural beauty and varied wildlife of the state of Texas. Again, while the program is of a quality and subject matter that may be interesting to people anywhere, it is of particular appeal to people within the region in which KXAS is actually carried as a distant signal. While I have not highlighted them, the other examples I have listed, in conjunction with the accompanying exhibits, consistently illustrate the reasons why station-produced programs are especially appealing in the distant cable markets where they are actually carried. Because of the "clustering" of the distant signal carriage, even local news of the station's home market will be of interest to the distant cable subscribers. Where, as is often the case, the station's home community is a larger regionally important center, and the cable systems are located in smaller markets themselves, the importance of station-produced news programs is further enhanced.

D. Again in 1990, 1991 and 1992, the Great Majority of Distant Signal Carriage of Non-Superstations Was Clustered Within a Close-in Region.

In the 1989 proceeding, we presented detailed analyses of the patterns of distant signal carriage, comparing 1989 with 1983. We showed that more than 86% of all incidents of carriage of non-superstation distant signals were clustered within 150 miles of the community from which the signal was imported. This percentage was up from approximately 82% in 1983. The five most widely-carried superstations, WTBS, WGN, WWOR, WPIX and WSBK, were omitted from the analysis, since their programming does not present the same issue of "local appeal" about which we understand the Tribunal was concerned. Even for some of the superstations, however, there is a degree of regional concentration of carriage, and the increasing mobility of our society extends communities of interest ever wider. In 1990 through 1992, the non-superstation clustering effect intensified. As reported in Mr. DeFranco's testimony, the percentage of non-superstation distant signal carriage within 150 miles continued to increase, from 86.4 in 1990, to 86.8 percent in 1991 and 87.6 percent in 1992. And as shown in the 1989 case testimony and exhibits of John Elkins, there was a complementary trend of outward growth of populations around center cities through 1990, which enhanced the probability that distant cable subscribers would have ties with and interest in news of regionally important central cities. I have reproduced his summary exhibit showing population growth trends through 1990 as Exhibit 34.

The Tribunal noted in its 1989 decision that the trend towards regional clustering of distant signals was offset by a countervailing trend in the mix of signals, which it said "definitely tended to more independent stations and fewer network stations." This factual assumption was incorrect, however, because the clustering analysis related only to non-superstations. As is shown in Exhibit 35, the number of non-superstation distant signal incidents represented by carriage of network affiliates was higher in 1989 than the number of non-superstation independent station distant incidents. (As shown in Exhibit 35, this is also true for non-superstation 3.75 signals.) This gap widened somewhat between 1989 and 1992. As our examples show, of course, independent stations broadcast strong station-produced programs as well. For both non-superstation independents and network affiliates, the clustering effect means that station-produced programs were of substantial value in the distant markets where they were carried. Thus, the Tribunal's reason for discounting NAB's 1989 evidence was unfounded.

For 1990 and 1992, NAB has also analyzed the extent of carriage of distant signals by cable systems within the same ADI as the station or within smaller ADIs. As reported in Exhibit 41, 83 percent of all distant signal incidents in 1990, and 84 percent in 1992, involved carriage of a station within the same ADI or into a smaller ADI.

Carriage within the same ADI strongly supports the cable operator survey evaluation of station-produced programming, since the distant cable system is in a county in which the preponderance of the viewing is to stations from the same community as the distant signal. Carriage into smaller ADIs also suggests a high value for station-produced programs, since larger market stations tend to have higher production quality, and thus would produce programs that may be relatively more attractive than programs available locally in the smaller market. This phenomenon is described by Ms. Chang in her testimony, and is illustrated also by the letters WGN has received.

The objective evidence about patterns of carriage thus supports giving full credit to the overall valuation of station-produced programs in the cable operator survey.

VI. THE HARM CRITERION.

To the extent there is any harm caused to copyright owners by cable retransmissions, NAB-represented station claimants suffer the same kinds of harm as those represented by other claimant groups.

One kind of claimed harm refers to the effect of audience fragmentation in the local market due to the importation of distant signals from elsewhere. For example, PBS stations have claimed to be harmed through the loss of member donations when a distant PBS affiliate is imported into the market, and the sports leagues have argued analogous harm because of audience competition from imported games featuring different teams. NAB-represented stations are subject to the same kind of harm as a result of audience diversion to imported distant signals. For advertising-supported stations, lower ratings mean lower revenues.

With respect to program syndicators, any special claim they may previously have made that they should be compensated for harm was eliminated by the reimposition of the FCC's syndicated exclusivity rules in 1990. Since 1990, syndicators have been able to protect their own interest by selling exclusive rights that would enable the stations to require cable systems to delete duplicative programs from distant signals. Because they now have it within their power to prevent head-tohead competition with their own program on a cable-imported distant signal, syndicators could not have been harmed any more than other program owners by distant signal carriage of their programs in 1990 through 1992.

The cable operator surveys provide a measure of the extent of the harm experienced by claimants from what the Tribunal characterized as the deprivation of their "opportunity to receive an adequate economic benefit from the exploitation of [their] works" through distant retransmission. The cable operators allocated between 11.9 percent and 14.8 percent of the value of the distant signals they actually purchased to the news and public affairs programming on those signals. Stations would suffer harm to the extent they received lesser economic benefit than the value the cable operators allocated. For this reason as well, the Panel should base its allocations on the results of the cable operator surveys.

Before the COPYRIGHT ARBITRATION ROYALTY PANELS Library of Congress

Copyright Arbitration Royalty Panels)1990-1992 Cable Royalty)Distribution Proceeding)

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TESTIMONY OF WILLIAM B. FAIRLEY

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Before the COPYRIGHT ARBITRATION ROYALTY PANELS Library of Congress

Copyright Arbitration Royalty Panels 1990-1992 Cable Royalty Distribution Proceeding

Docket No. 94-3 CARP CD 90-92

TESTIMONY OF WILLIAM B. FAIRLEY

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I am the President of Analysis and Inference, Inc., a research and consulting firm formed in 1979 that specializes in statistical analysis and research techniques. I hold a Ph.D. in Statistics from Harvard University, and have taught statistics and applied statistical techniques at Harvard, New York University, Swarthmore College, and Temple University. I have written extensively in the field of applied statistics, and have testified as an expert statistician in approximately 18 different administrative or judicial proceedings. My curriculum vitae and a listing of my prior testimony is appended at PTV Exhibit 37.

In this testimony I will describe a statistical adjustment to the survey prepared on behalf of the Joint Sports Claimants by Bortz & Company, entitled "Cable Operator Valuation of Distant Signal Non-Network Programming."^{1/} The adjustment is needed to take account of the fact that the Bortz survey automatically assigns a zero share value to public television (or "PTV") programming for any cable

 $[\]frac{1}{2}$ The Bortz survey was included as JSC Exhibit 1 in the aborted 1990 proceeding before the Copyright Royalty Tribunal, and reported survey results for the years 1990 through 1992.

operator included in the survey that did not actually carry a public television station on a distant signal basis during the survey year.

Overview of the Issue

For each of the years 1990 through 1992, the Bortz survey asked between 170 and 200 cable systems to state the relative value of the programming categories carried on the television stations that the cable systems retransmitted on a distant signal basis during the survey year. Public television programming was automatically assigned a zero value if the cable system did not actually carry a distant public television signal during the survey year. The Bortz survey results for PBS thus reflect a weighted average of the responses given by those cable systems that <u>did</u> carry a distant public television signal during the survey year and the "automatic zero" responses for those cable systems that did not retransmit a distant public television signal.^{2/}

In its decision on the 1989 cable royalty distribution, the Copyright Royalty Tribunal concluded that "the fact that a cable system did not carry a PBS signal only meant that the actual price was too high. There could have been some

 $[\]frac{2}{2}$ To be more technical, the Bortz study does not rely on a straight average of the survey responses but is instead a "stratified ratio estimator" of the true average share values reported by the survey respondents. (See 1990 Bortz Report, p. 25.)

lesser price they were willing to spend. Therefore, [the] Bortz practice to accord PBS an automatic zero underrepresented PBS." $\frac{3}{2}$

In its 1989 cable royalty distribution decision, the Tribunal found that an adjustment was necessary to correct for this underrepresentation of PBS in the Bortz survey results. The Tribunal applied a multiplier of 1.2 to the actual Bortz results. This was based on a simple ratio of $6 \div 5$, reflecting the fact that respondents that carried a distant public television signal were asked to value public television programming as one among six choices, whereas respondents without a distant public television signal valued the remaining programming categories among five alternatives.

The Tribunal was clearly correct in its determination that the "automatic zero" methodology of the Bortz survey understates the proper value for PBS programming and that the PBS results therefore must be adjusted. However, the multiplier of 1.2 is a "back of the envelope" approach that does not adequately correct for the understatement of the value of PBS programming that we observe in the survey responses. The technique described here is a more rigorous statistical approach that takes into account the actual survey results and is therefore a far more accurate and analytically sound adjustment.

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 $[\]frac{3}{2}$ 57 Fed. Reg. at 15299. The Tribunal noted that asking cable operators that did not carry a distant public television signal to value PBS programming "would have caused confusion. Therefore, the design of the survey is not faulted, but an adjustment nonetheless needed to be made." <u>Id</u>. at 15300.

The Bortz Survey Results for PBS

An important outgrowth of the Bortz survey methodology is that a majority of the respondents for each survey year were automatically assigned a zero value for public television programming. This is shown by the following table:

	Respondents Carrying Distant PTV Signal	Respondents Assigned Zero Value for PBS	Total
1990	27	146	173
1991	4 5	151	197
1992	38	140	178

Furthermore, the values assigned to public television programming by those respondents that did in fact carry a distant public television signal during the survey year are substantially larger than the Bortz survey results for public television programming:

	PBS Share in Bortz Survey	PBS Share Among Respondents Carrying <u>Distant PTV Signal</u>
1990	2.7%	15.4%
1991	2.9%	12.5%
1992	3.0%	11.2%



The bar charts included at PTV Exhibit 38 summarize the distribution of shares reported by respondents carrying a distant signal for the years 1990 through 1992.^{4/} PTV Exhibit 40 shows the shares reported for each category for those respondents that carried a distant PTV signal during the three survey years.

The pattern of survey responses among those cable systems that carried a distant public television signal suggests that there is a threshold value that would need to be exceeded before the system would carry a distant public television signal. For example, a threshold could exist if a cable operator had some maximum number of distant signals that it could profitably carry; or if the cable operator could only carry an incremental distant signal by forgoing some other broadcast signal or cable programming.^{5/}

^{$\frac{4}{}$} For each survey year, a small number of respondents that actually carried a distant PTV signal assigned a value of zero to the PBS programming category. (There were five such responses for 1990 and 1991, and seven for 1992.) This would appear to be a function of rounding in the survey responses, since a cable operator presumably would not assign a true zero value to public television programming if it elected to carry a distant PTV signal and paid copyright royalties for doing so.

^{5/} The Tribunal made this point in its 1983 cable distribution decision, in discussing an NAB survey of cable operators that had automatically assigned PBS programming a zero value if any given operator did not carry a distant PTV signal: "Supposing a cable operator faces the reality of being able to import only 4 distant signals. [If] his attitude were only on the measure of approximately 5% toward PBS, he or she would not carry a PBS signal. Therefore, we suspect that there are many operators who did not carry a distant PBS signal whose 'attitudes' might be greater than zero but short of actual behavior, that were ignored in the survey to the detriment of PBS." 51 Fed. Reg. at 12809-10.

The Tribunal's decision in the 1989 cable distribution proceeding effectively recognizes this threshold effect -- that a cable system might have chosen not to carry a PBS distant signal because "the actual price was too high" although there "could have been some lesser price they were willing to spend. " $^{6/}$ In this sense, public television programming is unlike any of the other programming categories included in the Bortz survey (putting aside Canadian programming), because the cable operator can obtain public television programming only by importing an entire distant signal, in contrast to a commercial broadcast signal that will ordinarily include a mix of commercial programming categories. This could reasonably be expected to create a threshold effect for PBS programming that does not apply to commercial programming categories that will be commingled on any given commercial signal.^{2/}

The conclusion that a threshold value applies to the distant retransmission of public television signals is consistent with the Bortz survey responses for these three years. For example, in the 1991 survey, 29 of the 45 respondents that carried a distant public television signal assigned a share value of 10% or greater to public television programming. Similarly, in the 1990 survey, 18 of 27

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⁶∕ 57 Fed. Reg. at 15299.

 $[\]mathbb{Z}^{1/2}$ The Bortz survey design implicitly assumes that any distant commercial signal will include all the commercial programming categories, since cable operators are asked to assign values to all commercial programming categories if they imported any distant commercial signals during the survey year.

respondents assigned PBS a value of 10% or more; and in the 1992 survey, the numbers are 22 of 38 respondents. These results suggest that the value allocated to a PBS distant signal would have to cross the threshold (perhaps, for most operators, 10% or higher) before the operator would decide to retransmit a distant public television signal.

<u>A Technique for Adjusting the PBS Results</u>

Under specific and plausible assumptions about this threshold effect, the unobserved share values for PBS can be estimated from the observed share values for those cable systems that did in fact carry a distant public television signal during the survey year.

We begin by estimating the average threshold value for carriage of a distant public television signal. The estimate of this average threshold value is the average of the smallest share reported by each cable operator responding to the Bortz survey. In other words, the smallest share reported by each cable operator was identified and these minimum values were then averaged over all operators in the survey to arrive at an estimated threshold value for each year. For PBS for the years 1990-1992, these threshold values were 10.8%, 10.8%, and 10.7%, respectively. (Table 1, col. 8.)

Using these threshold values, we performed maximum likelihood estimation to compute the average (mean) PBS share value for those respondents that did not actually carry a distant public television signal during the survey year (and so were

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assigned an automatic zero value under the Bortz methodology). Maximum likelihood estimation is a statistical technique to determine the value of a parameter that, in a sense that can be made precise through statistical estimation, is the most plausible given the actual survey response data.

The technique is based on determining the probability of the measured values for those cable operators that <u>did</u> provide a value for PBS programming during the survey year under an assumed probability model. Then, from these individual probabilities, we determined the joint probability of obtaining <u>all</u> of these reported values taken as a whole.^B/ This leads us to the estimation of a "maximum likelihood" average PBS share -- meaning an average that maximizes the likelihood of obtaining the results that were actually reported for PBS in the survey.²/ In other words, the method selects as the estimate of the average the value that makes the operators' reported share values for PBS most likely. Thus, although we are making an adjustment to take account of values that would have been assigned by operators who were subject to the "automatic zero" adjustment, the methodology is based on the pattern of responses given by those cable operators that did in fact carry distant PBS signals and did in fact assign a value for PBS programming.

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 $[\]frac{8}{2}$ The pattern of the survey responses for PBS shares suggested that the PBS shares (and the operators' threshold values for determining whether to carry a distant PTV signal) followed a negative binomial (geometric) distribution.

 $^{^{2&#}x27;}$ PTV Exhibit 39 illustrates geometrically the solution for the average that maximizes the likelihood.

Given these estimated joint probabilities based on the actual responses for PBS, and given the estimated average threshold values noted above, we can determine the maximum likelihood estimate of the mean share for PBS programming that would have been reported by all cable operators in the Bortz survey, if PBS programming had not automatically been assigned a zero value among those operators that did not carry a distant PTV signal. And based upon that estimated mean share for <u>all</u> survey respondents, as a matter of simple mathematics we can derive the mean share for those respondents who were assigned an "automatic zero" for PBS, since we know the mean share among those operators that did in fact assign a value for PBS programming.

The Results of the Adjustment Methodology

The results are set forth in Table 1. Column 1 shows the estimated share values for PBS, as reported by Bortz & Company. Column 2 shows the average reported share among those survey respondents that carried one or more public television stations on a distant signal basis during the survey year (these are the figures discussed above at page 4). Column 4 shows the estimated average PBS share for cable operators that did not carry a distant PTV signal during the survey year. This value is derived from the values set forth in Columns 2 and 3.

Column 3 shows the estimated average share for <u>all</u> cable operators (including those that did not carry a distant PTV signal during the survey year), based on the maximum likelihood estimation technique described above and the actual

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 Table 1

 Estimated PBS Share for All Respondents to Bortz Surveys, 1990 - 1992

Definitions

- Column 1 Weighted average PBS shares reported in Bortz surveys [1, p.54], weighted by total royalties in each stratum, in which non-queried respondents shares are taken to be zero.
- Column 2 Unweighted average reported share of systems queried.
- Column 3 Estimated average PBS share for all systems had they all been queried, using a negative binomial (geometric) distribution for the shares, and PBS shares reported by queried systems.
- Column 4 Average share of systems non-queried implied by the reported shares (Column 2) and the adjusted average PBS shares for all systems (Column 3).
- Column 5 95% Confidence Interval for the mean estimates given in Column 3. This is calculated as the mean estimate (Column 3) plus and minus 1.96 times the standard error of the mean estimate.
- Column 6 Number of respondents queried about PBS.
- Column 7 Total number queried about shares.
- Column 8 Average of the minimums of the shares reported by each system for the program categories to which they responded. Zerocs included (5, 5, and 7 for 1990-1992, respectively).

Sources: Except where noted, Bortz & Company (1993) "Cable operator valuation of distant signal non-network programming," August 1993, and James M. Trautman, Vice-president, personal communication.

survey results as reported by Bortz. I call this the "adjusted PBS share." This column, in other words, shows the estimated PBS share if all survey respondents -- and not simply those that actually carried a distant public television signal during the survey year -- had been asked to assign a value to public television programming. For the three survey years, the adjusted PBS shares are as follows:

1990	6.1%
1991	6.3%
1992	5.7%

Finally, any statistical technique must take into account the confidence intervals for the estimated results. These confidence intervals are shown in Column 5, and they signify, based on the statistical techniques applied here, that 95% of the time these intervals will encompass the "true" average PBS shares for these three years. This is colloquially translated to mean that we have a 95% confidence in the adjusted PBS shares noted above.

CONCLUSION

By assigning an "automatic zero" value to PBS programming for any cable operator that did not actually carry a distant PTV signal during the survey year, the Bortz study necessarily understates the value of public television programming to cable operators. This is what the Copyright Royalty Tribunal determined in the 1989 cable royalty distribution proceeding. The above analysis sets forth a statistical method for adjusting PBS's share, based upon the pattern of responses given by those cable operators that actually did carry a distant PTV signal during the survey year, and based further on the plausible assumption that there is a "threshold effect" such that cable operators will not import a distant PTV signal unless that programming exceeds a threshold value. The adjusted PBS shares shown in Table 1 are, at the 95% level of confidence, a proper estimation of the true average value for PBS among those cable operators who were included in the Bortz survey.

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I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief.

William B. Fairley



Before the COPYRIGHT ARBITRATION ROYALTY PANELS Library of Congress

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TESTIMONY OF JOHN W. FULLER

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I am the Director of Research for the Public Broadcasting Service (or "PBS"). I have held this position since March 1985; and I was the Associate Director of Research beginning in 1980. I am the person within PBS principally responsible for the analysis and interpretation of audience data and viewing trends for PBS and its member public television stations. My responsibilities include research on program scheduling and audience trends, and the interpretation of audience data for program underwriters and the news media.

Before joining PBS, I had extensive experience in television research and other aspects of the television business. In particular, between 1976 and 1980 I worked with Arbitron Ratings Co., where I was involved in various research projects and field studies on television viewing. I also worked for a decade with commercial television stations in Jacksonville, Florida, first as a director and promotion manager, and later as research director and program manager.

In this testimony, I will discuss a variety of matters pertinent to the division of the 1990-1992 cable royalty fund. The following is a brief summary of the principal points I will make below:

- The adjusted Bortz Study provides the best available method to measure the benefits to cable operators and the marketplace value of public television programming over the 1990-1992 period. When the appropriate factors are taken into account, public television's share of 60% of all funds under the Bortz Study is equivalent to 8% of the Basic fund. This figure is corroborated by data on the distant signal carriage of public television, which measure cable operators' actual behavior during the 1990-1992 period.
- Public television offers cable operators an exciting diversity of programming that helps them to attract and maintain viewers in different market "niches" as cable subscribers.
- Cable operators receive the greatest benefit from distant retransmission of a public television signal where no local public television signal is available. Over 2.1 million cable households, or roughly 4.6% of total cable households in the United States, receive their <u>only</u> public television signal via distant retransmission. In addition, another 2.6 million cable households, or another 5.7% of U.S. cable households, receive their second public television signal through distant retransmission, and thereby receive significant benefits of programming diversity and scheduling alternatives for their public television viewing.
- Cable operators receive particular benefit from the tremendous value of children's programming on public television. More than a third of U.S. households have children under the age of 12, and for such households in particular the availability of public television's renowned children's programming is an obvious reason to subscribe to cable television. Cable operators unquestionably benefit from the ability to offer this programming via distant retransmission.
 - The value and benefit of public television programming to cable operators and subscribers are shown by analogy to specialty cable channels such as Arts & Entertainment and Discovery, for which cable operators are willing to pay a significant amount per subscriber. Through comparison to these specialty channels, it is

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possible to estimate license fees for public television, which confirm the validity of the Bortz results as to public television.

An industry estimate has been prepared of the appropriate license fees for public television, based on a survey of the preferences of cable subscribers. That survey also confirms the Bortz survey results for public television.

The Program Suppliers' special Nielsen study is not a valid measure of the value of distant signal programming because household viewing hours are essentially irrelevant to cable operators. The overwhelming evidence of the value of public television to cable operators shows that the Nielsen study is not an appropriate basis for allocating cable royalties.

1. The Bortz Survey, as Adjusted, Shows the Value of the Distant Retransmission of Public Television

I recognize that an essential part of the task before the Arbitration Panel is to quantify the benefits to cable operators and the marketplace value associated with the distant retransmission of public television programming and other programming types. The Bortz study presented by the Joint Sports claimants provides the most reliable source of information available on the benefits to cable operators from the distant signal retransmission of different programming types and should be given controlling weight in the Panel's determination. Unlike the reliance of the Program Suppliers on household viewing hours, which provide virtually no insight into the benefits to cable operators flowing from distant signal retransmission, the Bortz study is a well-conceived effort to

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measure the benefits and value to cable operators from different types of programming available via distant retransmission.^{1/}

The Bortz study results must be refined to provide accurate results for public television, as discussed immediately below. However, even before the Bortz results are revised, it bears emphasis that public television's share in the Bortz study steadily increased during the 1989 to 1992 time period -- from 1.3% in 1989, to 2.7% in 1990, to 2.9% in 1991 and finally to 3.0% in 1992. Thus, cable operators attributed a substantially higher value to the distant retransmission of public television programming in the 1990-1992 studies than they did in 1989. I believe that this is a direct reflection of the substantial new programming and promotional initiatives undertaken by PBS, beginning in 1990 and continuing throughout the relevant time period (as discussed in detail in Jennifer Lawson's testimony), which significantly improved the visibility and stature of public television programming and consequently created substantially greater benefit for cable operators from the distant retransmission of public television programming.

As discussed in the testimony of Dr. William Fairley, the Bortz results must be adjusted to take account of the fact that PBS programming was automatically

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 $[\]underline{I}'$ On the other hand, the methodology of the Bortz study does not measure the harm to copyright owners flowing from distant signal retransmission. Considerations of harm to public television from distant retransmission are discussed at length in the testimony of Peter Downey.

assigned a zero value if a cable operator did not carry a distant public television signal during the survey year. That adjustment, which was accepted in principle by the Copyright Royalty Tribunal in the 1989 cable royalty distribution decision, is necessary to correct for the underrepresentation of public television programming in the Bortz survey. The adjusted Bortz results for PBS, as described by Dr. Fairley, are as follows:

1990	6.1%
1991	6.3%
1992	5.7%

In applying these adjusted survey results to the distribution of cable royalties, it is necessary to take account of the fact that public television only receives royalties from the Basic fund and does not participate in the 3.75 fund, which accounts for about one-quarter of cable royalties for each year at issue. In contrast, every other programming category included in the Bortz study participates in both the Basic and 3.75 funds.

Because PBS only participates in about three-quarters of the total royalty funds, it can be readily seen that its share of the Basic fund must be <u>higher</u> than the adjusted Bortz figures shown above if PBS is to receive the proper share of overall royalties contemplated by the Bortz results. For instance, PBS's adjusted Bortz share in 1990 is 6.1%. If PBS received 6.1% <u>of the Basic fund</u>, but the Basic fund was only three-quarters of total royalties in 1990, PBS would end up receiving only 4.6%

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 $(6.1 \times .75)$ of total royalties -- substantially less than the total share contemplated by the Bortz results as adjusted.

This point does not involve a correction to the methodology of the Bortz study. Rather, it is an adjustment in the manner that the survey results are applied, to take account of the fact that PBS does not participate in all parts of the total royalty pool. PBS will not receive its full share of the total royalty pool unless its share of the Basic fund is increased to reflect that the Basic fund is about three-quarters of the total royalty pool.

This refinement in the application of the survey results involves a simple algebraic adjustment. If PBS's share of the Basic fund is divided by the percentage of total cable royalties that are in the Basic fund, then PBS's share of <u>total</u> royalties would be equivalent to the adjusted Bortz survey results. Again, taking 1990 as an example, the Basic fund is 75.442% of total royalties. If PBS's adjusted Bortz share for 1990 (6.1%) is divided by .75442, PBS's share of the <u>Basic fund</u> would be 8.1%. This is identical to saying -- as the adjusted Bortz results contemplate -- that PBS's share of total royalties should be 6.1%.

The same methodology can be applied to the 1991 and 1992 royalty funds. The Basic fund accounts for 75.743% of total royalties in 1991, and 75.651% in $1992.^{2'}$

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 $[\]frac{2}{2}$ The figures on the percentage of total royalties represented by the Basic fund are from data supplied by the Licensing Division of the Copyright Office.

Dividing the adjusted Bortz results by these percentages leads to the following shares for PBS for the Basic fund:

1990	8.1%
1991	8.3%
1992	7.5%

It is necessary to make pro rata adjustments in the Bortz shares for other program categories, to take account of the adjusted PBS shares as derived by Dr. Fairley. (This is the same approach that the Copyright Royalty Tribunal followed in its 1989 decision, when it made pro rata downward adjustments in the shares for other program categories when it made various upward adjustments in PBS's Bortz share.) These pro rata adjustments are shown at PTV Exhibit 20. They reflect a simple mathematical adjustment that deflates all other program categories to take account of the adjusted PBS shares.

Finally, once these adjusted shares are derived for each program category, they must then be allocated between the Basic and 3.75 funds to take account of the fact that PBS participates only in the Basic fund. PBS's share of the Basic fund, as discussed above, is higher than its adjusted Bortz share for total royalties; and PBS's share of the 3.75 fund is zero. Correspondingly, the share of 3.75 funds for all other program categories is slightly higher than their overall Bortz shares, as adjusted; and the share of Basic funds for each category is slightly lower than its overall Bortz share. These shares for the Basic and 3.75 funds are shown in PTV Exhibit 21. When these shares of the Basic and 3.75 funds are combined, as a matter of mathematics they produce the adjusted Bortz shares for each program category set forth in PTV Exhibit 21.

2. The Actual Behavior of Cable Operators Confirms the Benefit to Them of Distantly Retransmitting Public Television Signals

The Bortz study results find important confirmation in the evidence of what cable operators actually did during the 1990-92 period. During that time, public television signals accounted for on average 7.2% of all full-time distant signals retransmitted by cable operators, and 8.0% of full-time basic signals. In direct confirmation of the Bortz survey results -- which show an increase between 1989 and 1992 for public television, as discussed above -- the instances of carriage for public television also increased between 1989 and 1992 (from 6.7% to 7.3% of all distant signals, and from 7.4% to 8.0% of basic signals). See PTV Exhibit 22.

While these instances of carriage data are not precisely identical to the Bortz survey results for public television, they are quite close to the range of adjusted shares -- 7.5% to 8.3% -- presented above for 1990-1992, and they are within the confidence intervals for the Bortz results as derived by Dr. Fairley.^{3/} The essential point, however, is that the instances of carriage data -- which measure what cable operators actually did during the relevant 1990-1992 time period with respect to public

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See Table 1 of Dr. Fairley's testimony.
television programming -- correspond quite closely with the Bortz measurements of how cable operators valued distant public television signals. This is a strong confirmation of the validity of the Bortz study.

As the Copyright Royalty Tribunal previously recognized, instances of carriage data can provide an important insight into the way that cable operators value public television programming. When a cable operator makes a decision to import a public television signal it is acting affirmatively to import an entire programming category, while a decision to import any other type of distant signal results in the importation of a variety of different program categories. The Tribunal made the point in these terms: "[B]ecause PBS occupies the entire broadcast signal[, each] time a cable operator chooses to import a PBS signal, even if it is already carried locally, the operator has made his or her desire known." (1983 Cable Decision, 51 Fed. Reg. at 12811.)

Thus, as the Tribunal noted, for most programming categories "cable operators do not obtain distant signal programming on a program-by-program basis. The operator 'purchases' by the compulsory license entire broadcast signals consisting of a variety of program types. Operators must take the distant signal as is or not at all." (1989 Cable Decision, 57 Fed. Reg. at 15288.) The situation is entirely different as to public television -- where the cable operator "votes with its feet" for an entire programming category when it elects to import the distant signal. Here, the data in fact show a convergence -- the Bortz survey results based on cable operators' rankings of

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relative value confirm what the instances of carriage data show about how cable operators actually valued distant public television signals in making decisions to import distant signals during 1990-1992.

3. The Number of Cable Households That Receive Their Only Access to Public Television Via Distant Retransmission Supports the Results of the Bortz Survey

The value of distant signal public television to cable programmers is also shown by the number of cable households that receive their <u>only</u> public television signal via distant retransmission. During the 1990-1992 time period, on average more than 2.1 million cable households, or 4.6% of cable subscribers, received their first public television station as a distant signal. This number shows an obvious and important value for cable operators serving this portion of the cable-viewing public. In addition, on average another 2.6 million cable households, or 5.7% of cable subscribers, received what was only their second public television station by distant signal. See PTV Exhibit 23.

Cable operators almost always choose to carry PBS. On average, over 99% of all Form 3 cable systems carried at least one public television signal in each year between 1990 and 1992, and on average over that same period 21% of all cable systems chose to retransmit a distant public television signal.

Given the benefits to having access to multiple public television channels, as discussed by Jennifer Lawson in her testimony, the availability of public television via distant retransmission gave cable operators real value in their efforts to attract and maintain subscribers. This benefit to cable operators is accompanied by a corresponding harm to public television copyright holders. During the 1990-1992 period, nearly half (47%) of the retransmitted public television signals overlapped with a local public television signal. PTV Exhibit 24. As Peter Downey will discuss, these overlapping signals create situations in which local stations, and ultimately copyright owners of public television programming, suffer harm from distant retransmission.

4. Distant Retransmission Is a Particular Benefit for Cable Operators Who Have No Local Public Television Signals or Who Gain Significant Benefits from Programming and Schedule Diversity

The most obvious and significant benefit to a cable operator from the distant retransmission of a public television signal is where the operator does not have a local public television signal to offer to its subscribers. See PTV Exhibit 25. A cable operator that failed to provide <u>any</u> public television signal would have a slate of programming lacking in diversity by almost any standard. This point was made, for instance, during the 1983 case by Richard Loftus, who had worked in the cable television business for some 25 years. The Tribunal summarized his testimony in this way: "Loftus considered PBS stations a necessary distant signal if the local market does not have a PBS station as a must-carry." (51 Fed. Reg. at 12796.)

Distant retransmission is vital to cable operators that need to include a public television station within their programming slate. From 1990 through 1992, over

half of the cable systems that imported a distant public television signal did not carry a local signal. See PTV Exhibit 24.

If a local public television station is not available to the cable operator, a distant public television signal brings to the cable subscriber (and cable operator) a unique set of programs that are <u>different in kind</u> from what is generally available in the local commercial television market. Programs running the gamut from SESAME STREET to READING RAINBOW to MASTERPIECE THEATER to the MacNEIL/LEHRER NEWSHOUR to the CIVIL WAR are simply not available in any comparable form on any commercial station. In contrast, the Saturday morning cartoons or Hollywood re-runs found frequently on many of the distantly retransmitted independent stations are of a type comparable, if not identical, to the programs invariably available within the local market on commercial television. This is not to say that the distant retransmission of independent stations lacks value to the cable operator. Rather, my point is that there is a <u>special</u> value to the cable operator in being able to gain access to public television programming via distant retransmission if it is not available locally. See PTV Exhibit 25.

In addition, cable operators can also receive significant benefits from each additional distant retransmission of a public television station that complements offerings available in the local market. These additional public television stations can add significant benefits of programming diversity, since oftentimes the mix and content of programming on different public television stations will differ substantially. (For

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instance, additional signals can add public television programming aimed at a minority group, or providing an instructional focus.) See PTV Exhibit 26. In addition, a second or third public television station can add to scheduling diversity, even when similar programs are found on the different stations. This also can be a significant benefit to cable operators who are thereby able to offer subscribers different time options for public television programming. (For instance, there can be real benefit in having different children's programming available on different channels at different times of the day.)

As noted above, during the 1990-1992 time period, on average more than 2.1 million cable households, or 4.6% of cable subscribers, received their first public television station as a distant signal. In addition, on average another 2.6 million cable households, or 5.7% of cable subscribers, received only their second public television station by distant signal. See PTV Exhibit 23. The cable operators who serve these groups of subscribers -- representing nearly 5 million cable households, and over 10% of total cable subscribers -- clearly receive direct and substantial benefits from the distant retransmission of public television signals. While these figures cannot necessarily be directly correlated to the Bortz study results, they confirm -- as do the Bortz results -- that distant retransmission of public television programming has significant benefit and value for a sizeable number of cable operators and the subscribers they are trying to attract to their systems.

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5. Public Television's Unique Slate of Children's Programming Is a Particular Benefit for Cable Operators in Attracting Subscribers

One of the particular benefits of public television programming is its unique and unparalleled children's programming. (See PTV Exhibit 9.) Public television shows such as SESAME STREET and READING RAINBOW have long been recognized by parents as programs that they want their children to watch. New additions to the PBS childrens' programming lineup, such as BARNEY & FRIENDS, SHINING TIME STATION and LAMB CHOP'S PLAY ALONG, have continued and built on this fine tradition. Thus, cable operators who are able to offer such programming via distant signal retransmission -- or who are able to offer such programming at different times of day by importing distant signals to complement their local public television offerings -gain a real and identifiable benefit in attracting subscribers to their systems. Over onethird of all households in the United States have children under the age of 12; and nearly one in six households have children under six years of age.⁴ That is an obvious target group for cable operators -- and the ability to offer children's programming of value and interest to parents can therefore be a substantial benefit flowing from the distant retransmission of a public television signal.

⁴ U.S. Department of Commerce, Bureau of the Census, <u>Household and Family</u> <u>Characteristics: March 1990, 1991 and 1992</u>, Current Population Reports, Series P-20-447 (1990), P-20-467 (1991-1992). Tables 19 (1990) and 18 (1991-1992).

An example helps illustrate the point. NFO Research, Inc., a firm specializing in research about families, conducted a national mail survey in July 1990 of parents of children aged 5 through 8. The parents to whom the questionnaire was sent were selected to match the U.S. Census profile of households with children in that age group. Responses to the survey were received from 707 households. Here are some of the key results which illustrate PBS programming's positive effect on children and their parents:

- 70% of the parents were familiar with READING RAINBOW.
- 72% of the parents familiar with READING RAINBOW encouraged their children to watch the program.
- 55% of all parents familiar with READING RAINBOW said that their child asks for books he or she has heard about on the program.

It also bears emphasis that a particular benefit of the children's programming on public television is the lack of commercial interruptions. This can be a real value of the programming -- particularly in the eyes of parents who make the decisions about whether subscribing to cable television is advantageous for their children. Indeed, during the hearings on the 1990 Children's Television Act, substantial concern was expressed by Members of Congress and many witnesses about the over-exposure of children to advertising on commercial television. (A number of these comments and excerpts from the Senate report are summarized at PTV Exhibits 10 and 11.) This concern is reflected in the intense interest that many parents have in the commercial-free children's programming available on public television.

In my testimony in the 1989 case, I provided substantial information comparing the intensive advertising on commercial television with the lack of commercial interruptions on public television, and I explained the benefits of being able to watch a program without the imposition of commercial interruptions. I hereby reincorporate that testimony by reference for purposes of this case. Whether it be a three-year-old child watching SESAME STREET or an adult eager to watch a full hour of news on the MacNEIL/LEHRER NEWSHOUR -- rather than 12 minutes of advertisements within a supposed hour of commercial television news programming -- there can be little question about the pleasures to cable subscribers (and therefore the benefits to cable operators) of watching television that is essentially commercial-free.^{5/}

⁵⁷ By way of example, in 1990 networks had an average of 12.46 minutes of advertisements per hour of programming. Thus, 20.8% of each programming hour was devoted to commercials, and a viewer of the local news plus the half-hour evening news would only see 47 minutes of news coverage --as compared to the virtually uninterrupted MacNEIL/LEHRER NEWSHOUR available on public television. The same pattern was reflected in commercial television programming in 1991 and 1992. Public television stations do run pledge weeks during certain times of the year, but even during those weeks much of the programming is uninterrupted. On an annualized basis, the pledge drives account for only 0.4% of the total air time for public television.

6. The Specialty Cable Channels Illustrate the Value and Benefit of Public Television <u>Programming to Cable Operators</u>

In recent years, a number of special cable channels have been launched that feature programming with many similarities to the programming found on public television. The very names of some of these specialty channels -- such as "Discovery Channel," "Arts & Entertainment," "The Learning Channel," and "Bravo" -- reflect an intention to compete in a number of the programming niches traditionally occupied by public television. And that is precisely what these channels have tried to do.

A. <u>Programming Similarities</u>

A 1990 study prepared by John Carey of Greystone Communications contains a comparative analysis of the general subject matters of programming on public television and on several of these public television look-alikes.^{6/} The study examined programming offered in February 1990 by Arts & Entertainment, Bravo, Discovery, The Learning Channel, and Nickelodeon, each of which offered a particular emphasis in at least one area of programming that corresponded to public television's areas of emphasis.

The Carey study found significant overlaps in the programming offered by public television and each of these specialty channels. Although public television offers

^{$\underline{6'}$} While the Carey study was conducted in 1990, its conclusions about the similarities between PBS and these look-alike channels are fully applicable for 1991 and 1992.

more overall diversity than any of these channels, each is nonetheless attempting to play to certain niche audiences within the PBS field. Some of these similarities can be briefly summarized:

- -- The Carey study found that both PBS and The Learning Channel have a relatively high percentage of "Instructional" programming, which occupied 38% and 37% of their schedules, respectively, during February 1990.
- -- Arts & Entertainment has significant programming in public affairs, dance and music, nature, and drama -- all programming categories that have been a consistent emphasis of public television.
- -- Bravo features a large number of musical performances, such as jazz or classical concerts, as well as dance and opera programs. These, again, are well-known staples of public television's programming.
- -- The Discovery Channel has a large volume of nature programming as well as significant blocks of instructional programming, especially cooking shows. These, also, are areas strongly featured within public television's mix of programming.
- Much of the Nickelodeon program day consists of cartoons and aging Hollywood syndicated programming aimed at children. While this programming is different in content and approach from the children's programming on public television, it is notable that an entire specialty channel has been built around its appeal to children. In addition, several hours of Nickelodeon's programming day during the 1990 -1992 period had a more educational flavor: MR. WIZARD is a well-known science show similar to several public television programs, and THE ELEPHANT SHOW is a singalong program for pre-school children. In fact, in early 1994, Nickelodeon recognized the preeminence of PBS in children's programming when it unveiled a \$30 million dollar programming

effort designed to compete with PBS's dominant slate of pre-school programming.

For examples comparing the daily listings of PBS and the other channels, see PTV Exhibit 29.

In addition, and as a reflection of the overlap in programming between these look-alikes and public television, during 1990 and in subsequent years we have seen an increasing effort by these channels to compete against public television in the acquisition of the types of programming that have for many years been a cornerstone of public television. For instance, during the 1989/90 program season, public television purchased a large volume -- some 37% -- of the programming produced by BBC/Lionheart, while Arts & Entertainment accounted for 17.5% of BBC/Lionheart sales.²⁷ This head-to-head competition for new programming is certainly a reflection of the efforts being made by these look-alikes to mimic the programming of public television.

Despite these similarities in programming types, public television in fact offers a richer programming schedule that is likely to be of greater attraction to cable subscribers than any of these specialty channels. This is the result, first of all, of the diversity of programming found on public television in contrast to these specialty channels. Also, most if not all of these specialty channels offer at least some amount of

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This figure is from the Carey study.

second-run programming -- and some rely on programming that in fact had previously appeared on public television. In addition, experience has shown that local or regional programming available on most public television stations is a real attraction to many viewers; yet these specialty channels, produced for a nationwide audience, are completely lacking in such local content.

A notable comparison is with Arts & Entertainment. In February 1990, the month surveyed by the Carey study, Arts & Entertainment featured a number of dramas and nature programs that had previously appeared on public television, including BLEAK HOUSE, CHARTERS AND CALDICOTT, THE LIVING PLANET, and LIFE ON EARTH. As another example, in 1990, approximately 95% of PBS programming was exclusive to PBS in the U.S. market. By contrast, 40% of the Learning Channel's instructional programming was second-run public television material.

B. Licensing Fees

These PBS look-alike specialty channels are sold to cable operators for a licensing fee per subscriber. During the 1990-1992 period, these channels charged cable operators monthly licensing fees of between 7 cents and 26 cents per subscriber per month (based on top-of-the-rate-card rates).^{$\frac{8}{}$}

^{$\underline{8}'$} The yearly listings of license fees charged are presented in PTV Exhibit 30. The source for these and the other licensing fees discussed in text is Paul Kagan Associates, <u>Cable TV Programming</u> (May 22, 1995).

These fees compare favorably to fees paid by cable operators for the most popular cable channels. (An illustrative table is set forth at PTV Exhibit 31.) For instance, the fee for Nickelodeon is similar to that for MTV, and the only monthly cable channel fees that exceed Nickelodeon's are those of CNN and ESPN. The fee for Arts & Entertainment is on the high end of the next pricing tier, and is comparable to the fee for Lifetime. The somewhat lower fees for Discovery and The Learning Channel are comparable to superstation fees and fees for channels such as BET, Family Channel, and the Weather Channel.

In 1990 alone, cable operators paid an estimated \$45 million in license fees for Arts & Entertainment, \$32 million for The Discovery Channel, \$68 million for Nickelodeon, and \$6.2 million for The Learning Channel. From 1990 to 1992, these license fee revenues were increasing at an average rate of 15 percent per year. See PTV Exhibit 32. Thus, cable operators are willing to pay significant amounts of money to carry specialty channels that are in many senses pale imitations of what they are able to acquire via the distant retransmission of public television. And cable operators have clearly made the judgment that the programming of these public television look-alikes is a significant means for attracting subscribers.⁹ This is an illustration, again, of why public television programming is a significant benefit to cable operators.

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 $[\]frac{9}{2}$ The attributes sought by subscribers were the subject of a study submitted by Program Suppliers in the unfinished 1990 proceeding before the Tribunal. This study showed that the attributes subscribers seek in a television station or cable network are those offered by PBS. See PTV Exhibit 19.

It is possible to derive an estimated award for public television in this case based on the licensing fees charged for these specialty cable channels. A conservative assumption is to apply the license fee for Arts & Entertainment, which is reported as 12, 13 and 15 cents per subscriber per month for the respective years 1990, 1991, and 1992. (This is conservative because, for the reasons noted above, public television programming has significantly more appeal than Arts & Entertainment and is therefore more likely to be of benefit to cable operators in attracting subscribers who are interested in this sort of programming. Thus, a license fee based on Arts & Entertainment may, if anything, be too low as a proxy for public television.)

If one applies the noted license fees to the subscriber instances of carriage of public television signals during each year from 1990 to 1992, this leads to estimated "licensing revenues" for public television as reported below. From 1990-1992, these fees would result in awards from the Basic fund ranging from 6.8% to 8.0%.

Year	1990	1991	1992
License Fees	.12	.13	.15
Distant Subscribers	6,370,825	6,410,178	6,591,336
Total Fee Revenue	\$9,173,988	\$9,999,878	\$11,864,405
Percentage of Basic Fund	6.8%	7.0%	8.0%

It may also be appropriate to add one further adjustment to these estimated licensing fees for public television. One attraction of the specialty channels for cable

operators is that, to some extent, they allow cable systems to generate advertising revenues. While it is quite unlikely that cable systems feature these specialty channels <u>because</u> of their advertising time, this is nonetheless a source of incremental revenue to the cable system. Thus (assuming an equivalence in program content), a cable operator might be willing to pay somewhat less in license fees for public television than the specialty channels because it would lose revenues from spot advertising.

A reasonable way to adjust for this point is to deflate the estimated "license revenues" for public television, as computed above, according to the percentage of cable system revenues attributable to advertising. The percentage of the revenue earned by local cable operators from the sale of advertising time is shown in the following table.^{10/}

Year	Percentage of Revenue from Sale of Local Advertising Time
1990	3.6%
1991	3.6%
1992	4.1%

Thus, it is appropriate to deflate the above estimates to reflect that a cable operator that "licensed" public television distant signals would be losing 3.6% of its revenue base and would therefore presumably insist on a commensurate reduction in licensing payments.

^{10&#}x27; <u>Cable Television Developments</u> (Spring 1995) at 8 and 9. A quite similar adjustment was developed by John Woodbury, one of the witnesses for Program Suppliers during his testimony in the 1989 proceeding. (See page 19, note 28 of his rebuttal testimony.)

When this adjustment is applied, it leads to estimated "licensing revenues" for public television for the 1990-1992 period as presented below.

	1990	1991	1992
Total Fee Revenue	\$8,843,724	\$9,639,882	\$11,377,964
Percentage of Basic Fund	6.6%	6.8%	7.7%

Of course, these percentages are simply illustrative, but the values computed by these license fee analogies are similar to the adjusted Bortz results for public television. In other words, these estimates provide a <u>powerful</u> confirmation that the Bortz study is in fact producing an accurate measurement of the benefits and marketplace value for cable operators from the distant retransmission of public television.

7. An Industry Estimate of the License Fees for Public Television Confirms the Value of this Programming to <u>Cable Operators</u>

When the compulsory license law was changed by the Cable Act of 1992 to allow broadcasters to seek compensation from cable operators for the retransmission of over-the-air signals, both cable operators and broadcasters actively engaged in efforts to determine the potential license fees that broadcast stations could realistically expect from cable operators. One study of particular interest on this issue was prepared in April 1993 by Norman Hecht Research, Inc., on behalf of the National Association of Broadcasters ("NAB"). The Hecht study involved a survey of cable subscribers to two large Form 3 cable systems in a single (unidentified) "top ten" market. The cable subscribers were asked to allocate a portion of their monthly cable bill to the categories of broadcast programming included on those cable systems. In total, 385 subscribers were interviewed for the study.

The cable subscribers placed a value of \$2.28 on the first public television signal, \$1.01 on the second public television signal, and \$0.71 on the third public television signal. The total value attributed by those subscribers to the three public television stations exceeded the total for any other type of broadcast station.

While these figures measure the value placed on different programming types by cable subscribers, they did not themselves purport to establish the license fees that broadcast stations could charge cable operators for the retransmission of the different types of stations included within the survey. In April 1993, Paul Kagan Associates, Inc., a respected consultant to the cable industry, attempted to translate the figures developed by the Hecht survey into estimated "license fees" that broadcasters could be expected to charge based on the preferences as expressed by cable subscribers. These results were published in <u>Cable TV Programming</u>, April 30, 1993.

The Kagan study estimated that the first public television signal on a cable system could garner a monthly license fee of 24 cents per subscriber. While the Kagan study did not derive the comparable figures for the second and third signals, the same methodology developed by Kagan in deriving the 24-cent estimate can also be applied to these other signals. This produces an estimated monthly license fee for the second public television signal of 11 cents per subscriber, and 8 cents per subscriber for the third signal.

I recognize, of course, that the Kagan study and the underlying Hecht survey were conducted in 1993, and not during the years directly at issue in this proceeding. Nonetheless, in my judgment the estimated license fees have clear relevance to the award of 1990-1992 cable royalties -- because they are derived ultimately from the preferences of cable subscribers for public television programming, and those preferences are not likely to have changed significantly between the 1990-1992 period and 1993.

The estimated license fees from the Kagan study can be used to derive an award for public television in this proceeding. In general terms, this entails determining the number of subscribers who received their first, second, or third or more public television signal on a distant signal, and multiplying those numbers by the estimated license fees.

At the outset, however, it is necessary to deflate the 1993 estimates to take account of the increases in cable licensing fees that have been experienced in the marketplace between 1990 and 1993. During that period, the overall level of license fees for the specialty cable channels most comparable to public television -- Arts & Entertainment, The Discovery Channel, The Learning Channel, and Nickelodeon -- has increased on average approximately 14.25% per year. Thus, it is appropriate to deflate

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the 1993 estimated licensing fee estimates to take into account the fact that licensing fees have increased generally between 1990 and 1993. This results in estimated monthly license fees per subscriber for each year between 1990 and 1992 as listed below:

	1990	1991	1992	1993
First PBS Distant Signal Fee	16.1¢	18.4	21.0	24
Second PBS Distant Signal Fee	7.4¢	8.4	9.6	11
Third (+) PBS Distant Signal Fee	5.4¢	6.1	7.0	8

These estimated license fees can then be multiplied by the number of cable subscribers who received their first, second, or third (+) public television signal via distant signal retransmission. See PTV Exhibit 23. The total license fees for public television, based on these calculations, are presented below:

	1990	1991	1992
Revenue From First Station	\$4,174,080	\$4,654,347	\$5,271,870
Revenue From Second Station	\$2,366,481	\$2,599,324	\$3,017,074
Revenue From Third Station (+)	\$1,060,432	\$1,311,450	\$1,548,292
Total License Fee Revenue	\$7,600,933	\$8,565,120	\$9,837,236
Percentage of Basic Fund	5.6%	6.0%	6.6%

These figures, while not accounting for all distant PBS subscribers, again are close to the adjusted Bortz results for public television. This is another and independent confirmation of the estimated values for public television as reflected in the Bortz study. Moreover, it provides a further validation of the overall reliability of the Bortz study. While I am of course constrained to acknowledge the many variables involved in the Hecht and Kagan estimates, it is nonetheless striking that computations from the industry trade press can provide a substantial corroboration of the Bortz results as to public television.

8. The Program Suppliers' Special Nielsen Study Should Not Be Given Significant Weight In this Case

As in years past, it can be anticipated that the Program Suppliers will seek to place essentially dispositive weight on their special Nielsen study of distant signal viewing. But it is clear to me that the Nielsen study does not address the criteria of relevance to the Panel because it fails to measure either the benefits to cable operators from distant signal retransmission or the marketplace value of the retransmitted programming.^{11/}

Cable operators are primarily in the business of attracting subscribers to their systems. A program with relatively limited viewership (e.g, SESAME STREET or MASTERPIECE THEATER) may be of substantial importance in attracting viewers to subscribe to a cable system; and, conversely, a program with widespread viewership (e.g., THE BEVERLY HILLBILLIES or GILLIGAN'S ISLAND) may have virtually nothing

 $[\]frac{11}{2}$ A videotape of a NOVA program providing a more extensive analysis and critique of Nielsen ratings is included as PTV Exhibit 6.

to do with why viewers subscribe to cable systems because it is recognized as essentially generic programming of no particular interest. These sorts of nuances are entirely lost in the Nielsen numbers -- as the Tribunal recognized when it observed that "cable operators are interested in selling subscriptions and that viewership is of limited relevance to cable operators." (1983 Cable Decision, 51 Fed. Reg. at 12808.)

The point has special relevance in relation to cable operators' distant retransmission of public television programming. As the Tribunal previously concluded, "commercial factors, such as the size of the viewing audience, cannot provide an appropriate measure of the value of public television signals to cable operators." (1979 Cable Decision, 47 Fed. Reg. at 9893.) Although some public television programs achieve relatively high Nielsen ratings, public television is not designed to attract the largest possible audience for <u>each</u> program. Rather, the very essence of public television is the diversity of programming options, and the availability of programming types simply not found on commercial television. This may not generate viewers in large quantities for particular programs, but it may well be of substantial benefit to cable operators in attracting subscribers who are drawn to the special attributes of public television programming. See PTV Exhibit 27.

In the 1989 decision, the Tribunal reemphasized the advantages to cable operators from the specialized, focused programming available on public television: "cable's goal is to attract and retain subscribers, and [cable operators] will often offer

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'niche' services . . . to induce segments of the population to subscribe." (57 Fed. Reg. at 15301.) The Tribunal also recognized that "viewing <u>per se</u> did not necessarily correspond to marketplace value," that "[e]ven in the broadcast industry, which relies heavily on viewing data, ratings do not precisely predict value," and that "in the cable industry, viewing is even a lesser predictor of value." (57 Fed. Reg. at 15301.) Those conclusions are fully consistent with my views on the reasons why the Nielsen study should be given very limited weight in this proceeding.

Public television's programming for children provides a perfect illustration of niche programming that can be of very substantial value to cable subscribers (and hence of substantial benefit to cable operators) even though it generates relatively low numbers under the literalistic viewing numbers of the Nielsen study. As an example, a great many parents want SESAME STREET or BARNEY & FRIENDS to be available to their children -- and thus will place significant value on distant public television signals that may make such programming available to them via a cable system. (I have already noted above the large portion of U.S. households with young children who are likely to be particularly attracted to this type of programming.) But the appeal of SESAME STREET derives in large part from the very fact that it is targeted for preschool children aged two through five -- and therefore, by its nature, it will not generate large viewership figures.

While childrens' programming on PBS represents a very successful programming effort, it is difficult for SESAME STREET or READING RAINBOW or

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BARNEY & FRIENDS or a host of other children's programs to rack up huge viewing hours as relied upon by the Program Suppliers. But anyone who has been exposed to children watching these shows can have little doubt of the value of this type of programming; and parents clearly will be attracted to such programming as one basis for subscribing to a cable system.

Cable operators are particularly eager to attract families with small children as subscribers. Once such families become cable subscribers, they are likely to continue subscribing for a long period of time. In addition, demographic studies have shown that households with younger viewers are eager to have access to movies, and are more likely to pay for the more expensive premium movie channels in order to obtain such access. Cable operators, in turn, benefit from generating more subscriber fees among households that are inclined to add premium channels to their cable packages, since these channels are more profitable for operators than the basic channels.

None of these subtleties is measured by the Nielsen study. But these are the nuances that bear directly on the benefits of distant signal retransmission for cable operators. The Bortz study is far better suited to address the real-world considerations underlying a cable operators' valuation of distant retransmission -- because through an allocation of value among distant signals the cable operator takes into account a host of factors beyond simple viewing data that may affect its assessment of the benefits of particular distant signal programming. The point is illustrated by the fact that the Nielsen ratings are extraordinarily low for the specialty channels offered throughout the nation by cable systems as part of their basic package of cable services. As set forth in PTV Exhibit 34, cable channels such as CNN, Headline News, Discovery, and Arts & Entertainment all receive very small Nielsen ratings (and ratings far below those for public television). But cable systems pay substantial license fees for this programming -- and there cannot be a serious question that cable operators benefit from these specialty channels, as a way to attract subscribers, even though the Nielsen ratings are tiny. The value to subscribers and the benefit to cable operators from these specialty channels is simply not measured by the Nielsen approach.

Finally, I would add that the corroborating evidence I have discussed above in my testimony is yet a further reason why the panel should give lesser weight to the Nielsen study in this case than it has in the past. This corroborating evidence -- for instance, the instances of carriage data, and the computations based on license fees derived from the Hecht survey of cable subscribers -- provides important, independent verification of the general results reached by the Bortz study.

In contrast, if the past is any guide, I presume that the Nielsen numbers for public television will show a share of viewership far below the numbers suggested by the Bortz survey of cable operators, the instances of carriage data, and the Hecht survey of cable subscribers (not to mention the other evidence of marketplace value and benefits to

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cable operators discussed above). From this, the Program Suppliers will presumably argue, as they have in the past, that their Nielsen study should be given dispositive weight in assessing the value of public television programming to cable operators -- and that all this other evidence, pointing to a much higher value for public television, should be discounted as essentially irrelevant because the viewing data must control.

That has the analysis completely backward. Where the other evidence shows, unquestionably, that public television has a <u>significantly higher value</u> than is shown by the Nielsen viewing data, the appropriate conclusion is that the Nielsen data can no longer be considered accurate as a reflection of how cable operators value public television. In other words, there is a convergence of factors showing a value for public television <u>much</u> higher than the Nielsen viewing studies -- all of which support the general framework of the Bortz study as superior to an approach based on viewing data. The appropriate conclusion is that the Nielsen study can no longer be considered a reliable benchmark for the allocation of cable royalties, at least as to public television.

For example, the actual behavior of cable operators in the distant signal marketplace, as reflected in the instances of carriage data for public television, utterly contradicts the implicit suggestion of the Nielsen study that cable operators place a very low value on public television programming. Cable operators have said what they value, through the Bortz survey; and through their conduct, they have provided concrete corroboration of the Bortz survey results as to public television. Tired Hollywood re-

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treads such as LITTLE HOUSE ON THE PRAIRIE, ANDY GRIFFITH, or PERRY MASON -- the types of programs that consistently head up the Nielsen study -- cannot plausibly be the driving reason that viewers want to subscribe to cable systems or that cable operators import distant signals. See PTV Exhibit 27. The evidence recited above provides a far more discerning and reliable means for allocating cable royalties than do the Nielsen viewership numbers.

9. Duplication of Programming Among Distantly Retransmitted Public Television Signals

As I have noted earlier, cable systems will in many instances import a distant public television signal even though they also carry a local public television signal on their system. Throughout 1990-1992, approximately 47% of Form 3 cable systems made this decision to carry one or more distant public television signals in addition to a local signal. See PTV Exhibit 24.

In the 1989 proceeding, I offered a detailed study on the extent to which the programming of different public television signals overlap when more than one is being transmitted by a cable operator. My conclusion was that any duplication in scheduling was quite limited; on average, head-to-head duplication among the public television stations surveyed averaged only about 7% of total programming.^{12/} Thus,

 $[\]frac{12}{2}$ The study was conducted as a random survey of 30 cable systems from among those Form 3 systems that carried at least one distant public television signal and also (continued...)

cable subscribers who flipped back and forth between different public television signals would have seen different programs on the different channels more than 90% of the time.^{13/} Consistent with these findings, in the 1989 case the Tribunal found that "[t]here is very little direct duplication of programs when a cable system carries more than one PBS station." (57 Fed. Reg. at 15297.) See also PTV Exhibit 29.

I am confident that the same basic results would be achieved for the 1990-1992 period as in 1989, and I hereby incorporate my earlier study by reference for purposes of this case. (The results of the study appear in PTV Exhibit 35.) An informal evaluation of the program duplication in 30 markets during a one week period in 1993 revealed an average duplication by program of approximately 12%. See PTV Exhibit 35. The reason that duplication is limited is described in more detail in the testimony of Peter Downey: public television stations have substantial flexibility in scheduling different programs and in deciding on the programming they will carry; and when more than one signal is available in a given market, the stations of their own accord will invariably take steps to distinguish their programming mix and schedule from those of other stations. This can of course be a significant benefit to cable subscribers (and operators), who gain

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 $[\]frac{12}{(\dots \text{continued})}$

carried at least two public television stations in 1989. The program schedules for public television stations carried by those systems were then examined systematically to identify programming duplication during six weeks spread across 1989.

Moreover, even this figure tends to overstate the amount of duplication, since <u>13/</u> different episodes of the same series were treated as "duplicative" for purposes of my study.

the advantages of a diverse mix of public television programming and the benefits of time diversity in the program schedule. On the other hand, as Peter Downey describes, this has potentially adverse effects on the costs of public television programming and, ultimately, harms copyright owners.

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I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief.

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In Teller Fuller

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Executed this <u>18</u> day of August, 1995.

SPECIAL REPORT

COMPARISON OF VIEWING HOURS AND MARKET VALUE DATA FOR CABLE NETWORK PROGRAMMING: 1990-1992

PREPARED BY:

KAGAN MEDIA APPRAISALS, INC. 126 CLOCK TOWER PLACE CARMEL, CA 93923 (408) 624-1536

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The reader is advised that this Statement of Limiting Conditions and the accompanying introductory pages are an integral part of the final report, which contains the details of our analyses and all necessary documentation to support valuation conclusions.

Signed:

Kagan Media Appraisals, Inc./Bishop Cheen

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Signed:

Kagan Media Appraisals, Inc./Bishop Cheen

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I. QUALIFICATIONS

KAGAN MEDIA APPRAISALS, INC.

I. QUALIFICATIONS

Kagan Media Appraisals, Inc. (KMA) has been a leading media valuation and consulting company for the last 15 years. Over that time, we have at the request of various customers valued over twenty billion dollars worth of media assets.

Our affiliated company Paul Kagan Associates, Inc. (PKA) was founded in 1969. It has analyzed and valued hundreds of public and private companies in the monthly newsletters it publishes, which include:

BROADCAST INVESTOR TV PROGRAM INVESTOR TV PROGRAM STATS CABLE TV INVESTOR CABLE TV PROGRAMMING CABLE TV ADVERTISING MEDIA SPORTS BUSINESS CABLE NETWORK INVESTOR MARKETING NEW MEDIA THE PAY TV NEWSLETTER MOVIE STATS MOTION PICTURE INVESTOR

These newsletters contain data on, among other things, the license fees that cable networks charge their affiliates; the expenses that cable networks incur in order to obtain and to produce programming; and the audience levels generated by cable networks.

PKA also publishes an annual special report, ECONOMICS OF BASIC CABLE NETWORKS, which compiles data on license fees, programming expenses and audience levels. In addition, PKA (through other affiliated companies) organizes and moderates seminars covering topics such as pay-per-view, cable programming trends and motion picture and television program finance.


I. QUALIFICATIONS (Continued)

The data on which PKA bases its analyses are developed from a variety of sources, including Securities and Exchange Commission filings, press releases, industry trade publications, formal and informal surveys of subject companies, and regular conversations with industry executives. To the extent possible, PKA cross-checks data by using multiple sources and various internally developed analytical techniques.

Data published in PKA's newsletters and special reports are generally relied on by members of the industry in their daily business. Data contained in this report have been taken from the PKA databases which are used as the basis of various PKA publications, and much of the data have been published in various PKA publications.



II. PURPOSE OF REPORT



II. PURPOSE OF REPORT

1. Comparison Among Cable Networks

KMA was retained by the Joint Sports Claimants (JSC) to provide viewing and market value data

for certain cable programming networks. JSC requested the following data:

- * The total "viewing" of each cable network (calculated in the same manner that the Motion Picture Association (MPAA) calculates viewing in cable royalty distribution proceedings);
- * The total expenses that each cable network incurred to license and to produce its programming; and
- * The total fees that each cable network charged its affiliated cable operators;

JSC then asked us to determine the relationship between each cable network's share of total

viewing and its share of total program expenses and total affiliate fees.

JSC requested that we provide data on the following cable networks for the years 1990-1992:



Appendix A to this report contains a description of the programming on each of the above cable networks.



II. PURPOSE OF REPORT (Continued)

1

We decided to exclude two of the networks that the JSC asked us to review: NTN, because no viewing data were available; and FNN, because no viewing data were available for 1991, and because FNN was purchased by CNBC in 1992.

Data for Cable News Network and Headlines News (HLN) are presented in combined fashion, because both share common programming costs and are often sold in tandem to advertisers and to cable operators.

Throughout this report the sixteen networks are collectively referred to as the "Cable Networks" or the "Networks".

We believe that for the years 1990-1992, the Cable Networks captured the vast majority (75% to 80%) of the total viewing to all basic cable networks (other than superstations).

2. Comparison of Sports and Non-Sports Cable Network Programming

JSC also asked KMA to provide viewing and market value data for certain sports and nonsports programming comparable in value to that shown on superstations and other distant signals.

JSC requested for 1990-1992 the total viewing (calculated in the same manner that the MPAA calculates viewing in the cable royalty distribution proceeding) for the following programming, and the total expenses that cable networks incurred to acquire that programming:



II. PURPOSE OF REPORT (Continued)

Major League baseball games on ESPN NBA basketball games on TNT NHL hockey games on ESPN CFA college football on ESPN

We will refer to this programming as the "Sports Programming."

JSC also asked KMA to select a group of cable networks whose programming we believe collectively was comparable to the movies and syndicated programming shown on Superstations and other commercial distant signals. We chose the following five networks:

Nickelodeon (NICK) TNT USA Lifetime (LIFE) The Family Channel (FAM)

We will refer to the programming on these Networks as "Non-Sports Programming." Virtually all of the Non-Sports Programming consisted of movies and syndicated programming comparable to that found on superstations and other commercial distant signals.

Sample program schedules for these five Cable Networks are attached at Appendix B.

JSC then asked that we compare (1) the viewing hours of the Sports Programming and Non-Sports Programming; and (2) the costs that cable networks incurred to acquire the Sports Programming and the Non-Sports Programming.

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III. SUMMARY OF FINDINGS

III. SUMMARY OF FINDINGS

A detailed analysis of the viewing and financial data we compiled is presented in Section IV. To summarize, the data demonstrate the following:

 In a few instances, a Cable Network's share of viewing was approximately the same as its share of other indications of market value (programming expenses or affiliate fees) for a particular year. Generally, however, the viewing shares and value shares were different. In some instances, the differences were substantial.

For ESPN, (which is a 24 hour sport network that features NHL hockey, major league baseball, NFL football, college basketball and football, and a variety of other sports, such as tennis and beach volleyball) we found the following:

* ESPN's share of viewing ranged from 10% to 12%;

- * ESPN's share of affiliate fees ranged from 24.1% to 25.7%, or between 2.2 and 2.5 times its viewing share;
- * ESPN's share of programming expenses ranged from 25.9% to 27.2%, or between 2.2 and 2.7 times its viewing share.

This indicates that ESPN's programming was more than twice as valuable as its share of viewing would indicate.

For NICK, which presents a substantial amount of syndicated programming, we found the following:

III. SUMMARY OF FINDINGS (Continued)

* NICK's share of viewing ranged from 13.4% to 13.6%.

* NICK's share of affiliate fees ranged from 6.0% to 6.2%, or between 0.4 and 0.5 times its viewing share;

* NICK's share of programming expenses ranged from 4.3% to 4.6%, or 0.3 times its viewing share.

This indicates that NICK's programming was roughly half as valuable as its share of viewing would indicate.

2. The relative amount that cable networks paid to acquire Sports Programming was substantially higher than Sports Programming's share of viewing.

Sports Programming's share of viewing ranged from 4.3% to 4.8%, while the Non-Sports Programming's share of viewing ranged from 95.2% to 95.7%. However, of the total amount paid to acquire the Sports and Non-Sports Programming, between 24.9% and 26.3% went to acquire the Sports Programming alone.

Collectively, between 1990 and 1992, the Sports Programming's share of program expenses was between 5.3 and 6.2 times its share of viewing. In contrast, the Non-Sports Programming's share of program expenses was between 77 and 79 percent of its viewing share. What that means is that the Sports Programming was substantially more valuable than its share of viewing would indicate, while the Non-Sports programming was less valuable.

Individually:

* Major league baseball on ESPN's share of program expenses was between 4.9 and 5.8 times its share of viewing;

* NBA basketball on TNT's share of program expenses was between 7.2 and 8.3 times its share of viewing;

* CFA college football on ESPN's share of program expenses was between 2.8 and 3.2 times its share of viewing; and

* NHL hockey on ESPN's share of program expenses was approximately 3.9 times its share of viewing.



IV. DETAILED FINDINGS

A. VIEWING (HHVH) SHARES OF CABLE NETWORK PROGRAMMING

A. VIEWING (HHVH) SHARES OF CABLE NETWORK PROGRAMMING

1. Cable Networks

Our first task was to determine the viewing attributable to each of the Cable Networks. We used the same method that the MPAA uses in the cable royalty distribution proceedings to calculate viewing shares for program categories on superstations and other distant signals. Specifically, MPAA calculates the viewing for a particular program type by (1) adding up all the hours a particular program type was broadcast, and then (2) multiplying the total hours by the average number of distant cable households that viewed this program type per hour. MPAA refers to the resulting total as the "Household Viewing Hours" for the program type, or "HHVH".

We made the same calculation, with only one difference. Instead of calculating the viewing of particular types of programming on distant signals, we calculated the viewing of particular cable networks. Specifically, we determined the number of households that viewed each Cable Network in the average hour. This information on average audience is contained in PKA databases and publications and is based on Nielsen data supplied to PKA in the regular course of business by the Cable Networks. We then multiplied the average hour audience for each Cable Network by the number of hours the Cable Network transmitted its programming.

For two of the Cable Networks, A&E and BET, only prime time viewing data were available; we assumed that the total day viewing household average for A&E and BET were 50% of the prime time average, which we believe to be a reasonable assumption based on our experience that total day viewing is generally between 40% and 60% of prime time viewing.



14

A. VIEWING (HHVH) SHARES OF CABLE NETWORK PROGRAMMING (Continued)

Finally, we expressed each Cable Network's viewing (or HHVH) as a percentage of the total viewing (in total HHVH) of all sixteen Cable Networks. The results of this calculation are shown in Table A1.

Cable	1990	1991	1992
Network	. (%)	(%)	(%)
۵ <i>8.</i> -	30	3.2	4.5
RET	16	1.3	1.5
CNBC	0.4	0.6	1.1
	13.2	18.3	12.1
DISC	43	4.2	4.8
ESPN	12.0	10.0	10.5
FAM	6.0	5.0	5.6
	4.9	4.9	5.0
MTV	6.9	5.8	5.5
NICK	13.6	13.4	13.4
TNN	4.7	4.7	5.0
TNT	10.6	10.7	11.9
TWC	1.8	1.5	1.9
USA	15.2	14.8	15.1
VH1	1.8	1.7	2.1
TOTAL	100.0	100.0	100.0

TABLE A1 SHARE OF TOTAL HOUSEHOLD VIEWING HOURS

As table A1 shows, ESPN had 12.0% of the total viewing hours (or HHVH) generated by all sixteen Cable Networks in 1990. USA, on the other hand, had 15.2% of the total viewing hours (or HHVH) generated by the Cable Networks in 1990.



A. VIEWING (HHVH) SHARES OF CABLE NETWORK PROGRAMMING (Continued)

2. Sports and Non-Sports Cable Network Programming

We also calculated the HHVH for the Sports and Non-Sports Programming, using exactly the same method as MPAA uses to calculate HHVH.

To prevent double-counting, in calculating the HHVH of TNT, we excluded that portion attributable to NBA basketball.

For basketball and hockey, data are presented on a seasonal rather than a yearly basis. No data were available for hockey for 1990 and 1991, and for CFA football for 1990.

Then we expressed the viewing (or HHVH) for the Sports Programming and the Non-Sports Programming as a percentage of the total viewing (in total HHVH) of all the Sports and Non-Sports Programming on the cable networks studied. The results of this calculation are show in Table A2.



A. VIEWING (HHVH) SHARES OF CABLE NETWORK PROGRAMMING (Continued)

TABLE A2

SHARE OF TOTAL HOUSEHOLD VIEWING HOURS -SPORTS AND NON-SPORTS PROGRAMMING

	1990	1991	1992
Sports Programming			
MLB on ESPN	3.1%	2.7%	2.0%
NBA on TNT	1.2%	1.1%	1.2%
CFA on ESPN		1.0%	1.0%
NHL on ESPN			0.5%
Sports Total	4.3%	4.8%	4.7%
Non-Sports Programming			
USA	29.4%	29.2%	28.5%
TNT	19.2%	20.1%	21.3%
NICK	26.1%	26.4%	
25.4%FAM	11.6%	9.9%	10.6%
LIFE	9.4%	9.6%	9.5%
Non-Sports Programming Total	95.7%	95.2%	95.3%
Group Total	100.0%	100.0%	100.0%

As Table A2 shows, major league baseball on ESPN had a 3.1% share of total viewing in 1990, while USA had a 29.4% share. This means that 3.1% of the household viewing hours for the Sports and Non-Sports Programming on the cable networks studied were attributable to baseball on ESPN while 29.4% were attributable to USA. Sports Programming's share of viewing was 4.3% in 1990, while Non-Sports Programming's share was 95.7%.



KAGAN MEDIA APPRAISALS, INC.

1. Cable Networks

We next looked at the correlation between viewing shares and the expenses that the Cable Networks incurred in obtaining and producing the programming that they delivered.

Programming expenses generally include the costs to acquire the rights to air a program, sports rights license fees and the costs of creating original programming, including studio production costs. For networks which are predominantly live, such as The Weather Channel, Cable News Network and CNBC, this includes the cost of collecting information, news staffs, anchor salaries and studio expense. We determined the programming and production expenses for each Network based on figures contained in PKA databases and publications, which are obtained directly from the Cable Networks in the ordinary course of business. In most cases, it is standard industry accounting practice to expense or amortize the costs of acquired and original programming over several years to reflect the useful life of that programming.

Next, we calculated each Network's share of the total pool of program spending, i.e., the total amount of program expenses incurred by all Cable Networks. The results of this calculation are presented in Table B1.

Table B1

SHARE OF TOTAL	PROGRAMMING EXPENSES
----------------	----------------------

Cable	1990	1991	1992
Network	(%)	(%)	(%)
A&E	3.1	3.3	3.5
BET	1.1	1.2	1.1
CNBC	1.8	1.6	1.4
CNN+HN	12.4	11.7	11.3
DISC	3.1	3.4	4.4
ESPN	25.9	27.2	25.9
FAM	3.0	3.1	3.1
LIFE	5.2	5.1	5.5
MTV	5.2	4.8	4.6
NICK	4.4	4.3	4.6
TNN	4.0	3.5	3.5
TNT	16.5	15.8	15.9
TWC	1.1	[•] 1.1	1.0
USA	10.9	12.8	13.0
VH1	2.2	1.3	1.2
TOTAL	100.0	100.0	100.0

As Table B1 shows, in 1990 ESPN had a 25.9% share of the group's programming expenses, while USA had a 10.9% share. This means that 25.9% of all the programming and production expenditures by all the Cable Networks studied were attributable to ESPN, while 10.9% were attributable to USA.

Having determined what portion of the total pool of programming/production expenditures is contributed by each Cable Network, we next compared each Network's share of the total pool of programming expenses with each network's share of the total pool of viewing. Tables B2-B4 show these comparisons for the years 1990-1992.

Table B2

PERCENTAGE OF PROGRAMMING EXPENSES AND PERCENTAGE OF VIEWING HOURS -- 1990

Network			
A&E	Expense% Viewing%	3.1 3.0	
BET	Expense% Viewing%	1.1	
CNBC	Expense% Viewing%	1.8 0.4	
CNN+HN	Expense% Viewing%	12.4 13.2	
DISC	Expense% Viewing%	3.1 4.3	
ESPN	Expense% Viewing%	25.9	
FAM	Expense% Viewing%		
LIFE	Expense% Viewing%	5.2	
MTV	Expense% Viewing%	5.2 6.9	
NICK	Expense% Viewing%	4.4	
TNN	Expense% Viewing%	4.0 4.7	
TNT	Expense% Viewing%	16.5	
TWC	Expense% Viewing%	1.1 1.8	
USA	Expense% Viewing%	10.9	
VH1	Expense% Viewing%	2.2 1.8	
		0 5 10 15 20 25 30)



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Table B3

PERCENTAGE OF PROGRAMMING EXPENSES AND PERCENTAGE OF VIEWING HOURS -- 1991

Cable								
Network			1					and the second
A&E	Expense% Viewing%	3.3 3.2						
BET	Expense% Viewing%	1.2 1.3						
CNBC	Expense% Viewing%	1.6 0.6						
CNN+HN	Expense% Viewing%	11.7						
DISC	Expense% Viewing%	3.4 4.2						
ESPN	Expense% Viewing%	27.2						
FAM	Expense% Viewing%	3.1 5.0						
LIFE	Expense% Viewing%	5.1						
MTV	Expense% Viewing%	4.8 5.8						
NICK	Expense% Viewing%	4.3 13.4]			
TNN	Expense% Viewing%	3.5 4.7						
TNT	Expense% Viewing%	15.8 10.7						
TWC	Expense% Viewing%	1.1						
USA	Expense% Viewing%	12.8 14.8						
VH1	Expense% Viewing%	1.3 1.7						
		0	5	10	15	20	25	30





Table B4

PERCENTAGE OF PROGRAMMING EXPENSES AND PERCENTAGE OF VIEWING HOURS -- 1992

Network			1
A&E	Expense% Viewing%	3.5	
BET	Expense% Viewing%	1.1	
CNBC	Expense% Viewing%		
CNN+HN	Expense% Viewing%	11.3	
DISC	Expense% Viewing%	4.4 4.8	
ESPN	Expenses% Viewing%	25.9 10.5	
FAM	Expense% Viewing%		
LIFE	Expense% Viewing%	5.5 5.0	
MT∨	Expense% Viewing%	4.6 4.6 5.5 4.6	
NICK	Expense% Viewing%	4.6	
TNN	Expense% Viewing%	3.5 5.0	
TNT	Expenses% Viewing%	15.9 11.9	
TWC	Expense% Viewing%	1.0	
USA	Expense% Viewing%	13.0	
VH1	Expense% Viewing%	1.2 2.1	
		0 5 10 15 20 25	30



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As the tables above show, ESPN's share of the total pool of programming costs was larger than its share of the total viewing. In other words, ESPN paid more of its revenue on acquiring and purchasing programming than it would had the only determinant of value been viewing hours. At the same time, Networks such as USA and Nickelodeon spent less than would be expected based solely on each Network's proportionate share of total viewing.

The comparisons shown in Tables B2-B4 can be quantified as ratios. Table B5 shows the ratio of percentage of total expenditures to the percentage of total viewing for each Network for the years 1990-1992.

Table B5

Cable Network	1990 Ratio	1991 Ratio	1992 Ratio
		1.0	0.8
A&E	1.0	1.0	0.7
BET	0.7	0.9	4.2
CNBC	4.3	2.5	1.5
	0.9	0.6	0.9
	0.7	0.8	0.9
DISC	0.7	2.7	2.5
ESPN	2.2	0.6	0.6
FAM	0.5	. 0.0	1.1
LIFE	1.1	1.0	0.8
MT∨	0.8	0.8	0.3
NICK	0.3	0.3	0.0
TNN	0.9	0.7	1.2
TNT	1.6	1.5	1.5
	0.6	0.7	0.0
	0.7	0.9	0.9
USA	1 2	0.7	0.6
VH1	1.2		

RATIO OF PROGRAMMING SPENDING TO VIEWING

If viewing share and share of programming expenses were the same, the ratio would be 1.0. ESPN's ratio ranged from 2.2 to 2.7. This indicates that ESPN's programming had more than twice as much value (as measured by the amount ESPN actually paid to acquire and to produce that programming) as ESPN's share of viewing would indicate. On the other hand, the value of the programming on NICK was only half its viewing share.

2. Sports and Non-Sports Cable Network Programming

We next performed the same analysis for Sports and Non-Sports Programming. (For the Non-Sports Programming, we were able to include both the cost of acquiring programming and additional production costs. For the Sports Programming, we had access only to the acquisition costs -- the fees paid by the cable networks for the rights to the Sports Programming -- and not the additional expenses incurred in producing the programming. As a result, our data understates somewhat the actual programming expenses for the Sports Programming.)

To prevent double-counting, in calculating the programming expenses for TNT, we excluded that portion attributable to NBA basketball.

For basketball and hockey, data are presented on a seasonal rather than a yearly basis. No data were available for hockey for 1990 and 1991, and for CFA football for 1990.



Next, we calculated the Sports Programming and Non-Sports Programming shares of the total pool of program spending, i.e., the total amount of expenses incurred to acquire all of the cable network Sports and Non-Sports Programming we analyzed.

Table B6

SHARE OF TOTAL PROGRAM EXPENSES -SPORTS AND NON-SPORTS PROGRAMMING

	1990	1991	1992
Sports Programming			
MLB on ESPN NBA on TNT CFA on ESPN NHL on ESPN	16.8% 9.6% 	13.4% 8.8% 3.3%	11.5% 8.5% 2.9% 2.1%
Sports Total	26.3%	25.5%	24.9%
Non-Sports Programming			
USA TNT NICK FAM LIFE	22.6% 24.8% 9.1% 6.3% 10.9%	26.0% 23.2% 8.7% 6.3% 10.3%	25.8% 23.0% 9.2% 6.2% 10.9%
Non-Sports Programming Total Group Total	73.7% 100.0%	74.5% 100.0%	75.1% 100.0%

As Table B6 shows, in 1990 ESPN spent 16.8% of the total expenses incurred for all of the

Sports and Non-Sports Programming just to acquire the rights to televise Major League

Baseball. All of the Sports Programming accounted for 26.3% of the 1990 programming

expenses and all Non-Sports Programming accounted for 73.7%.





Having determined what portion of the total pool of programming/production expenses is contributed by the Sports and Non-Sports Programming, we next compared the Sports and Non-Sports Programming shares of the total pool of programming expenses and the total pool of viewing. Tables B7-B9 show these comparisons for 1990-1992

Table B7

PERCENTAGE OF PROGRAMMING EXPENSES AND PERCENTAGE OF VIEWING HOURS - SPORTS AND NON-SPORTS PROGRAMMING -- 1990





Table B8

PERCENTAGE OF PROGRAMMING EXPENSES AND PERCENTAGE OF VIEWING HOURS - SPORTS AND NON-SPORTS PROGRAMMING -- 1991





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Table B9

PERCENTAGE OF PROGRAMMING EXPENSES AND PERCENTAGE OF VIEWING HOURS - SPORTS AND NON-SPORTS PROGRAMMING -- 1992



As the tables show, baseball, basketball, college football and hockey each had a larger share of the total pool of programming expenses than they did of the total share of viewing. Put another way, ESPN and TNT were willing to spend substantially more to get baseball, basketball, college football, and hockey than one would expect if viewing were the only determinant of programming expenses. By contrast, cable networks were willing to pay less than one would



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expect for the syndicated programs and movies on USA, TNT, Lifetime, Nickelodeon, and the Family Channel.

The comparisons shown in Tables B7-B9 can be quantified as ratios. Table B10 shows the ratio of percentage of total programming expenses to percentage of total viewing for the years 1990-1992.

Table B10

PROGRAM COST SHARE-TO-VIEWING SHARE RATIO -SPORTS AND NON-SPORTS PROGRAMMING

	1990	1991	1992
Sports Programming			
MLB on ESPN NBA on TNT CFA on ESPN NHL on ESPN	5.4 8.2 	4.9 8.3 3.2	5.8 7.2 2.8 3.9
Sports Total	6.2	5.3	5.3
Non-Sports Programming			
USA TNT NICK FAM LIFE	0.8 1.3 0.3 0.5 1.2	0.9 1.2 0.3 0.6 1.1	0.9 1.1 0.4 0.6 1.1
Non-Sports Programming Total	0.8	0.8	0.8



If viewing share and share of program expenses fees were the same, the ratio would by 1.0. The Sports Programming's ratio ranged from 5.3 to 6.2. This indicates that the Sports Programming had roughly five to six times as much value (as measured by the amount TNT and ESPN were willing to spend on them) as its share of viewing would indicate.



The next step was to calculate each Cable Network's share of the total pool of affiliate license fees paid to all the Cable Networks, so that we could then determine the relationship between this measure of program value and viewing hours.

Affiliate license fees are the fees paid by cable operators to a Cable Network for permission to transmit the programming on one Cable Network to their subscribers. We determined the affiliate license fees for each Network based on the affiliate license fees contained in PKA databases and publications, which are obtained directly from the Cable Networks in the ordinary course of business.

Next, we calculated each Network's share of the total pool of affiliate fees received by the Cable Networks. The results of this determination are presented in Table C1.



Table C1

PERCENTAGE SHARE OF TOTAL AFFILIATE LICENSE FEES

Cable	1990	1991	1992 (%)
Network	(%)	(%)	(,0)
	A 1	39	3.7
A&E		1.6	1.8
BET	1.1	2.3	2.7
CNBC	1.3	2.5	11.4
CNN+HN	13.1	12.0	16
DISC	2.9	3.4	4.0
ESPN	25.7	25.3	24.1
EAM	2.4	3.3	3.6
	3.4	3.4	3.4
	52	4.9	5.0
	6.1	62	6.0
NICK	5.1	4 7	4.7
TNN	5.0	19.0	17.2
TNT	18.5	10.0	15
TWC	1.8	1.7	1.5
USA	9.2	9.2	9.0
VH1	0.0	0.2	0.3
TOTAL	100.0	100.0	100.0

As Table C1 shows, in 1990 ESPN had a 25.7% share of the affiliate license fees in 1990, while USA had a 9.2% share. This means that 25.7% of the affiliate license fees received by all the Cable Networks studied were attributable to ESPN while 9.2% were attributable to USA.

Having determined what portion of the total pool of affiliate fees is contributed by each Cable Network, we next compared each Network's share of the total pool of affiliate fees with each Network's share of the total pool of viewing hours. Tables C2-C4 show these comparisons for the years 1990-1992.



Table C2

PERCENTAGE OF LICENSE FEES AND PERCENTAGE OF VIEWING HOURS -- 1990







1



Table C3

PERCENTAGE OF LICENSE FEES AND PERCENTAGE OF VIEWING HOURS -- 1991

Cable Network			
A&E	Fee% Viewing%		
BET	Fee% Viewing%		
CNBC	Fee% Viewing%	2.3 0.6 J	
CNN+HN	Fee% Viewing%	12.0	
DISC	Fee% Viewing%		
ESPN	Fee% Viewing%	25.3	
FAM	Fee% Viewing%	3.3 5.0	
LIFE	Fee% Viewing%	3.4 4.9	
MTV	Fee% Viewing%	4.9 5.8	
NICK	Fee% Viewing%	6.2 13.4	
TNN	Fee% Viewing%	4.7 4.7	
TNT	Fee% Viewing%	18.0	
TWC	Fee% Viewing%	1.7 1.5	
USA	Fee% Viewing%	9.2 14.8	
VH1	Fee% Viewing%	0.2 1.7	
		0 5 10 15 20 25 30	







Table C4

PERCENTAGE OF LICENSE FEES AND PERCENTAGE OF VIEWING HOURS -- 1992

Cable Network			
A&E	Fee% Viewing%	3.7 4.5	
BET	Fee% Viewing%	1.8 1.5	
CNBC	Fee% Viewing%	2.7	
CNN+HN	Fee% Viewing%	11.4	
DISC	Fee% Viewing%	4.6	
ESPN	Fee% Viewing%	24.1 10.5	
FAM	Fee% Viewing%	3.6 5.6	
LIFE	Fee% Viewing%	3.4 5.0	
MTV	Fee% Viewing%	5.0	
NICK	Fee% Viewing%	6.0	
TNN	Fee% Viewing%	4.7 5.0	
TNT	Fee% Viewing%	17.2 11.9	
TWC	Fee% Viewing%	1.5 1.9	
USA	Fee% Viewing%	9.8	
VH1	Fee% Viewing%	0.3 2.1	
		0 5 10 15 20 25	30





As the tables show, ESPN's share of the total pool of affiliate fees was more than twice as large as its share of viewing. Put another way, cable operators paid substantially higher fees for ESPN than one would expect if viewing hours were the determinant of fees. By contrast, cable operators paid substantially lower fees for Networks like NICK and USA than those Network's share of total viewing hours would indicate.

The comparisons shown in Tables C2-C4 can be quantified as ratios. Table C5 shows the ratio of percentage of total affiliate fees to percentage of total viewing for each Network for the years 1990-1992.

Table C5

RATIO OF AFFILIATE FEES TO VIEWING

Cable Network	1990 Ratio	1991 Ratio	1992 Ratio
A&E	1.3	1.2	0.8
BET	0.7	1.2	1.2
CNBC	3.1	3.6	2.4
CNN+HN	1.0	0.7	0.9
DISC	0.7	0.8	1.0
ESPN	2.2	2.5	2.3
FAM	0.4	0.7	0.6
LIFE	0.7	0.7	0.7
MTV	0.8	0.8	0.9
NICK	0.5	0.5	0.4
TNN	1.1	1.0	0.9
TNT	1.7	1.7	1.4
TWC	1.0	1.1	0.8
USA	0.6	0.6	0.7
VH1	0.0	0.1	0.2


C. COMPARISON OF VIEWING SHARES AND SHARES OF AFFILIATE LICENSE FEES (Continued)

If viewing share and share of affiliate fees were the same, the ratio would be 1.0. ESPN's ratio ranged from 2.2 to 2.5. This indicates that ESPN had more than twice as much value to cable operators (as measured by the amount cable operators actually paid to carry ESPN) as its share of viewing would indicate. On the other hand, the value of the programming on NICK was only half its viewing shares while the programming on USA had a value of approximately 70 percent of its viewing share.

V. APPENDIX A: DESCRIPTION OF CABLE NETWORKS

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v. APPENDIX A: DESCRIPTION OF CABLE NETWORKS

ARTS AND ENTERTAINMENT (A&E) -- features a sometimes eclectic mix of arts, cultural, music, international, documentary and historical programming, including theatrical motion pictures and some syndicated television series.

BET -- a program mix designed to appeal to Afro-American and other "people of color" audiences. A combination of music, informational, talk show and syndicated TV series.

CNBC -- daytime weekday schedule features live business, financial and consumer news, a continuously-updated stock ticker and business news talk and interview shows. Evening and nighttime schedule features a range of informational, business, political, lifestyle and interview-style talk shows.

CNN -- a 24-hour news channel, with regularly scheduled talk shows and topic-specific magazine and news segments.

DISCOVERY CHANNEL (DISC) -- a network dedicated to nature, science, documentary and historical and educational programming, featuring both original and acquired syndicated programming and international co-productions.

ESPN -- a network dedicated to sports and sports news. Though it carries many sports events live, by necessity much of schedule is repeat or time-delayed broadcasts of sports events, syndicated sports shows, acquired sports-related programming and originally-produced sports news and magazine shows.

FAMILY CHANNEL (FAM) -- a family-oriented general-entertainment network featuring talk shows, syndicated TV series, original and theatrical motion pictures, music segments, children's programming and religious programming. Carries many of the same program genres as independent TV stations and superstations. No sports programming.

HEADLINE NEWS (HLN) -- a 24-hour news channel built around a regularly updated 30-minute program block of national, international, sports, weather, entertainment and business news.

LIFETIME (LIF) -- a general-entertainment network programmed with a women's point-of-view and interests in mind. Program mix is similar in many respects to independent TV stations and superstations, with talk shows, syndicated TV series and both original and theatrical motion pictures, but no sports programming.

MTV -- continuous rotation of music videos, live musical performances and events and young lifestyle-oriented original segments.

NASHVILLE NETWORK (TNN) -- a network dedicated to the country and western lifestyle, including music, entertainment and sports programming designed to appeal to the same demographic which enjoys country and western music.



V. APPENDIX A: DESCRIPTION OF CABLE NETWORKS (Continued)

NICKELODEON (NICK) -- daytime programming oriented to children, including both original and syndicated live-action and animated programming. Evening schedule consists primarily of "classic" TV series, almost entirely syndicated, comparable to those found on superstations.

TNT -- a general entertainment-oriented network, though the program schedule is built primarily around movies and sports, very similar to sister superstation TBS. It has some syndicated programming.

USA NETWORK -- general entertainment-oriented network, carrying a mix of original and syndicated programming (with an extensive schedule of off-network series and movies), and some sports events (such as golf and tennis). Program schedule bears strong resemblance to independent TV stations, including superstations, except without major team sports.

VH1 -- a sister channel to MTV which targets the 25-44 age demographic in its mix of music videos, comedy and documentary segments, original music performances. Carries some acquired syndicated programming.

WEATHER CHANNEL (TWC) -- 24-hour local, national and international weather forecasts and weather-related features and information.



VI. APPENDIX B: SAMPLE PROGRAM SCHEDULES





PRIL 1991 PROGRAM SCHEDULE

				THEODAY	WEDNESDAY	THURSDAY	FRIDAY	CENTRAL	MOUNTAIN
EASTERN PACIFIC	SATURDAY	SUNDAY	MONDAY	IUESDAY	Various			4.00	3 00
AN 5 00		Vancers						4 30	3 30
5 30	-	Validus			Lary Lea			5 [.] 00	4.00
6 00	Various	NewS:gnt 91			Ismas Bobison			5.30	4.30
6 30		James Robison			The Existing Kids			6:00	5.00
7 00		D James Kennedy			Proceet			6.30	5:30
7 30	Americas Backibacis				Drossuccis			7.00	6:00
8 00	American Baby	SuissFamin Roomeon		The Letter				7.30	6:30
S 3 0	Gerbert	Gerbert						8:00	7:00
9 00	Popeye	Poe Poston Record preser			Eng Valley			8:30	7.30
9 30	TANGLITER ORE	Coos						9:00	8 00
10 00	PALEETTEN DIE	Barnan		Tr	e 700 Club With Pat Robe	rison		9.30	8.30
10 30	The Simistone was	Big Bromer Jake			and To Hand With Sheria V	Yelsn		10:00	9.00
11 00	Bonanza The	Bonanza The			Vanous			10:30	9:30
11 30	Lost Episades	Lost Edisodes		LetsEat.	Americas	Let SER!	Vanous	11:00	10:00
Noor			Various	WimBurtWolf	Vancus	Healthy Kids	American Baby	11.30	10.30
*2 30) The Virginian	The Virginian	American Baby	Heatiny Kids	Valous			Noon	11.00
• 00								12.30	11.30
1 30	The Riveman	The Ritheman		The	Family Channel Attempo	n Movie		1 00	Noon
2 00	Itizana Traic	Wacon Train						1.30	12.30
2 30	••ag0: 1 a								1:00
3 00		The Big Valley		Fainer Knows Best				2:30	1.30
3.30) Inebig variev						3:00	2.00	
4 00		Gunsmoke		Comp.			3.30	2.30	
4 30) Gunsmoke	Gorandae					4:00	3:00	
5 00	Bonanza The	Bonanza The		Popeye			4:30	3:30	
5 30) Lost Episodes	Lost Episodes					Bin Tin Tin K-9 Cop	5:00	4.00
6 00	Bordertown	Big Brother Joke	1	0	ur House		The New Zorro	5.30	4:30
6 30	The New Zorro	Maniac Mansion					Big Brother Jake	6.00	5.00
7 00	E Rin Tin Tin K-9 Coc	R-Tin Tin K-9 Cop	1	Scarecro	wAnd Mrs King		Maniac Mansion	6.30	5.30
- 3	Brack Stamon	Black Stallion						7 00	6.00
8 6	0	Bordertown	1					7.30	6.30
ā 3	C The Family Channe	The New Zorro	Beauty and		The Farmiy	Channel Move		8.00	7 00
90	c Movie	In Touch	UTE Deast					8.30	7 30
93	0		<u> </u>					9:00	8: 0 0
10 0	0 Dirty Dozen	Changed Lives	4		The 700 Club With Pat Rol	penson		9:30	8.30
10 3	30	John Ankerberg	Ļ				Bordertown	10:00	9:00
11 (00 Maniac Mansion	John Osteen	4	Scareci	row and Mars. King		Bordentown	10:30	9:30
11 3	30 Videosynorrasy	Winning Welk						11:00	13:00
Midn	Ight	Larry Jones	_	1				11:30	10:30
12 :	30 Zoia Levitt		Beauty and	Beauty and The Family Channel Movie		Midnight	11:00		
10	Notice in		(ne beas)					12:30	11:30
13	30							1:00	Midnight
2.0	00 Jewish Voice				The 700 Club With Pat Ro	ibertson .		1.30	12:30
23	30 Various	Vanous						2:00	1 00
30	20	7	1					2:30	1.30
3.3	30 Praise				Vanous			3:00	2:00
40	00 Lord							3:30	2:30
-			1					Changes 20	e indicated in CA

This schedulo is tentative and subject to immediate change "Changes are indicated in CAPS

The Family Connel 1000 Centerville Turnpike Virginia Beach, Virginia 23463 (804) 523-7301

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	THESDAY THESDAY THEONESDAY THURSDAY FRIDAY	SATURDAY	SUNDAY	ET/PT
7-00 AM	It Figures	Consumer Advisory	Consumer Advisory	7:00 AM
7.00	The Everyday Workout	and the set	Consumer Advisory	7:30
.30	Annudes	Contraction and	The World Tomorrow	8:00
5.00	ALLINGS		Consumer Advisory	8:30
5.30	Wast Every Baby Knows	What Every Baby Knows	Living With Diabetes	9:00
9.00	Bern Famous	Buy By Buy	Physicians' Journal Update	9:30
9.30	Cionar Koto	Michaels Arts & Crafts	Family Practice Update	10:00
10:00	Day By Day	E/R	Internal Medicine Update	10:30
10:30	The Frugal Gourmet	Autodes	Cardiology Update	11:00
11:00	Canadar for Hire	-	OB/GYN Update	11:30
11:30	openeel. ev inte	The Frugal Gourmet	Physicians' Journal Update	NOON
NOON	ER	Sister Kate	Family Practice Update	12:30 PM
12:30 PM	Em Europeander Swaan	Supermarket Sweep	Internal Medicine Update	1:00
1:00		Deast	OB/GYN Update	1:30
1:30	The Inscry Gilman Snow	Mooslighting	Physicans Journal Update	2:00
2:00	Moeniighbeg		Cardiology Update	2:30
2.30		Hend	Destustry Update	3:00
3:00	Albrudes	Tiouri	Family Practice Update	3:30
3:30			Saeriats	4:00
4:00		Speaser: For mire	Saariak	4:30
4.30	Lifetime Afternoon Movie		Specials	5:00
5:00		LALow	Saecials	5.20
5:30			Cassiste	6.00
6:00	Supermarket Sweep	-	Second	6.00
6.30	Great American TV Poll	- Stand	Specials	6.30
7:00	E/R	Lifetime	Internal Medicine Update	7:00
7.30	Deet	Double	Milestones in Modicine	7:30
8:00	LA. Law	reature	Physicians Journal Update	8:00
8:30		Marine Marine	Destastry Update	8:30
9:00		· · · ·	Cardiology Update	9:00
9:30	Movie		Internal Medicine Update	9:30
10:00		The Tracey Ulimon Show	OB/GYN Update	10:00
10.30		D & N Of Melly Dedd	Family Practice Update	10:30
11:00	The Tracey Uliman Shew	LA Law	Physicans' Journal Update	11:00
11:20	The Days & Nights Of Molly Dodd		Briel Summary of Prescribing Information	11:30
11.30	EN.G.	Great American TV Poll	Sec. and	12:00 AM
12:00 AM		You're On The Air With Dr. Ruth		12:30
12:30	Caesamer Advisory			1-2 AM
1-2 AM	Caseman Advisory	Contraction and an		2-5:30 AM
2-5:30 AM		oHEARST/	ABC-VIACOM ENTERTAINM	ENT SERVICES







BOLD FACE TITLES INDICATE NEW TIME SLOTS

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TITLES IN ITA

SCHEDULE SUBJECT TO CHANGE AS OF 2/1/91



NOTE This schedule is prepared for Eastern and Pacific time zames. Subtract 1 hour in Central time zone. In Mountain time zone, adjust accordingly. Effective March 2, 1991.

ASTERN TIME	MONDAY THROUGH FRIDAY	EASTERN TIME	
MADO	Lassie	6:00 AM	
:30	Kidswarld	6:30	
7:00	Mr. Wizard's World	7:00	
7:30	Nickelodeon's Most Wanted: Yogi Bear!	7:30	
8:00	. Inspector Gadget	8:00	
8:30	Heathcliff	8:30	
9:00	Lassie	9:00	
9:30	Maya The Bee	9:30	
10:00	Eureeka's Castle	10:00	
11:00	Sharon. Lois & Bram's Elephant Show	10:30	-
11:30	Fred Penner's Place	11:00	
12:00 PM	The World Of David The Gnome	11:30	De
12:30	Adventures Of The Little Koala	12:00 PM	D
1:00	Noozies	12:30	
1:30	Maya The Bee	12.00	
2:00	Today's Special	1:00	-
2:30	Lassie	1:30	
3:00	Flipper	2:00	-
3:30	Looney Tunes	4:00	-
4:00	Heathcint	4:30	
4:30	Nickelodeon's Most Wanted: Yogi bear:	5:00	1.44
5:00	You Can't Do Inat Un relevision	5:30	100.5
5:30	Hey Duce	6:00	
6:00	Loude Date	6:30	1
6:30 .	Make the Grave	7:00	
7:00	Hispectur Gauget	7:30	1
7:30	Library Marks	8:00 PM	
8:00 PM 斗	Mork & Mulby mill Lu	8:30	
8:30	Fot Cmart	9:00	
9:00 .	Bernant Get Stild I	9:30	-
9:30		10:00	B
40.00	Bost III Saturday Ninul Live/ in Alleu Hitcherski Presents		
10:00	Desi of Satoliday High Elite	10:30	
10:00	Fernwood 2Nicht/ Green Acres	10:30 11:00	:
10:00 10:30 11:00	Fernwood 2Woht/ Green Acres Fernwood 2Woht/ Green Acres Alfred Hitchcock Presents/ Best Of Saturday Night Live Coope Acres / Fernwood 2Woht	10:30 11:00 11:30	:
10:00 10:30 11:00 11:30	Fernwood 2Nicht/ Green Acres Fernwood 2Nicht/ Green Acres Alfred Hitchcock Presents/ Best Of Saturcay Night Live Green Acres/ Fernwood 2Nicht Acres/ Fernwood 2Nicht Acres/ Fernwood 2Nicht	10:30 11:00 11:30 12:00 MID	:
10:00 10:30 11:00 11:30 12:00 MID	Fernwood 2Nicht/ Green Acres Alfred Hitchcock Presents/ Best Of Saturce/ Night Live Green Acres/ Fernwood 2Nicht Bewitched/ † Looney Tunes T AB Bewitched	10:30 11:00 11:30 12:00 MID 12:30	:
10:00 10:30 11:00 11:30 12:00 MID 12:30	Fernwood 2Nrcht/ Green Acres Alfred Hitchcock Presents/ Geen Acres Green Acres/ Fernwood 2Nicht Live Green Acres/ Fernwood 2Nicht Bewitched/ † Looney Tunes 11 Bewitched The Patty Diske Shrw	10:30 11:00 11:30 12:00 MID 12:30 1:00 AM	:
10:00 10:30 11:00 11:30 12:00 MID 12:30 1:00 AM	Fernwood 2Nicht/ ■ Green Acres Alfred Hitchcock Presents / ■ Best Of Saturca / Night Live Green Acres / ■ Fernwood 2Nicht Bewitched / † Looney Tunes 11 Bewitched / † Looney Tunes 11 Bewitched The Patty Duke Show Alfred Three Sons	10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30	
10:00 10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30	Ferrivoid 2Nicht/ ■ Green Acres -Alfred Hitchcock Presents/ ■ Best Of Saturcay Night Live Green Acres/ ■ Ferrivoid 2Nicht → Bewitched/ † Looney Tunes ** → Bewitched The Patty Duke Show My Three Sons The Finnna Reed Show	10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00	:
10:00 10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00	Fernwood 2Nobi/ ■ Green Acres -Alfred Hitchcock Presents / ■ Best Of Saturce / Night Live Green Acres / ■ Fernwood 2Nicht → Bewitched / † Looney Tunes ** → Bewitched The Patty Duke Show My Three Sons ● The Donna Reed Show Mr. Ed	10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00 2:30	
10:00 10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00 2:30 2:30	Fernwood 2Notit/ ■ Green Acres -Alfred Hitchcook Presents/ ■ Best Of Saturcay Night Live Green Acres/ ■ Fernwood 2Nicht → Bewitched/ † Looney Tunes ** → Bewitched Doue Gillis The Patty Duke Show My Taree Sons The Bonna Reed Show Mr Ed Bewitched	10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00 2:30 3:00	
10:00 1 10:30 11:00 11:30 12:00 MID 1 12:30 1:00 AM 1:30 2 2:00 2:30 3:00	Fernwood 2N-ohi/ ■ Green Acres -Alfred Hitchcook Presents/ ■ Best Of Saturce/ Night Live Green Acres/ ■ Fernwood 2Nicht → Bewitched/ ↑ Looney Tunes ** → Bewitched Doble Gillis The Patty Duke Show My Three Sons ● The Donna Reed Show Mr Ed Eewitched Datue	10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00 2:30 3:00 3:30	:
10:00 · · · · · · · · · · · · · · · · · ·	Ferrivoid 2Nicht/ ■ Green Acres -Alfred Hitchcock Presents/ ■ Best Of Saturcay Night Live Green Acres/ ■ Ferrivoid 2Nicht → Bewitched/ † Looney Tunes ** → Bewitched Doele Gillis The Patry Duke Show My Three Sons The Bonna Reed Show Mr Ed Bewitched Dragnet Attreet Hitchcock Presents	10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00 2:30 3:00 3:30 4:00	
10:00 10:30 11:00 11:00 12:00 MID 12:30 1:00 AM 1:30 2:00 2:30 3:00 3:30 4:00	Fernwood 2Nobi/ ■ Green Acres -Alfred Hitchcock Presents / ■ Best Of Saturce/ Night Live Green Acres / ■ Fernwood 2Nicht → Bewitched / 1 Looney Tunes ** → Bewitched □ Doele Gillis The Patty Duke Show My Taree Sons ○ The Bonna Reed Show Mr Ed Bewitched □ Dragnet Alfred H tobcock Presents - Fernwood 2Night	10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00 2:30 3:00 3:30 4:00 4:30	
10:00 10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00 2:30 3:00 3:30 4:00 4:30	Ferrivood 2Nobi/ ■ Green Acres -Alfred Hitchcock Presents / ■ Best Of Saturce/ Night Live Green Acres / ■ Ferrivood 2Nicht → Bewitched / † Looney Tunes ** → Bewitched Doble Gillis The Patty Duke Show My Three Sons ● The Donna Reed Show Mr Ed Eewitched - Dragnet Alfred Hitchcock Presents - Fernwood 2Night Dragnet Bits	10:30 11:00 11:30 12:00 MID 12:30 1:00 AM 1:30 2:00 2:30 3:00 3:00 3:30 4:00 4:30 5:00	

6:30	Spartalous And The	e Sun Beneath The Sea				
7:00	Eureeka's Castle					
7:30	Kid	is Court				
8:00	Coun	t Duckula				
8:30	He	athcliff				
9.00	Inspector Gadget	Nickelodeon's Cartoon Kablooey				
0.30	Inspector Gadget	Flipper				
10.00	Nickelodean's Ma	ost Wanted: Yogi Bear!				
10.30	Nickelodeon's Ma	ost Wanted: Yogi Bear!				
11.00	Think Fast	Nickelodeon's Cartoon Kablooey				
11.00	Don't Just Sit There	SK8 TV				
12:00 04	Dennis The Menace	Wild & Crazy Kids				
12.00 FM	Dennis	The Menace				
12.30	Lassie	Fifteen				
1:00	Lassie	Welcome Freshmen				
1:30	Sper	cial Delivery				
200	Vinu Can't D	o That On Television				
4:00	Cert	t Of Control				
4:30	Mr. Wizerd's Month	Fifteen				
5:00	Dennis The Menace					
5:30	hild.	& Crazy Kids				
6:00	Million England	Family Double Dare				
6:30	Welcome Mesinici	ventor Garinet				
7:00	100	nev Times "				
7:30	Los	nev Tunes "				
8:00 PM		Rewitched				
8:30		Get Smart =				
9:00		Dragnet				
9:30	Rest Of Saturday Night I	Live/ Alfred Hitchcock Presents				
10.00	Fernwood 2	2Night / 📰 Green Acres				
11:00	Attred Hitchcock Prese	nts/ 🔲 Best Of Saturday Night Live				
11:30	Green Acres	s/ 📰 Fernwood 2Night				
12:00 MID	* Bewitched	Self Improvement				
12:30	Dable Gillis	American Marketing Systems				
1:DD AM	The Patty Duke Show	Gateways Research				
1:30	My Three Sons	The second second second				
2:00	The	e Donna Reed Show				
2:30		* Mr. Ed				
3:00	*	Un The Television				
3:30	U.S. Press Line	Uragnet				
4:00	Altre	Earnunod 2Ninht				
4:30		Doble Gillis				
5:00		My Three Sons				
< 5:30		Wy THEE Sons				

SUNDAY

SATURDAY

Lassie

Indicates schedule change.
 Piezse note on Wednesdays, THE DONNA REED SHOW at 2:00am will be preempted for STOP SMOKING BREAKTHROUGH.
 These programs begin on Monday, March 25.
 Looney Tunes " airs Monday through Thursday only, beginning March 25.

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Effective Date 1/1/91 SUNDAY SATURDAY MONDAY-FRIDAY ROUGH RIDERS 600 AM Courtship of Eddie's Father TNT Fun Zone 6:00 AM 6:39 AM Courtship of Eddie's Father 6:30 AM 7:00 AM Fraggie Rock 7:00 AM National Velvet 7:30 AM Fraggle Rock 7:30 AM The Popeye Show Travels of Jamie McPresters 600 AM Popsye Hour 8:00 AM 0:30 AM A-30 AM Hondo 9:00 AM Bugs Bunny & Pats 9:00 AM Fraggle Rock 9-30 AM Muppet Show 9:30 AM How the West Was Won (2000 AM TNT FAMILY CLASSIC HOLLYWOOD MORNINGS 10:00 AM (0-30 AM 40:30 AM SATURDAY SHOOTOUT 41:00 AM 41:00 AM 41:30 AM 44:30 AM 22-00 FM SUNDAY MATINEE HOLLYWOOD LEGENDS 12:00 FM 92-30 FM 12:30 FM SATURDAY MATINEE 1:00 FM 1:00 FM 4:30 FM 1:30 FM 2:00 FM SUNDAY MATINEE 2:00 PM FESTIVAL OF STARS 2:30 FM 2:30 FM SATURDAY MATINEE 3:00 FM 3:00 FM 3:30 FM 3:30 FM 4:00 FM HOLLYWOOD LEGENDS GETAWAY MATINEE 4:00 FM 4:30 FM 4:30 FM 5:00 FM Logan's Run 5:00 FM 5-30 FM 5:30 FM 600 FM HOLLYWOOD LEGENDS II Bugs Bunny & Pais 6:00 FM Gilligan's Island 6:30 FM 6:30 FM Bugs Bunny & Pals 7:00 FM 7:00 FM 7:30 FM 7:30 FM 6:00 PM THE BIG PICTURE I THE BIG PICTURE I 8:00 FM THE BIG PICTURE I 0:30 FM 8:30 FM 9:00 FM 9:00 PM 9-30 FM 9-30 FM THE BIG PICTURE II (3:00 FM THE BIG PICTURE II 10:00 PM (3-30 FM THE BIG PICTURE II 10:30 FM \$1:00 FM 41:00 FM 41:30 FM 44:30 FM 12:00 AM FESTIVAL OF STARS 12:00 AM FESTIVAL OF STARS 12-30 AM 12:30 AM 4:00 AM 1:00 AM 1:30 AM TNT Trailer Camp FESTIVAL OF STARS 4:30 AM 200 AM HOLLYWOOD LEGENDS 2:00 AM 230 AM 2:30 AM HOLLYWOOD LEGENDS 3:00 AM 3:00 AM 3:30 AM HOLLYWOOD LEGENDS 3:30 AM 4:00 AM 4:00 AM 4:30 AM 4:30 AM 5:00 AM 5:00 AM 5-30 AM 5:30 AM Eastern Times Eastern Times



<u></u>	MON	TUE	WED	THU	FRI	SAT	SUN
7 AM	Cartoon Express*	Cartoon Express*	Cartoon Express*	Cartoon Express*	Cartoon Express®	Informative Programming	Calliope®
8 AM							Jem
• •							Cartoon Express ^o
9 AC1						Kollywood Insider®	
10 AM	The New Mile Hammer	The New Mixe Hammer	The Now Mile Hemmer	The Now Mile Hemmar	The New Mile Herriner	Crime Story	
11 AM	Divorce Court	Divorce Court	Disorce Court	Diverce Court	Disonce Court	Youmque're	
	Divorce Court	Divorce Court	Divorce Court	Divorce Court	Divorce Court	It's Your Move	
Neon	The Judge	The Judge	The Judge	The Judge	The Judge	USA Movia	WWF All-Amencan Wresting
	The Judge	The Judge	The Judge	The 22052	The Juste		
1 PM	Chain Reaction	Chain Reaction	Chain Reaction	Chain Reaction	Chain Reaction		MacGyver
	Name That Tune	Name That Tune	Name That June	Name That Tune	Name That Tune		
2 PM	Wipeout	Wipcout	Wapzout	Wigcout	Wapcout	World League Football/ USA World Premiere	USA Move
	Win, Lose or Draw	Win, Lose or Drew	Win, Lose or Drew	Win, Loss or Drew	Win, Lose or Drew	Mone/USA Move	
3 PM	The Now	The New	The New Sources	The New Kocycood Squares	The New Kourses		
	S25.000 Pyramid	S25,000 Pyremid	\$25,000 Pyramid	S25,000 Pyramid	S25.000 Pyrantid		ė
4 PM	Press Your Luck	Press Your Luck	Press Your Luck	Pross Your Luck	Press Your Luck		Square Pegs
	High Rollers	High Rollers	Kigh Rollars	Kiga Rollars	Kigh Rollars		Dog Rouse
5 PM	My Sister Sam	My Sister Sam	My Sister Som	My Sister Szm	My Sister Som	Miami Vice	Swamp Thing
	Dance Party USA	Dance Party USA	Dance Party USA	Dance Party USA	Dence Party USA		Altred Hitchcock Presents
6 PM	Cartoon Express ^e	Cartoon Express ^o	Centron Expresso	Carteon Express ^o	Canoon Express ^o	MacGyvar	Murder, She wrote
7 PM	MacGyvzr	MacGyver	MzcGyvar	MacGyvar	MacGyvar	Counterstrike	USA World Premiere Movie
8 PM	World League Football (WWF Kressing Elisense 6/3)	Munder, She Wrote	Mandar, Sha Wrote	Muriczi, She Wrole	Murder, She Withe	World Lezgue Football Connects Activities Accessed, Effective 6(3)	-
9 PM		WWF Wresting Coung Effective 641)	USA World Premiere	USA Mone	Alfred Kitchcock Presents	$\overline{-}$	Counterstrike
10 PCI					The Kichicor		The Equalizer
					Stamp Thing		
11 PM	Miami Vice	Miami Vice	Miemi Vice	Ciami Vice	Mizmi Vice	USA Up All Night	Miami Vice
Mid- night	The Equabzer	The Equation	The Equation	The Equalizer	USA Up All Night	-	Kollywood Insider ^o Informative Programmin
1 AL1	Madame's Piace	USA Moraz Coung Elizano 641	CANF WRESSING	USA More			
	Hocywood Insider®				-		

Programming subject to durings. All times are Eastern Products. USA Update and Conv Plantary Entering Internal 10:52744, 7:52744 and 10:52744 and 10:52744 and 10:52744 and Sundary at 9:52744, 10:52744 and 11:52744. Programs Représentation USA entering. "Program case conv canal

VI. EXHIBITS

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KAGAN MEDIA APPRAISALS, INC.

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AFFILIATE LICENSE FEES
(mil.)
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•		
1990	1991	1992
45.0	50.0	54.0
12.7	20.6	25.6
14.0	29.0	39.6
144.7	154.2	166.5
32.0	44.0	67.0
284.8	326.4	350.0
26.9	42.9	51.9
38.0	44.0	50.0
58.0	62.6	73.0
68.0	80.0	87.0
54.8	60.8	69.0
205.0	231.9	250.5
20.0	21.3	22.4
102.0	118.0	143.0
0.5	3.0	5.0
1,106.4	1,288.7	1,454.5
	1990 45.0 12.7 14.0 144.7 32.0 284.8 26.9 38.0 58.0 68.0 54.8 205.0 20.0 102.0 0.5 1,106.4	1990199145.050.012.720.614.029.0144.7154.232.044.0284.8326.426.942.938.044.058.062.668.080.054.860.8205.0231.920.021.3102.0118.00.53.01,106.41,288.7

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PROGRAMMING & PRODUCTION EXPENSE				
	_ع (mil.)			
	1990	1991	1992	
A&E	38.4	50.6	59.8	
BET	13.9	17.9	19.3	
CNBC	22.0	23.8	25.0	
CNN+HN	153.8	178.4	195.5	
DISC	38.0	52.0	76.0	
ESPN	321.0	414.0	448.5	
FAM	37.5	47.0	54.5	
LIFE	65.0	77.0	95.0	
MTV	65.0	73.0	79.0	
NICK	54.0	65.0	80.0	
TNN	49.8	53.1	60.0	
TNT	205.0	240.0	275.0	
TWC	14.0	16.0	18.0	
USA	135.0	195.0	225.0	
VH1	27.0	19.5	21.0	
Total	1,239,4	1,522.3	1,731.6	

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AVERAGE DAY HOUSEHOLD VIEWING HOUR ('000)

	1990	1991	1992
A&E	3,000	3,630	5,050
BET	1,568	1,482	1,710
CNBC	408	720	1,272
CNN+HN	13,080	20,808	13,728
DISC	4,318	4,760	5,474
ESPN	11,880	11,424	11,880
FAM	5,958	5,688	6,336
LIFE	4,828	5,542	5,678
MTV	6,864	6,576	6,192
NICK	13,464	15,264	15,168
TNN	4,644	5,310	5,652
TNT	10,536	12,216	13,440
TWC	1,800	1,720	2,100
USA	15,120	16,872	17,040
VH1	1,824	1,968	2,328
Total	99,292	113,980	113,048

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TOTAL HOUSEHOLD VIEWING HOURS SPORTS AND NON-SPORTS PROGRAMMING

Sports Programming ('000)	1990	1991	1992
MLB on ESPN NBA on TNT CFA on ESPN NHL on ESPN	581,194 219,713 	570,906 223,623 218,079 	431,028 258,152 222,698 115,739
Sports Total	800,907	1,012,608	1,027,617
Non-Sports Programming ('000)			
USA TNT (excl. NBA) NICK FAM LIFE	5,518,800 3,625,927 4,914,360 2,174,670 1,762,220	6,158,280 4,235,217 5,571,360 2,076,120 2,022,830	6,219,600 4,647,448 5,536,320 2,312,640 2,072,470
Non-Sports Programming Total Group Total	17,995,977 18,796,884	20,063,807 21,076,415	20,788,478 21,816,095

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KAGAN MEDIA APPRAISALS, INC.

PROGRAMMING EXPENSES -SPORTS AND NON-SPORTS PROGRAMMING

	1990	1991	1992
Sports Fees (\$mil.)			
MLB on ESPN NBA on TNT CFA on ESPN NHL on ESPN	100.0 57.0 	100.0 66.0 25.0	100.0 74.0 25.0 18.0
Sports Total	157.0	191.0	217.0
Non-Sports Expense (\$mil.)			
USA TNT (excl. NBA) NICK FAM LIFE	135.0 148.0 54.0 37.5 65.0	195.0 174.0 65.0 47.0 77.0	225.0 201.0 80.0 54.5 95.0
Non-Sports Total	439.5	558.0	655.5

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Analysis of the Cable Copyright Royalty Funds: 1989-1992

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Author

Dr. Peter H. Lemieux

A Report Submitted to:

The Copyright Arbitration Royalty Panel

On Behalf of:

The Joint Sports Claimants

August, 1995

Information Architects 59 Locke Street, Watertown, MA 02172

(617) 924-7991

Analysis of the Cable Copyright Royalty Funds: 1989-1992

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Analysis of the Cable Copyright Royalty Funds: 1989-1992

Executive Summary

This report presents an analysis of the Cable Copyright Royalty Funds. Most of the report compares data collected in 1989-2 and 1992-2, though some comparisons are made between the 1992-2 and 1983-2 Funds where appropriate.

- The greatest change in the Copyright Royalty Funds between 1989 and 1992 concerned the abolition of payments for "syndicated exclusivity," or "syndex," first begun in 1983. In 1989, cable operators paid about \$115 million in "basic" cable royalties, or 57% of all royalties collected, about \$45 million (22%) at the 3.75% royalty rate on signals previously prohibited by the FCC's now defunct signal carriage rules, and about \$43 million (21%) in syndex. The reinstitution of syndicated exclusivity by the Commission ended syndex payments in 1990. By 1992, basic fees had risen to over \$140 million, with 3.75% fees remaining steady at \$45 million. The elimination of syndex payments meant that the basic fund constituted three-quarters of all royalties collected in 1992.
- The Copyright Act divides cable systems into three groups according to their "gross receipts" from basic cable service and assesses greater royalty payments on the largest systems. Payments by these so-called Form-3 systems constituted at least 97% of all royalties collected in both 1989 and 1992.
- Payments from cable operators in smaller markets, those below the top-100 in size, constituted the largest share of 3.75% royalties in both 1989-2 and 1992-2, rising from 55% of the fund in 1989-2 to 65% in 1992-2. Systems in the top-100 markets paid the majority of basic funds, about 73% in both years.
- The satellite-delivered superstations continued their dominance of both royalty funds. Payments for the three original superstations WTBS, WGN, and WWOR represented fully 75% of all basic royalties collected in 1992-2, up from 67% three years earlier. When the four other superstations are added the figure rises to 80% in 1992-2. These signals command an even larger share of 3.75% royalties: payments for the seven superstations constituted 84% of the fund in 1992-2, up from 71% in 1983-2, when 3.75% payments first began.
- The rise of the superstations continues a process that began in the early 1980's. Shares of the basic royalty fund attributable to other commercial stations – both other independent stations and network affiliates – have fallen since 1979, while the share generated by superstation carriage has grown.
- All seven superstations originate live telecasts of professional sport events between teams of Major League Baseball, the National Basketball Association, and the National Hockey League, and many of them carried collegiate events sponsored by the National Collegiate Athletic Association as well. Two of the original

superstations, WTBS and WGN, carry more sports programming than any other distant signal.

- The reinstitution of the syndicated exclusivity rules by the FCC in 1990 requires that cable operators "black out" programs when requested by local television stations that own exclusive rights to broadcast those shows in their markets. All three original superstations have, by various means, constructed program schedules that contain only syndicated programming not subject to exclusivity. WTBS, for instance, carried only older shows to which no local broadcasters own exclusive rights. WWOR and WGN, in contrast, did broadcast more recent syndicated series, but these shows were stripped out of their satellite retransmissions to cable systems, and programming not subject to exclusivity was substituted. An examination of data for 1990 showed that about 30% of the programming on WWOR and about 20% of the programming on WGN was blacked-out to comply with the exclusivity rules. Sports programming on these stations was not subject to exclusivity blackouts.
- All but three of the 59 stations that originated live professional sporting events in 1992 under the auspices of Major League Baseball, the National Basketball Association, and the National Hockey League were carried as distant signals on cable systems. However, with the exception of the three original superstations, carriage of these "flagship" stations is highly concentrated in the same geographic region as the station itself. Of those stations not carried by satellite, payments by operators in the same region as the flagship constituted an average of 97% of all such payments, with the remainder arising from adjacent geographic regions.
- An examination of patterns of distant-signal carriage suggests that a typical Form-3 system in a top-100 market carries on average just under three stations, two of which are usually original superstations. Operators in smaller markets and rural areas typically add a network affiliate, and either another independent or a noncommercial, educational station.

Analysis of the Cable Copyright Royalty Funds: 1989-1992

1. Introduction

As a result of the Copyright Act of 1976, cable television system operators must make royalty payments for the right to carry copyrighted non-network programming shown on so-called "distant" television signals, over-the-air broadcast stations serving communities that are generally located more than thirty-five miles from the cable system. In this report I will present some fundamental information concerning the pattern of royalty payments made by cable operators between 1989 and 1992. In general, figures for 1990 and 1991 fit the trends observed by comparing the endpoint years.

I have presented similar analyses in earlier royalty distribution proceedings before the former Copyright Royalty Tribunal. In particular, the current report extends the analysis of patterns and trends conducted for the 1983 and 1989 distribution proceedings.¹ All these studies have relied on the "Statements of Account" filed twice yearly by cable operators with the Copyright Office as compiled by the Cable Data Corporation. In these statements operators calculate their total royalty payment, and in some cases identify the specific television signals they carried for which payments are made. The computerized data files of the Cable Data Corporation were made available to Information Architects for detailed analysis. Because CDC constantly revises and updates its database to account for errors in transcription, revised filings by operators, and so forth, results presented in this report may differ slightly from analyses conducted by CDC itself. As in my past reports to the Tribunal, I have usually focused solely on data from the second accounting period, July through December, of each year. Customarily these periods are referred to as "1989-2" and "1992-2."

2. Three Types of Royalty Funds: Basic, 3.75% and Syndex

The Copyright Act specifies a rate structure for television signals whose carriage was authorized under Federal Communications Commission rules in effect in 1976. The Act also establishes procedures for adjusting those rates for inflation. Throughout this report I shall refer to royalties paid under this original rubric as the "basic" royalty fund. Congress also created a new body, the Copyright Royalty Tribunal, to determine the proper distribution of these fees to the various owners of the copyrighted



¹ See Peter H. Lemieux, The Structure and Growth of the Cable Copyright Royalty Fund: 1979-1989, submitted in evidence before the Copyright Royalty Tribunal, August, 1991; Analysis of the Cable Copyright Royalty Fund and Analysis of the 3.75% Cable Copyright Royalty Fund, May, 1985. Data for 1989 in Structure and Growth differs slightly from that presented here because this report is based on more recent information for 1989 from Cable Data Corporation and the Copyright Office.

programming carried over the distant television stations. The functions of the Tribunal have since been assigned to a new body, the Copyright Arbitration Royalty Panel.

The Copyright Act also included a provision that empowered the Tribunal to set new royalty rates if the FCC ever altered its rules governing distant-signal carriage. This provision was triggered in 1981 when two FCC decisions were upheld on appeal. One abolished all restrictions on the number of distant signals that may be imported, while the other removed the "syndicated exclusivity," or "syndex," rule. This rule required that cable operators delete certain syndicated television programs if requested by a local broadcaster holding the exclusive rights to those programs in its market.

In response to these FCC actions, the Tribunal conducted a rate-setting proceeding, and in its 1982 decision assigned a rate of 3.75 percent of cable system "gross receipts" for the rights to carry the programming on formerly prohibited distant signals; I shall thus refer to these fees here as the "3.75" fund.² The Tribunal also imposed a "syndex surcharge" to compensate for the repeal of the syndicated exclusivity rules. Payments under this syndex rubric ended for the most part beginning in 1990 after the Commission reinstituted syndicated exclusivity.

Table 2-1 presents the distribution of all royalties collected in 1989-2 and 1992-2 by type of fund.³ Payments to the basic fund have grown by nearly 22 percent over the three-year period from about \$115 million in 1989 to \$140 million in 1992. In contrast, payments to the 3.75% fund have remained flat, hovering about the \$45 million figure each year. As Figure 2-1 depicts, the abolition of syndex payments means that, by 1992, three out of every four dollars paid in cable copyright fees went to the basic fund.

	1989		1992	
	Amount	%	Amount	%
Basic Fees	\$115,294,502	56.8%	\$140,488,443	75.7%
3.75% Fees	44,908,676	22.1%	44,849,134	24.2%
Syndex Fees	42,871,730	21.1%	148,188	0.1%
Total	\$203,074,907	100.0%	\$185,485,765	100.0%

Table 2-1: Copyright Royalties by Type of Fund, 1989-92

The figures in this table are for the entire calendar year.

²This figure excludes revenues from "premium" cable programming for which subscribers pay a perchannel monthly fee, such as Home Box Office (HBO), the various regional sports programming services like the New England Sports Network (NESN), and "pay-per-view" services like individual movies or boxing matches.

³ This information, along with the figures presented in the following section of this report, are based on data provided to Information Architects by the Licensing Division of the Copyright Office. These figures are taken from their documents entitled "Status of Cable Royalty Receipts" for the relevant years.











3. Three Types of Cable Systems: Form-1, Form-2, and Form-3

Both the royalty fees cable operators pay, and the amount of detail they must supply in their filings, vary according to the system's "gross receipts" from basic service. The Copyright Act divides cable systems into three groups based on their gross receipts. Because each group files one of three different, and progressively more detailed, forms with the Copyright Office, it has become common to speak of "Form-1," "Form-2," and "Form-3" cable systems. Tables 3-1 and 3-2 on the next page present summary information supplied by the Copyright Office.⁴

In 1992-2, the Copyright Office reports that 8,254 Statements of Account were filed by Form-1 systems. These systems had semi-annual gross receipts of less than \$75,800 and paid a nominal royalty fee of \$28 each. Their total royalty payment for all of 1992 amounted to \$470,484 (excluding accumulated interest). Form-2 systems, those with gross receipts between \$75,800 and \$292,000, numbered 2,801 in 1992-2. These systems pay royalties as a percentage of their gross receipts. For all of 1992, Form-2 systems paid a total of \$4,748,628.

However these smaller Form-1 and Form-2 cable systems accounted for only a very small share, about three percent, of the total royalty pool in any of these years. The Form-3 systems, those whose gross semi-annual receipts totalled at least \$292,000, paid nearly all of the copyright royalties collected for distant signal retransmission. Payments by these cable systems depend on both their total gross receipts and the number and types of distant signals they carry.

Form-3 filings totalled 2,236 in 1992-2, or about 17 percent of all the cable systems filing with the Copyright Office. However these systems paid \$180,266,653 in cable copyright royalties in 1992, or over 97 percent of the entire royalty fund. Form-3 systems dominated the royalty fund in each of the years analyzed here, as they have every year since copyright payments began in 1978.

Table 3-2 also includes data on the 1990 royalty pool to show what happened when syndex royalty payments ended in that year. Because only Form-3 systems made syndex payments, their share of total royalties fell by slightly less than a percentage point in 1990 and has remained there since. Of much greater importance, of course, is the fact that, *in all these years, at least 97% of all cable copyright royalty payments are made by Form-3 systems.*

⁴ These data vary slightly from the information contained in the database compiled by the Cable Data Corporation on which the remaining analyses in this report are based.

	1989-2		1992-2	
	Number	%	Number	%
Form-1	7,806	63.7%	8,254	62.1%
Form-2	2,420	19.7%	2,801	21.1%
Form-3	2,031	16.6%	2,236	16.8%
Total	12,257	100.0%	13,291	100.0%

Table 3-1: The Distribution of Cable Systems by Form of Filing

Table 3-2: The Distribution of Copyright Royalties by Form of Filing

	1989		1990		1992	
	Amount	%	Amount	%	Amount	%
Form-1	\$457,206	0.2%	\$478,690	0.3%	\$470,484	0.3%
Form-2	4.002.767	2.0%	4,468,379	2.7%	4,748,628	2.6%
Form-3	198.614.934	97.8%	160,576,115	97.0%	180,266,653	97.2%
Total	\$203.074.907	100.0%	\$165,523,184	100.0%	\$185,485,765	100.0%

The figures in this table are the for entire calendar year.

Figure 3-1: Royalty Payments by Form, 1989-1992





How Royalty Payments Vary by Market Size 4.

Table 4-1 displays various statistics for Form-3 cable systems by the size of the television markets in which they are located. The geography of these larger cable systems changed hardly at all between 1989 and 1992. About two out of every five cable systems could be found in the 50 largest television markets, and a majority of the systems, about 55 percent, were located in one of the top-100 markets. Cable systems in markets below the top-100 in size, together with those located outside all television markets, accounted for about 45 percent of the systems.

Systems in the larger markets naturally tend to have larger subscriberships than those in more remote places. As a result, large-market systems pay substantially greater royalties, on average, than systems in smaller markets. In 1992-2, the 889 systems in the top-50 markets paid an average of \$43,000 in royalties, nearly three times the \$13,700 paid on average by the 314 systems outside all television markets. In both years, systems in the top-100 markets made up about 55 percent of the Form-3 systems, while contributing about 73 percent of the basic fund.

Though I shall cover the 3.75% fund in greater detail later, the distribution of 3.75% systems across market groups differs considerably from the pattern for basic royalties and deserves some attention here. (Systems located outside all television markets were always permitted to carry any distant signal they chose; as a result, they do not incur any 3.75% royalties.) In both years, systems in markets below the top-100 were the largest contributors to the 3.75% fund, despite being less numerous than systems in the top-50 markets. In fact, the share of small market systems in the 3.75% fund has grown since 1989. In that year, smaller market systems accounted for 54 percent of all systems making a 3.75% payment, and 55 percent of 3.75% royalties. By 1992-2, their share of systems had grown to 63 percent, and their contribution to the royalty pool rose to 65 percent. Over this four-year period the number of cable operators in the top-100 markets that chose to pay the 3.75% premium for formerly prohibited signals declined. while their numbers grew among the smaller market cable systems.

1989-2	Syste	ems	Basic	c Royalties	P. Standard	3.75% S	ystems	3.75%	& Rovalties	Con Constants
Market	Number	%	Total	Percent	Average	Number	%	Total	Percent	Average
Top-50	855	41.5%	\$32,661,037	56.2%	\$38,200	127	28.8%	\$7,302,634	31.6%	\$57,501
2nd-50	306	14.8	9,333,130	16.1	30,500	75	17.0	3.160.273	13.7	42,137
Smaller	607	29.5	12,207,136	21.0	20,111	239	54.2	12,660,604	54.8	52 973
Outside	293	14.2	3,914,392	6.7	13,360	N/A				02,010
Total	2,061	100.0%	\$58,115,695	100.0%	\$28,198	441	100.0%	\$23,123,511	100.0%	\$52,434

- word i i i i i i i i i i i i i i i i i i i	<i>Table</i> 4-1:	Royalty	Payments b	52.	Market	Location	of	the	Cable	Syster
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1992-2	Systems		Basic Royalties			3.75% Systems		3.75% Royalties		
Market	Number	%	Total	Percent	Average	Number	%	Total	Percent	Average
Top-50	889	39.7%	\$38,234,417	56.2%	\$43,008	102	23.0%	\$5,748,121	25.7%	\$56.354
2nd-50	351	15.7	11,271,093	16.6	32,111	63	14.2	2.019.148	9.0	32.050
Smaller	688	30.7	14,201,057	20.9	20,641	278	62.8	14,594,822	65.3	52,499
Outside	314	14.0	4,303,522	6.3	13,705	N/A	Sec. No. 1			
Total	2,242	100.0%	\$68,010,089	100.0%	\$30,335	443	100.0%	\$22,362,091	100.0%	\$50,479



Basic Royalties

Figure 4-1: Royalty Payments by Market Location of the Cable System







5. Instances of Carriage: Superstations and Other Types of Distant Signals

Cable operators paid significantly different amounts to import each of the hundreds of television stations carried on a distant-signal basis. In large part these distinctions arise from the way different classes of signals are treated in the Copyright Act. Royalty payments for distant-signal retransmission are determined using a "distant-signal-equivalent" (DSE) basis. Independent and foreign stations count as one full DSE for royalty purposes, while network-affiliated and non-commercial, educational stations are valued at 0.25 DSE. Using this system, a cable system carrying a distant independent station, a Canadian station, a distant educational signal, and a network affiliate would pay royalties for 2.50 DSE's (=1.00+1.00+0.25+0.25).

Throughout the distribution proceedings, the Tribunal and the parties have employed an alternative measurement concept, that of "instances of carriage," which treats all types of signals equally. On this basis, our hypothetical cable system with 2.5 DSE's would generate four instances of carriage, one for each signal carried. I will use this instances of carriage measure in the analysis to follow.

Table 5-1 on the next page presents the distribution of instances of distant-signal carriage in both 1989-2 and 1992-2 across seven major types of television stations.⁵ In the most recent year, the 2,242 Form-3 cable systems carried, on average, 3.29 distant signals, for a total of 7,377 different instances of carriage. Over the period since 1989-2, the average number of distant signals carried on an average system fell 6.5%; growth of the distant-signal universe failed to keep pace with the number of Form-3 systems.

Looking at the specific signal categories, the first two groups, original and newer "superstations," refer to independent television stations delivered via satellite. The original superstations are WTBS, Atlanta, WGN, Chicago, and WWOR, New York-Secaucus. These three signals were later joined by four other superstations: WPIX, New York, WSBK, Boston, KTLA, Los Angeles, and KTVT, Dallas-Fort Worth. The other signal types include the remaining independent stations, network-affiliated stations, non-commercial educational stations, and Canadian and Mexican signals.⁶

In both years, the seven satellite-delivered superstations constituted a majority of the instances of carriage. By the end of 1992, however, five of these seven types of signals were carried by fewer cable operators than in 1989. Only distant carriage of the original superstations and educational signals grew during this period. As a result, although cable operators retransmitted some 782 different distant signals in 1992-2, more than half of all distant television signals retransmitted by Form-3 cable operators, nearly 3,800 instances in all, were one of just three superstations – WTBS, WGN, and WWOR. Collectively the seven superstations' accounted for 55% of the total number of



⁵ As noted earlier, these data come from the Cable Data Corporation and differ slightly from the figures provided by the Copyright Office presented above.

⁶As in my report to the Tribunal in 1989, these figures include the carriage of signals generating both basic and 3.75% royalty payments, and signals carried on both a fully-distant and partially-distant basis.

		Instances of	of Carriage		Change	1989-92
	1989	9-2	1992	2-2	Growth	Diff %
	Number	%	Number	%	Rate	Share*
Original Superstations	3,413	47.0%	3,787	51.3%	11.0%	+4.3%
WTBS	1,874	25.8	2,086	28.3	11.3%	+2.5%
WGN	1,006	13.9	1,234	16.7	22.7%	+2.9%
WWOR	533	7.3	467	6.3	-12.4%	-1.0%
Other Superstations	349	4.8%	276	3.7%	-20.9%	-1.1%
WPIX	190	2.6	133	1.8	-30.0%	-0.8%
WSBK	88	1.2	84	1.1	-4.5%	-0.1%
KTLA	35	0.5	32	0.4	-8.6%	-0.0%
KTVT	36	0.5	27	0.4	-25.0%	-0.1%
All Superstations	3,762	51.8%	4,063	55.1%	8.0%	+3.2%
Other Independents	1,238	17.1%	1,131	15.3%	-8.6%	-1.7%
Network Affiliates	1,654	22.8	1,559	21.1	-5.7%	-1.7%
Educational	497	6.8	533	7.2	7.2%	+0.4%
Canadian	102	1.4	89	1.2	-12.7%	-0.2%
Mexican	3	0.0	2	0.0	-33.3%	-0.0%
All other signals	3,494	48.2%	3,314	44.9%	-5.2%	-3.2%
Total	7,256	100.0%	7,377	100.0%	1.7%	
Number of Systems	2,061	The share had	2,242		8.8%	The second
Signals per System	3.52	and the second	3.29		-6.5%	

Table 5-1: The Distribution of Instances of Carriage by Type of Signal

*Absolute difference in percent shares of all distant signals. E.g., superstations represented 51.8% of all instances in 1989-2, but 55.1% in 1992-2, for a difference of +3.2%.

instances of carriage in 1992-2, up from 52% four years earlier. Figure 5-1 depicts this fact graphically.

One characteristic that distinguishes these seven stations from most other independent stations is that each superstation carries a number of live sporting events. Each station telecast the games of a Major League Baseball team in 1992. In addition, WTBS, WGN, WWOR, KTLA, and KTVT were the "flagship" stations for a team in the National Basketball Association, while WSBK complemented its carriage of professional baseball with telecasts of National Hockey League games. Finally, WTBS, WGN, WWOR, and WSBK augmented their telecasts of professional sporting events with games between members of the National Collegiate Athletic Association.



Figure 5-1: Instances of Carriage by Type of Distant Signal









6. Basic Royalties Attributable to Types of Distant Signals

Basic royalty payments are attributed to signals by distributing each cable system's total basic payment across all the distant signals it carried in proportion to their DSE values. Because foreign and independent stations, including superstations, were assigned higher DSE values in the Copyright Act than network-affiliated and educational stations, these signals are attributed proportionately higher royalties. Cable operators thus pay a greater share of their gross receipts to carry independent and foreign stations.

Table 6-1 presents the amount of basic royalties paid to carry each of the seven types of distant signals in 1989-2 and 1992-2. The superstations, especially the original superstations, increasingly dominate the basic royalty pool. In 1989, cable operators paid two out of every three dollars in basic royalties to carry just three television stations – WTBS, WGN, and WWOR. Three years later their share had grown to three out of every four royalty dollars, because royalty payments for these stations grew over 30 percent, a rate higher than any other category.

WTBS by itself generated 45 percent of all royalties, with WGN contributing another 20 percent. Both these figures represent substantial increases over their values in 1989. Royalties for WWOR grew more slowly than did payments for the other two stations, though in comparison to the other superstations and the other independents WWOR did relatively well.

Thus three out of every four dollars of basic royalties in 1992-2 were paid to carry one of the three original superstations. This growth more than compensated for the decline in royalties attributable to the other superstations, so that superstation royalties increased overall from 76% in 1989-2 to 80% three years later. These data appear in Figure 6-1.

The growth of the superstations has come at the expense of other U.S. commercial stations, both independents and affiliates. Other independents generated 12 percent of basic royalties in 1992-2, down from 15 percent two years earlier. Network affliates accounted for 3.9 percent of the fund in 1992-2, down one percentage point from their share three years earlier. The comparison between independents and network affiliates shows the effect of the DSE method of valuation. Though more cable operators carry distant affiliates than distant independents, the affiliates' share of the royalty fund is much smaller because they are valued for copyright purposes at only one-fourth the amount attributed to independents. Educational and Canadian stations remained steady at about two percent of the royalty pool each in both years, while imported Mexican stations accounted for less than one-half of one percent of all Form-3 royalties collected in either year.

F	CONTRACTOR STREET	Change 1	989-92			
	1989-2		1992-2		Growth	Diff %
	Amount	%	Amount	%	Rate	Share*
Original Superstations	\$39,003,510	67.0%	\$50,893,371	75.0%	30.5%	+8.0%
WTBS	22.794.321	39.2	30,501,138	45.0	33.8%	+5.8%
WGN	10,141,793	17.4	13,872,980	20.4	36.8%	+3.0%
WWOR	6,067,396	10.4	6,519,253	9.6	7.4%	-0.8%
Other Superstations	5,283,485	9.1%	3,431,850	5.1%	-35.0%	-4.0%
WPIX	2,258,570	3.9	1,669,761	2.5	-26.1%	-1.4%
WSBK	1,448,474	2.5	1,218,855	1.8	-15.9%	-0.7%
KTIA	872.385	1.5	386,867	0.6	-55.7%	-0.9%
KTVT	704,056	1.2	156,367	0.2	-77.8%	-1.0%
All Superstations	\$44,286,995	76.1%	\$54,325,221	80.1%	22.7%	+4.0%
Other Independents	8,698,931	14.9%	8,137,902	12.0%	-6.4%	-3.0%
Network Affiliates	2,846,926	4.9	2,615,204	3.9	-8.1%	-1.0%
Educational	1,183,328	2.0	1,423,933	2.1	20.3%	+0.1%
Canadian	1,177,454	2.0	1,337,176	2.0	13.6%	-0.1%
Mexican	9,443	0.0	3,169	0.0	-66.4%	-0.0%
All other signals	\$13,916,082	23.9%	\$13,517,384	19.9%	-2.9%	-4.0%
Total	\$58,203,077	100.0%	\$67,842,605	100.0%	16.6%	

Table 6-1: The Distribution of Basic Royalties by Type of Distant Signal

The rapid growth of the original superstations continues a trend discussed in my 1989 report to the Copyright Royalty Tribunal.⁷ In Figure 6-2 I present an updated version of Figure 4 from that report which depicts total royalty payments by type of signal since 1979-2. (Figure 6-3 presents the same information expressed as percents of the basic royalty fund.) In that half-year, carriage of the original superstations generated just under \$1.9 million, or 26 percent of the entire basic fund. For the second half of 1992 payments had risen to nearly \$51 million, or fully 75 percent of all basic royalties.

⁷ Lemieux, Structure and Growth, pp 8-9.

Figure 6-1: The Distribution of Basic Royalties by Type of Signal









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Figure 6-2: Basic Royalty Payments by Type of Signal, 1979-1992









Figure 6-3: Shares of the Basic Royalty Pool by Type of Signal, 1979-1992



7. 3.75 Royalties Attributable to Types of Distant Signals

I turn now to a consideration of the 3.75% royalty pool. These fees are collected for the carriage of distant signals formerly prohibited by the FCC's carriage rules. Operators began making these royalty payments in 1983, after the abolition of the rules was upheld on appeal. I discussed the structure of these payments in my 1983 report to the Copyright Royalty Tribunal, but not in my 1989 report. By comparing 3.75% royalties for 1983 and 1992 we can see how this fund has evolved from its inception.⁸

Only Form-3 cable systems located in a television market pay royalties under the 3.75% rubric; systems located wholly outside all television markets were never subject to the signal carriage rules, exempting them from these royalties. In addition, 3.75% fees are not assessed for the retransmission of noncommercial educational stations or "specialty" (foreign-language or religious) stations. The carriage rules permitted operators to import an unlimited number of these signals.

In broad terms, the number of signals an operator was permitted to import depended on the type of signal being carried and the size of the market in which the cable system was located. Importation of distant network affiliates was nearly always prohibited by the rules. Carriage of independent stations varied by market size. Cable operators in the top-100 markets were usually able to carry two distant independents, while operators in smaller markets could carry only one. Operators carrying signals in excess of these limits when the rules were instituted in 1972 had their carriage patterns grandfathered. Operators could also petition the Federal Communications Commission for a specific waiver.

Table 7-1 presents a comparison of the 3.75% royalties collected in the second half of 1983 with the amounts cable operators paid in 1992-2. The fund has more than tripled over its nine year history, from just under \$7 million in 1983-2 to over \$22 million in 1992. Nearly all of this growth has been concentrated in just a single category of distant signal, the original superstations. These three stations accounted for 62% of the 3.75% royalty pool in 1983-2; by the end of 1992 this figure had risen to 81%. Payments for WTBS alone now constitute two out every five dollars collected, with another quarter of the royalty pool resulting from carriage of WGN. Royalties for WWOR grew more slowly so its share of the 3.75% fund actually declined between 1983 and 1992.



⁸ In my 1983 report on the 3.75% fund, *Analysis of the 3.75% Cable Copyright Royalty Fund*, I explained that royalties in this fund could not be directly attributed to a specific signal. In many cases, operators could have chosen to drop a current distant independent station to add another distant independent yet remain within the signal quotas. 3.75% royalties in these cases should be seen as payments to carry the entire package of signals that would previously been prohibited.

Take the case of a cable system in a top-100 market carrying both WTBS and WWOR according to the former rules. If the operator adds WGN, a 3.75% royalty is due, but all of the fee cannot be attributed to WGN. Either of the other signals could have been dropped to accomodate WGN, so all three equally contributed to the 3.75% royalty and deserve a one-third share of the payment.

I have applied this same method of allocation to the 1992-2 data, making it directly comparable with the 1983 figures. I did not allocate 3.75% royalties in my 1989 report to the Tribunal.

\$6.872.961

Total

		3.75% F	Royalties		Change 1983-92	
	1983-2	2	1992-2	2	Growth	Diff %
	Amount	%	Amount	%	Rate	Share*
Original Superstations	4,295,073	62.5%	18,143,764	81.2%	322.4%	+18.7%
WTBS	2,144,908	31.2	9,504,186	42.5	343.1%	+11.3%
WGN	1,162,823	16.9	5,706,775	25.5	390.8%	+8.6%
WWOR	987,342	14.4	2,932,802	13.1	197.0%	-1.2%
Other Superstations	597,110	8.7%	678,406	3.0%	13.6%	-5.7%
WPIX	230,452	3.4	197,389	0.9	-14.3%	-2.5%
WSBK	328,216	4.8	240,275	1.1	-26.8%	-3.7%
KTLA	27,074	0.4	64,761	0.3	139.2%	-0.1%
κτντ	11,368	0.2	175,981	0.8	1448.0%	+0.6%
All Superstations	\$4,892,183	71.2%	\$18,822,170	84.2%	284.7%	∻13.1%
Other Independents	1,210,472	17.6%	2,186,276	9.8%	80.6%	-7.8%
Network Affiliates	707,725	10.3	1,286,681	5.8	81.8%	-4.5%
Canadian	62,581	0.9	47,767	0.2	-23.7%	-0.7%
Mexican	0	0.0	0	0.0	Not app	licable
Educational	Not applicable		Not applica	able	Not app	licable
All other signals	\$1,980,778	28.8%	\$3,520,724	15.8%	77.7%	-13.1%

Table 7-1: 3.75% Royalties by Type of Signal

The other superstations commanded a smaller share of the fund in 1992 than they did in 1983. The two signals carried more widely in 1983, WPIX and WSBK, actually generated fewer 3.75% royalties nine years later, while payments for the two smaller signals, especially KTVT, grew. Royalties for the remaining commercial stations also grew between 1983 and 1992, but not fast enough to maintain their share of the royalty pool. The shares of the 3.75% fund attributable to affiliates and to other independent stations both fell by almost half over the nine-year period.

\$22,342,894

100.0%

225.1%

100.0%

The much higher royalty fees for these formerly prohibited signals makes decisions about their carriage a much more serious matter for cable operators. On average, an independent station carried under the 3.75% rubric in 1992-2 cost a cable operator about 40 cents per subscriber per month; network affiliates thus cost some 10 cents since their DSE value is one-fourth that of independent stations.⁹ In contrast,

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⁹ The figures for 3.75% carriage in 1992-2 were computed as follows: Carriage of 463 excess fully-distant independents and 85 affiliates constituted a total of 484.25 DSE's, for which some \$21,049,000 in 3.75% royalties were collected for the six-month accounting period, or \$7,245 per DSE per month. Subscribers to these 383 systems totalled some 6,985,000, or about 18,240 per system. Dividing \$7,245 by 18,240 yields the figure of 40 cents given in the text for an independent station.

independents carried at the basic rate cost cable operators on average only 4 to 13 cents oper subscriber per month; the cost for network affiliates thus ranged from 1 to 3.25 cents. (No single figure can be given for basic royalties because they are assessed on a sliding scale depending on the total number of distant signals carried.) Given these much higher royalties, cable operators scrutinize more carefully the programming available on candidate 3.75% signals before making the decision to add them to the programming lineup.

8. The Effects of the Reinstitution of Syndicated Exclusivity

As noted in section 2 above, the FCC reinstituted its syndicated exclusivity rules beginning in 1990. In response, the Copyright Royalty Tribunal largely eliminated the "syndex surcharge" originally imposed in 1983, and syndex payments by cable operators fell from about \$40 million in 1989 to less than \$200,000 by 1992. The reinstitution of these rules also affected the types of programming carried on the satellite-delivered superstations, particularly on the three original superstations.

The syndicated exclusivity rules require that operators "black out" programs when requested by local television stations that own exclusive rights to broadcast those shows in their markets. All three of the original superstations have, by various means, constructed program schedules that contain only syndicated programming not subject to exclusivity. WTBS, for instance, telecast only older shows like *Andy Griffith* to which no local broadcasters own exclusive rights. WWOR, in contrast, did broadcast more recent syndicated series like *Cagney and Lacey* in the New York market, but these shows were stripped out of the satellite retransmission of WWOR to cable systems, and programming not subject to exclusivity substituted. WGN followed a similar strategy. In contrast, the other four satellite-delivered superstations did not employ such measures to adjust to the new exclusivity regime.

I have examined the patterns of syndex deletions on WGN and WWOR using data from the A.C. Nielsen Company. Their report, "Syndex Protected Quarter Hours: WGN and WOR Sweep Months, 1990" was submitted by the Motion Picture Association of America to the Copyright Royalty Tribunal for its 1990 Cable Distribution Proceeding. No more recent version of this report is available at this time. I have assumed the information contained in this report is accurate; I cannot independently verify it.

I begin my analysis by looking first at the aggregate results of syndex deletions. For each of four Nielsen ratings periods, known popularly as "sweep" periods, I have totalled up the number of deleted quarter-hours listed in the report and taken it as a percentage of the total number of quarter-hours in the period. Table 8-1 on the next page presents the results.

WWOR deleted 29 percent of its programming broadcast during the four sweep periods of 1990; for WGN, the comparable figure was 21 percent. For both stations, the rate of deletions increased in the November sweep period, the first rating period of the 1990-91 television season. Over 40 percent of WWOR's November programming was not available in cable households served by its satellite feed, while nearly 30 percent of WGN's programmng suffered a similar fate. Because the current distribution proceeding covers the years 1991 and 1992, as well as 1990, I have chosen to use the November data for the more detailed analysis to follow.

For each station I have presented its programming on Sunday, November 11, 1990, and on Wednesday, November 14, 1990 in Tables 8-2 to 8-5. In none of these four instances are the levels of deletions unrepresentative of other Sundays and Wednesdays in November, 1990. To examine the composition of the satellite feed, I used the *TV Week* magazine section of the *Boston Sunday Globe*, for November 11, 1990. This information

	Quarter		
	Deleted	Total	Percent
WWOR			
February	618	2,496	24.8%
May	649	2,688	24.1%
July	696	2,688	25.9%
November	1,132	2,688	42.1%
Total	3,095	10,560	29.3%
WGN			
February	484	[.] 2,496	19.4%
May	515	2,688	19.2%
July	527	2,688	19.6%
November	736	2,688	27.4%
Total	2.262	10,560	21.4%

Table 8-1: Amounts of Programming Deleted to Comply with theSyndicated Exclusivity Rules: WWOR and WGN, 1990

was compared to the list in the MPAA/Nielsen Report to determine the number and identity of the deleted programs for Tables 8-2 through 8-5. Each deletion is marked by black shading in the central column, with the name of the deleted program given in the right-hand column. The shaded period of 7 p.m. through 1:59 a.m. Eastern Time each day indicates the periods known as "prime-time-access" and "prime time" in one of the four continental U.S. time zones.

Although schedules from only two specific dates are presented here, they are quite representative of the programming lineups found on other weekend or weekdays. During the week, WWOR and WGN like most independent stations "strip" their programming, showing different episodes of the same program at the same time each day. Weekend schedules tend to be slightly different: There is a larger proportion of movies to syndicated series, and sports programming is more common on weekend afternoons than weekday afternoons.

On WWOR, 52 of the 96 quarter-hours of programming telecast that second Sunday of November, 1990, some 54 percent, were deleted from the satellite feed. The following Wednesday 40 quarter-hours, or 42 percent, were removed from the satellite version of WWOR. Distant viewers of WGN were fed 36 quarter hours of replacement programming on that Sunday (38%), and 34 quarter hours (40%) on the following Wednesday.

To take one example, WWOR broadcast the police drama *Cagney and Lacey* each weekday afternoon at 2 p.m. in the New York market, but viewers of the satellitedelivered version of the signal saw the older Western serial *Laredo*. Overall on that Wednesday, some 10 hours of programming on WWOR were blacked out to avoid

Time	Local Programming	Deleted	Substituted Programming
6:00 AM	Welcome Back, Kotter		
6:30 AM	Archie Bunker's Place		
7:00 AM	Top Cat		
7:30 AM			
8:00 AM	Chicago's Very Own		
8:30 AM	Heritage of Faith		
9:00 AM	Mass for Shut-Ins		
9:30 AM	Leave it to Beaver		
10:00 AM	Star Search		
10:30 AM			
11:00 AM	Wild, Wild West		
11:30 AM			
12:00 PM	Movie: From Here to Eternity		
12:30 PM			
1:00 PM		1000	
1:30 PM			
2:00 PM	Movie: 20,000 Years in Sing Sing (1933)		
2:30 PM			
3:00 PM			
3:30 PM		Service and	
4:00 PM	Movie: Boys Town		Movie: Valley of Hunted Men
4:30 PM			
5:00 PM			Movie: Spanish Cape Mystery (1935)
5:30 PM			
6:00 PM	Movie: National Lampoon's Vacation		Movie: In Old Amarillo
6:30 PM			
7:00 PM			Movie: The Missourians (1950)
7:30 PM			
8:00 PM	Movie: Twilight Zone: The Movie		Movie: Bowery Boy (1941)
8:30 PM			
9:00 PM			Movie: Street Bandits (1951)
9:30 PM	A PARA A PARA PARA		
10:00 PM	News		
10:30 PM			
11:00 PM	Monster		
11:30 PM	St. Elsewhere		
12:00 AM			
12:30 AM	Movie: Whatever Happened to Baby Jane?		Movie: Tahiti Honey (1943)
1:00 AM			and the second second second second second second second second second second second second second second second
1:30 AM			
2:00 AM			Movie: Pride of the Plains
2:30 AM			
3:00 AM			
3:30 AM	Soap		
4:00 AM	Movie: Almost Summer (1978)		
4:30 AM			
5:00 AM			
5:30 AM			

Table 8-2: Program Schedule for WGN, Sunday, November 11, 1990





Time	Local Programming	Deleted	Substituted Programming
6:00 AM	Facts of Life	and the second	
6:30 AM	Faith 20	1.	
7:00 AM	Fantasy Island		Success 'N Life
7:30 AM	Mighty Mouse and Friends		
8:00 AM	Wake, Rattle and Roll	1	Wake. Rattle and Roll*
8:30 AM	Wake, Rattle and Roll		and the second of the second second second second second second second second second second second second second
9:00 AM			
9:30 AM	Bewitched		
10:00 AM	Magnum, PI	The second	
10:30 AM		A STATISTICS	
11:00 AM	Joan Rivers		
11:30 AM		1.1	
12:00 PM	Geraldo		
12:30 PM		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
1:00 PM	News		
1:30 PM			
2:00 PM	Andy Griffith		
2:30 PM	Dick Van Dyke		
3:00 PM	Honeymooners	1 Standard	
3:30 PM	Cooky's Cartoon Club		
4:00 PM	Disney's Adventures of the Gummi Bears		Wheelie and the Chopper
4:30 PM	Duck Tales		
5:00 PM	Chip N' Dale		
5:30 PM	Tale Spin		M.A.S.K
6:00 PM	Charles in Charge	Section 11	
6:30 PM	Perfect Strangers		Abbott and Costello
7:00 PM	Cheers		I Dream of Jeanie
7:30 PM	Night Court	A STATE STATE	
8:00 PM	Movie: Biloxi Blues		Movie: The Bachelor's Daughter (1946)
8:30 PM			
9:00 PM			
9:30 PM			
10:00 PM	News		
10:30 PM		- Annes	
11:00 PM	Night Court	Sec. Sec. Sec.	
11:30 PM	Hunter		Matt Heim
12:00 AM			
12:30 AM	Movie: Secret of Monte Carlo		
1:00 AM			
1:30 AM	Movie: Security Risk	A STATE	
2:00 AM			
2:30 AM	Twilight Zone		
3:00 AM	Paid Programming		
3:30 AM	Soap		
4:00 AM	Gay Purree		Movie: Trail of Kit Carson
4:30 AM			
5:00 AM			Movie: Hose of the Yukon
5.20 AM			

Table 8-3: Program Schedule for WGN, Wednesday, November 14, 1990

*Nielsen reports that the 8:00 a.m. showing of "Wake, Rattle and Roll" was deleted, but the Boston Globe includes it in its listing. Both sources agree that the 8:30 a.m. telecast was not deleted.

Time	Local Programming	Deleted	Substituted Programming
6:00 AM	Paid Programming	and an an oral of	
6:30 AM	Hispanic Horizons		
7:00 AM	Point of View		
7:30 AM	Sunday Mass		
8:00 AM	Jetsons		No Data
8:30 AM	Bugs and Daffy		No Data
9:00 AM			
9:30 AM	Widget		No Data
10:00 AM	Steampipe Alley		
10:30 AM	the second second second second second		
11:00 AM	Out of this World		Paid Programming
11:30 AM	Munsters Today	1 Section in the	
12:00 PM	Silver Spoons	and the second	
12:30 PM	New Lassie	The second second	Sportsman
1:00 PM	Movie: Johnny Be Good		Movie: A Matter of Humanities (1968)
1:30 PM			
2:00 PM			
2:30 PM			
3:00 PM	Movie: Easy Money		Movie: Badge or the Cross (1971)
3:30 PM			
4:00 PM			
4:30 PM			
5:00 PM	Superboy		It Takes a Thief
5:30 PM	My Secret Identity		
6:00 PM	Knight Rider		
6:30 PM			
7:00 PM	Movie: Chinatown		Movie: Clear and Present Danger (1970)
7:30 PM			
8:00 PM			
8:30 PM			
9:00 PM			Run for Your Life
9:30 PM			
10:00 PM	News		
10:30 PM	On Scene: Emergency Response		CinemAttractions
11:00 PM	Arsenio Hall		Paid Programming
11:30 PM			
12:00 AM			
12:30 AM		Call Ling Statistics	
1:00 AM			
1:30 AM			
2:00 AM			
2:30 AM		The states in the	
3:00 AM	Home Shopping Spree		and the second second second second second second second second second second second second second second second
3:30 AM		all' in allowed	
4:00 AM			
4:30 AM			
5:00 AM			
5:30 AM			

Table 8-4: Program Schedule for WWOR, Sunday, November 11, 1990





Time	Local Programming	Deleted	Substituted Programming
6:00 AM	No Data	1 States	No Data
6:30 AM		is the second	
7:00 AM	Jetsons		
7:30 AM	Merrie Melodies		Children's Room
8:00 AM	Bugs, Daffy and Friends		
8:30 AM	Mighty Mouse and Friends	Constant Line	Today's Monitor
9:00 AM	Bugs' Buddies		One Norway Street
9:30 AM	Silver Spoons		
10:00 AM	Nine Broadcast Plaza		
10:30 AM			
11:00 AM			
11:30 AM		a sugar	
12:00 PM			
12:30 PM			
1:00 PM			
1:30 PM		and the second	
2:00 PM	Cagney and Lacey		Laredo
2:30 PM			
3:00 PM	Hawaii Five-O		
3:30 PM		P Contraction of the	
4:00 PM	Hunter		Run for Your Life
4:30 PM			
5:00 PM	227		It Takes a Thief
5:30 PM	Alt		
6:00 PM		Constant for	
0:30 PM	Perfect Strengere		Comparts Millional
7:00 PM	Who's the Bose?		Comeay wheel
8.00 PM	Shades of LA		Owon Marshall
8:30 PM	Shades of L.A.		Owen Marshall
9:00 PM	Bounty Hunters		To Be Announced
9:30 PM			
10:00 PM	News	C. C. C. C. C. C. C. C. C. C. C. C. C. C	
10:30 PM			
11:00 PM	Amen		Fifty Years Ago Today
11:30 PM	Arsenio Hall		Comedy Tonight
12:00 AM			Bachelor Father
12:30 AM	Twilight Zone		Paid Programming
1:00 AM	Joe Franklin	Courses and	
1:30 AM			
2:00 AM	Paid Programming		
2:30 AM			
3:00 AM	Home Shopping Spree		
3:30 AM			
4:00 AM			
4:30 AM			
5:00 AM			
5:30 AM			

Table 8-5: Program Schedule for WWOR, Wednesday, November 14, 1990



conflicts with broadcast stations that held exclusive rights to those shows in their local markets. For WGN, a total of 8 1/2 hours of programming was deleted that day, including the recent movie *Biloxi Blues* for which the 1946 film *The Bachelor's Daughter* was substituted. Notice that a large portion of the evening "prime-time" hours were blacked out on both stations. Audience viewing levels reach their peak during this period.

The Sunday schedules show even higher deletion rates for both stations. On WWOR, 13 hours of programming were deleted, including three recent movies, for which three older movies from the late 1960's and early 1970's were substituted. WGN was forced to delete four movies from its line-up, replacing them with films produced in 1951 or before.

One type of programming not subject to deletions for syndicated exclusivity is live sporting events. Both WGN and WWOR are flagship stations for, among others, Major League baseball teams. I examined the program schedules for those two stations for Sunday, July 22, 1990, to get a flavor for the effect of sports programming on deletion rates. On that date both stations telecast baseball games on Sunday afternoon, rather than their November line-up of movies and syndicated programming. Together some 7 1/2 hours of sports programming was shown on these stations to *all* distant households. In contrast, all of the equivalent period in November was blacked out on WWOR, as was about half the equivalent period on WGN.

9. The Geographic Distribution of Sports Flagship Stations

I examined the regional distribution of distant-signal carriage for all professional sports "flagship" stations, those owning the rights to originate live telecasts of professional events. As noted earlier, all seven superstations are the flagship station for one or more professional sports teams; in all, 52 stations originated live telecasts of professional baseball, basketball, and hockey games in 1992.

I have generally followed the Census Bureau's regional division of the country, with the exception of placing Maryland, Delaware, and the District of Columbia in the "Mid-Atlantic" region, rather than the "South," to create more equally-sized categories. I have also assigned the tiny numbers of subscribers in Puerto Rico and the Virgin Islands to the South. Here are the assignments of states to regions:

Kegion	States
New England	CT, MA, ME, NH, RI, VT
Mid-Atlantic	DC, DE, MD, NJ, NY, PA, WV
South	FL, GA, NC, PR, SC, VA, VI
North Central	IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI
South Central	AL, AR, KY, LA, MS, OK, TN, TX
Mountain	AZ, CO, ID, MT, NM, NV, UT, WY
Pacific	AK, CA, HI, OR, WA

Table 9-1 shows the regional distribution of all instances of carriage, subscribers, and royalties for both the entire country and for the three original superstations. While these data apply to 1992-2, similar patterns can be found in data for 1990-2 and 1991-2.

		Region							
	New England	Mid-Atlantic	South	North Central	South Central	Mountain	Pacific		
Instances of Carriage									
All Form-3	6.4%	15.3%	15.7%	24.6%	18.2%	6.1%	13.6%		
WTBS	5.6%	13.9%	15.4%	26.1%	19.6%	6.3%	13.1%		
WGN	0.6%	4.8%	19.8%	33.0%	25.6%	7.9%	8.3%		
WWOR	15.4%	38.5%	20.1%	10.5%	8.4%	4.1%	3.0%		
Subscribers									
All Form-3	7.1%	21.2%	16.0%	20.5%	13.8%	4.9%	16.5%		
WTBS	6.2%	20.5%	15.5%	21.6%	14.7%	5.1%	16.4%		
WGN	0.3%	5.1%	23.2%	28.7%	22.9%	7.7%	12.1%		
WWOR	14.0%	40.8%	23.8%	8.9%	4.1%	2.7%	5.6%		
Total Royalties									
All Form-3	7.1%	19.6%	17.1%	19.8%	14.4%	5.7%	16.4%		
WTBS	6.4%	18.7%	17.0%	20.8%	15.3%	5.9%	15.9%		
WGN	0.4%	5.2%	22.8%	27.7%	23.4%	8.7%	11.8%		
WWOR	11.6%	36.5%	26.9%	9.3%	5.0%	3.8%	7.0%		

<i>Table 9-1:</i>	Regional Distribution of Carriage,	Subscribers	and Total	Royalties
	for the Original Superstations			·



		Instances			Subscriber	6		Royalties	
	Same	Adjacent	Other	Same	Adjacent	Other	Same	Adjacent	Other
	Region	Regions	Regions	Region	Regions	Regions	Region	Regions	Regions
Original Superstations									
WTBS	15%	34%	51%	16%	35%	49%	17%	34%	49%
WGN	33%	58%	9%	29%	59%	12%	28%	60%	12%
WWOR	39%	46%	15%	41%	47%	12%	36%	48%	16%
Average	29%	4 3%	25%	28%	47%	25%	27%	47%	26%
Other Superstations									
WPIX	72%	26%	2%	66%	33%	1%	63%	36%	1%
WSBK	74%	21%	5%	61%	26%	13%	66%	18%	16%
KTLA	56%	38%	6%	66%	18%	16%	71%	20%	8%
KTVT	93%	7%	0%	93%	7%	0%	92%	8%	0%
Average	74%	23%	3%	71%	21%	7%	73%	21%	6%
Other Flagships									
Average	<u>93%</u>	4%	0%	97%	3%	0%	97%	3%	0%

Table 9-2: Regional Distribution of Carriage, Subscribers and Total Royaltiesfor Professional Sports Flagship Stations

The original superstations, especially WTBS, all have a broad reach, with viewers in each of the seven regions. However WGN and WWOR show some weighting toward their own regions. Carriage of WGN is more extensive in the central regions around Chicago, with disproportionately less carriage along both coasts. WWOR, in contrast, has substantial carriage all along the Eastern seaboard, with much less exposure west of the Mississippi.

Table 9-2 presents summaries for all professional sports flagship stations, broken out by type of signal. In each case I present the percentage of instances of carriage, total subscribers, and total royalties (both basic and 3.75%) attributable to cable systems in the same region as the flagship station, in geographically adjacent regions, and in more distant locales. The superstations are presented individually and averaged within categories; for the other flagships I show only the average values. (Figure 9-1 presents the information on the distribution of total royalties in a graphical fashion.)

Despite their nationwide availability via satellite, the newer superstations tend to be more geographically concentrated than the three original superstations. About threequarters of the instances of carriage of other superstations takes place in the same region as the station itself, compared to a figure of less than 30% for the original superstations. This pattern of regional concentration exhibited by the newer superstations holds even more strongly for the remaining flagship stations. All of these stations are retransmitted in only one or at most a second, adjoining region, with the vast bulk of carriage concentrated in the same region as the station itself.







Original Superstations

10. Patterns of Signal Carriage on the Average Form-3 System

I conclude this report with an examination of typical signal carriage patterns on Form-3 cable systems in 1992-2. I present two different ways of thinking about "typical" patterns, one based on averages across all cable systems, the other a ranking of the most common patterns of signal carriage.

Table 10-1 presents the average number of distant signals carried by type for Form-3 systems in each of the four market size categories. I have broken out the data by market because the patterns of carriage differ between top-100 market systems and systems in more rural settings.

A typical Form-3 system carries at least one, and usually a second original superstation. The other superstations are carried much less widely and, like the original superstations, their rates of carriage are fairly similar all across the country. Greater differences appear in patterns of carriage for the other types of signals. Smaller market and rural systems usually carry at least one, and sometimes more, distant networkaffiliated station, and often an independent or educational station as well. These types of signals appear less frequently in the packages offered by cable operators in urban markets.

All told, most Form-3 cable operators in the largest markets typically offer at least one, and usually two or three, original superstations, with perhaps one other distant signal from the remaining categories. Operators in smaller markets and rural areas usually add at least one distant network affiliate to their two original superstation offerings, and usually either another independent or educational station as well. Overall, large market operators carry on average fewer than three distant signals, while operators in smaller markets and rural areas carry four.

I have also taken a second approach to depicting common patterns of distant signal carriage. In Table 10-2 I present the 25 most common patterns of distant signal carriage. Along with the usual six-part categorization of signals used throughout this report, I have broken out the three original superstations separately because of their dominance in the distant signal universe. The left-hand column of percentages indicates how frequently each pattern occurs, while the right-hand column keeps a running total of these individual frequency rates.

Table 10-1: A	Average Number	of Signals	Carried by	[,] Signal Type,	1992-2
---------------	----------------	------------	------------	---------------------------	--------

Market Category	Original Superstations	Other Superstations	Other Independents	Networks	Educational	Foreign	Total
Top-50	1.76	0.12	0.29	0.30	0.11	0.03	2.61
2pd-50	1.78	0.08	0.41	0.45	0.19	0.04	2.95
Smaller	1.51	0.14	0.69	1.17	0.33	0.05	3.88
Outside	1.86	0.14	0.85	1.10	0.45	0.06	4.45
All Systems	1.70	0.12	0.51	0.70	0.24	0.04	3.31

		Percent of	Cumulative
Rank	Carriage Pattern	Systems	Percent
1	WTBS, WGN	25.2%	25.3%
2	WTBS	7.4	32.8
3	WTBS, WGN, Other Ind	4.7	37.5
4	WTBS, WGN, Network	4.2	41.8
5	WTBS, WWOR	4.1	45.9
6	WTBS. Other Ind	4.0	49.9
7	WTBS, Other Ind, Network	3.9	53.8
8	WTBS, WGN, Other Ind, Network	3.7	57.5
9	WTBS, Network	3.2	60.7
10	WTBS, WGN, WWOR	2.5	63.3
11	WTBS, WGN, Other Ind, Network, Educ	2.5	65.8
12	WTBS, Other Ind, Network, Educ	2.4	68.2
13	WTBS, WGN, Educ	2.1	70.3
14	WTBS, WGN, Other Ind, Educ	1.7	71.9
15	WTBS, WGN, Network, Educ	1.5	73.4
16	WTBS, Educ	1.4	74.9
17	WTBS, WWOR, Other Ind	1.4	76.2
18	WTBS, Other Ind	1.3	77.6
19	WTBS, Network, Educ	1.1	78.7
20	WTBS, WWOR, Other Sup	0.8	79.5
21	WTBS, WGN, WWOR, Other Ind	0.8	80.2
22	WTBS, WWOR, Network	0.8	81.0
23	WGN, WWOR	0.8	81.8
24	WTBS, WGN, WWOR, Network	0.7	82.5
25	WTBS, WGN, WWOR, Other Ind, Network	0.7	83.2
	Other Patterns	17.4	100.0%

Table 10-2: Top 25 Signal Carriage Patterns, 1992-2

The most popular package of distant signals is simply the two most broadly distributed original superstations, WTBS and WGN. In fact this package is available on 25 percent of the Form-3 cable systems. Another seven percent of operators carry only WTBS, and about four percent each carry both WTBS and WGN with either another independent station or a network affiliate, or both. Nearly four percent also carry the pairing of WTBS and WWOR or WTBS with another independent. Together these six packages of distant signal offerings account for about half of all the patterns found on the 2,242 Form-3 cable systems in 1992-2.

These patterns also add a bit more detail to the averages presented earlier. Only a tiny fraction of cable operators fail to carry WTBS, and it is usually accompanied by a least one other original superstation. Operators that add a third signal to this package are somewhat more likely to offer a commercial station, either independent or affiliate, than a noncommercial, educational station.

Testimony of Paul Lindstrom Before the Copyright Arbitration Royalty Panel

My name is Paul Lindstrom. I am a Vice-President and Product Manager of Nielsen Homevideo Index (NHI). NHI is a division of Nielsen Media Research, a Dun & Bradstreet Company. D&B is the largest information- providing company in the world. NHI was established in 1980 in order to measure all non-traditional broadcast uses of television including cable, Pay-TV, VCR, video games, DBS, teletext, videotext etc. I have worked for Nielsen Media Research for seventeen years and I have been with NHI since its inception. I have spent the last fifteen years designing custom research for the new technologies. I have been involved with the MPAA's studies for the CRT since the 1980 hearings.

The Nielsen name is synonymous with television ratings. The ratings provide an estimate of the television audience size and are a barometer of viewing habits. In 1992, advertisers spent approximately \$30,000,000,000 a year on television advertising time with the expectation that their commercial messages were reaching certain audiences. Nielsen's charter as an independent measurement service is to provide both the buyer and seller of time with unbiased estimates of viewing behavior.

The television viewing diary was first introduced in 1953 to enhance the Nielsen Television Index (NTI) Audiometer Service by reporting individual viewer demographics. Ever since that time Nielsen has used a metered measurement for its national service. A year later, in 1954, Nielsen established the Nielsen Station Index (NSI) to measure television in local markets. For local measurement purposes the diary was used for collecting both what channel to which the television set was tuned to and viewer demographic information. These diaries not only form the basis for NSI's measurement, but are also used for Nielsen's Cable Audience Profile (CAP) Service. CAP is an ongoing service which provides viewing data on cable network audiences on the individual cable system level. CAP currently reports on over 400 cable systems.

Nielsen utilizes two basic data collection instruments in our syndicated services: meters and diaries. Nielsen Television Index (NTI) utilizes the People Meter (NPM). In addition to measuring what channel the television set is tuned to, the People Meter electronically collects viewing information from the people in the household. The NPM sample is used to measure viewing to the broadcast networks, national syndicated programs and 32 cable networks.

The heart of this system is the Nielsen People Meter. Smaller than a cigar box, the People Meter is placed on each TV in the household. An accompanying remote control unit makes it possible to make electronic entries from anywhere in the room.

Each member of the sample household is assigned a personal viewing button (identified by name) on the People Meter. Red and green lights by each button assist in showing who is watching and is not watching when the TV is on. For example, if one of the children, Susan, is watching, she presses her button, followed by the "OK" button.

Additional buttons are labeled for visitors for the purpose of tracking viewing for those viewers

who are not normally living in the home. Other buttons are used for those viewers to record their age and sex.

All of the data are stored in the in-home metering system until they are retrieved by Nielsen's computers. Data include when the set is turned on, which channel is viewed, when the channel is changed and when the set is off, in addition to the information on who is viewing.

Nielsen's Operations Center in Dunedin, Florida, then processes this information each day for release to the industry.

The television environment is not the same today as it was 40 years ago when Nielsen first began measuring television. Over the years Nielsen has continued to improve and refine measurement techniques. There is no such thing as a perfect research tool. All research is susceptible to both sampling and non-sampling bias. The meter is no exception. Nielsen continually works, however, with our clients and takes all prudent steps to insure the highest quality measurement possible.

I have worked with the MPAA for the last twelve royalty years on the refinement of our special study in order to provide the best third-party measurement of distant signal usage.

The MPAA requested our recommendations as to the best methodology for determining the distribution of distant viewing to broad program categories for use in the royalty phase one proceedings where the royalties are allocated among program categories. We felt that all things considered, Nielsen People Meter was a superior data collection method. Based on this recommendation the MPAA commissioned Nielsen to run an NPM based study for 1990, 1991 and 1992.

To set the context of my testimony, I want to take a minute to discuss ratings and sampling.

The Nielsen Rating you may see reported in the newspapers or magazines is simply a statistical estimate of the number of homes tuned to a program. For example, a rating of 15 for a network TV program means that 15% of U.S. TV homes are estimated to be tuned in to that program. In 1992, 93.1 million U.S. households (98% of the total) had TV sets. A rating of 15 meant that an estimated 14 million TV households tuned in.

Equation for determining viewing households: Rating x Total TV households = Viewing households .15 x 93.1 million = 14 million

Note that when we described the rating, we used the words "statistical estimate". Ratings are based not on a count of all TV households, but on the count within a sample of TV households selected from all TV households. The findings within the sample are then "projected" to national totals. Thus a rating is subject to a margin of statistical error, a concept which I will discuss later. Why use a sample? A complete count—program by program of those over 93 million TV homes—would cost countless millions of dollars. Furthermore, any count—complete or from a sample- - has to be taken regularly so that broadcasters and sponsors can stay in tune with peoples' likes and dislikes, which often change over time. It is far more efficient to draw a sample and then project the results.

You might go through the sampling process if, prior to a 500-mile automobile trip, you wanted to predict how much gasoline you'd use. Obviously, it would be wasteful and time-consuming to drive 500 miles to find out, so you might check your gasoline consumption over a trip of, say 25 miles. The 25 miles is your "sample". Then, if you find that you've used a gallon of gasoline, by projection you'll know that in 500 miles you'll use approximately 20 gallons.

Statistics that we see on indices of cost of living, retail sales, unemployment rates, wage rates and the like are all based on samples. Many people seem to feel that samples are never large enough to measure what is being viewed on TV or cable. But they are satisfied that samples are used to offer unemployment statistics, cost of living, and the like. When the doctor takes a blood test, even people who are hopelessly skeptical about samples agree that there's no need to be pumped dry.

It often surprises people to learn that the U.S. Census Bureau uses samples to assess the accuracy of their figures. Even more surprising to many is the following fact: of the 59 questions included in the 1990 Census, only 14 were asked of all households. The remaining 45 were asked among a sample of households. In short: sampling is a highly useful - and completely valid - technique.

Expert statisticians could give you some very comprehensive answers to the question of how sampling works, probably too comprehensive, in fact, for anyone but another expert statistician. So let's explain sampling by using an example of the photographs on Attachment A.

Example A is composed of several hundred thousand dots. Let's consider these dots as our total population and draw several samples.

The other three pictures represent samples of 250, 1000 and 4000 dots. These samples represent a specific kind of sample design called "area probability sampling" because the black and white dots in the samples are distributed in proportion to their distribution in the original picture. (More black dots in the dress, more white dots in the face, etc.) Think of homes (which add up to our population) instead of dots (which add up the pictures), and you have the sampling method used by Nielsen for arriving at national TV ratings.

Now...if you put the page down and step back a few feet, you'll notice a very interesting thing as you look at these small pictures. Your eye will adjust to the overall image and will stop trying to "read" the dots. See how the 250-dot sample provides a recognizable picture? Recognizable, yes, but obviously not much detail. So let's take a look at the 1000-dot sample...again from a few feet away.



ATTACHMENT A



A



Now we find that the person is very recognizable; in fact, if all we want is a reliable idea of what she looks like, this sample would be quite adequate.

Here's another interesting thing about sampling. The 1000-dot photograph is about twice as sharp as the 250-dot photograph because it has four times as many dots. And so it is with sampling: to double accuracy, one must quadruple the sample size.

These are some of the basic sampling laws followed in constructing Nielsen's national television sample.

Approximately 4000 households across the U.S. are used for these Nielsen National TV Ratings (as of November 1992). An often-asked question is: "Does a 4000 household sample provide a sufficiently reliable estimate of the national TV audience?" Ultimately, the proof is in the pudding. The TV industry considers the sample adequate. By "TV industry" we mean the advertisers and their agencies, networks, TV stations, program producers, cable systems and cable networks.

We can also answer the question mathematically. I will do this without going into all the intricacies of statistics. The idea behind sampling rests on the fact that if 20% of all U.S. homes were watching a program, and we picked 1000 different samples of 4000 households each to measure viewing to that program, then virtually all of the samples -- 995 out of 1000 -- would have ratings between 18.2 and 21.8, that is, plus or minus 1.8 rating points of the real rating.

Being almost certain --995 times out of 1000 -- that the real rating is within so small a range is adequate for most practical purposes. Confidence in the data is further enhanced by examining the ratings over time. Rarely would a programming decision be made on just one ratings report. Repeated measurements substantially reduce the range of statistical error that applies, and they provide broadcasters with a vital sense of direction as to whether an audience is building or dropping off.

The following exercise demonstrates the theory of sampling. Imagine 100,000 beads in a washtub: 30,000 red and 70,000 white. Mix thoroughly, then scoop out a sample of 4000. Even before counting, you'll know that not all the beads in your sample are red. Nor would you expect your sample to divide exactly at 1200 red and 2800 white (30% and 70% respectively). As a matter of fact, the mathematical odds are about 99 out of 100 that the count of red beads will be plus or minus 90 beads of the ideal 1200 count- - or a range of 27.2% to 32.2% of the sample. So, in short, you have now produced a "rating" of 30, plus or minus 2.2, with a 99 out of 100 assurance of statistical reliability.

These basic sampling laws wouldn't change even if you drew your sample of 4000 from 93 million beads instead of 100,000 -- assuming that the 93 million beads had the same ratio of red and white. This is a simple demonstration of why a small sample is just as adequate for a nation of 93 million households as for a city of 100,000.



In some ways, measuring a television audience is as simple in principle as counting beads. We don't measure what programs people plan to tune in or expect to tune in; we only measure what they actually did tune in. We're asking questions such as: "Is the set on?" "If on, is it tuned to channel A, B, C or D?" and "Who's watching?" These questions are just as simple as asking if the bead is red or white. The answer in each case is as simple as yes or no.

For the Nielsen People meter sample we use scientific sampling procedures to randomly select housing units from the U.S. Census Bureau's count of all housing units in the nation. Homes that are occupied and have a TV set are asked to become a part of our sample. The whole process takes thousands of work-hours and costs literally hundreds of thousands of dollars. (See attachment B for details.) This process has been covered many times including on a CBS prime time program called "How Do They Do That?"

Remember the sample dot photographs? Just as a random selection of black and white dots turned out to be representative of the whole photograph, the Nielsen area probability sample contains all types of households -- city, town, farm, rich, poor, etc.- - each selected at random according to population density across the U.S. As a result, the Nielsen sample provides what in effect is a scale model of all U.S. TV households.

Recently, we compared car registrations of the households in the Nielsen sample with officially reported car registrations, by make of car, throughout the U.S. The results show that in seven of the fourteen cases, the Nielsen sample was "on the nose," and was only off slightly in each of the other seven! Particularly impressive were the results on American Motors and Lincoln—because the less frequently something happens (and ownership of these two car makes is less frequent), the better the sample has to be to serve reliably as a scale model of the whole.

Model	Iodel % of All Registrations	
AMC	1	1
Buick	4	6
Cadillac	1	3
Chevrolet	17	15
Chrysler	2	2
Dodge	6	4
Ford	18	14
Lincoln	1	1
Mercury	4	4
Oldsmobile	6	6
Plymouth	3	3

Car Registrations* vs. Cars in the Nielsen People Meter Sample (11/92) Model years 1980-1991

5

Pontiac	5	7
Other American	1	1
Imports	30	33

*Source: Automotive News, 1991 Market Data Book Issue

The 4000 metered households may seem like a small number. The factor of time must be considered, however, when examining sample sizes. Unlike a single measurement, e.g. a phone interview where 4000 households are queried once, the metered panel collects data over time. Each metered home is measured every minute. We measure the 4000 homes at minute one, again at minute two and so forth. Each minute measured for each household can be thought of as a different sampling point (the equivalent of one person being asked a question). Assuming a 3500 intab (used in the data tabulations) sample for 60 minutes, we measure 210,000 household/minutes ($3500 \times 60 = 210,000$) during that hour. Multiply this times 24 hours a day, seven days a week and you get 35,280,000 household minutes ($3500 \times 60 \times 24 \times 7 = 35,280,000$). At this level, even a programming source which averages a .1 national rating generates 35,280 household minutes of viewing in the NPM panel during a single week (35,280 / 35,280,000).

It should be understood that the 35,280,000 household/minutes generated are not equivalent to an independent sample size of 35,280,000 due to the nature of panels (the same households remaining in the measurement versus all new ones).

Each MPAA NPM report is based on approximately 30,000,000 minutes of distant signal viewing from 180 stations.

Sample Selection

We used a sample frame of all stations with distant carriage for the sample selection for the NPM study. The sample was selected as follows:

For 1990, Nielsen was provided with a tape listing all stations, with distant carriage and the number of distant subscribers for the two accounting periods. The list was stripped of all Canadian and Mexican stations. The two periods were then averaged creating one list of 734 stations with average distant subscriber counts. The stations were then rank ordered based upon the number of subscribers.

The sample for this study is a stratified random sample. The 180 stations were divided into two strata. The top 50 stations in terms of the number of distant subscribers as of the time of the sample selection were selected with certainty. The second strata consisted of a random sample of 130 stations selected from the 684 remaining on the list.



In order to project the results to all 734 stations, weights were developed and applied to reflect the differences in probability of selection and the total number of subscribers in each stratum. The same sampling procedure was used for 1991 and 1992. The stations used for each study are listed on Attachment C.

Geography Definition

The next step after the station sample selection was the defining of geography. This was necessary as we were only measuring viewing in distant counties. In order to identify which counties were distant to each station, MPAA was provided a list of the 180 stations to be included in the 1990 meter study. The MPAA then supplied Nielsen with a list of counties to be considered local for each station based on FCC definitions. Time period data (ratings for a specific period of time on a station, as opposed to ratings for a particular program) were then generated for those households viewing the stations outside the local area. The same procedure was followed for the 1991 and 1992 studies.

Program names

The sources for the program names for all stations on the list were TV Data and/or Nielsen Local station names. Nielsen obtains program names from the individual stations for the four sweep periods of February, May, July and November. The names have been verified by Nielsen and classified by type for use in the Ratings on Syndicated Programs (ROSP) report. The ROSP types are determined by a combination of TV Data, Syndicator and local station information. ABC, CBS and NBC network programs not in syndication are excluded from the analysis. Programs for which Syndex protection has been requested were also excluded.

Program typing

For the special studies, all programs were placed into one of six categories:

Local Syndicated Series, Specials, and Movies Devotional Series

Sports Other

Non-commercial

Classification of programs into categories was based on source and program type. The sources of the program were provided by TV Data and/or Nielsen.

Each program was assigned to one type, and only one type, based on instructions increasing to the received from MPAA. Programs were assigned to the various categories according to the various categories accordi

the following rules:

- 1. Any Nielsen-identified PBS station's programming was put in type Non-commercial.
- 2. Any program identified as a movie as per TV Data was put in the Syndicated Series, Specials and Movies category.
- 3. Programs named "filler," "TBA" or other such names, as per TV Data or the local station were classified as Other.
- 4. Programs identified as devotional by TV Data or by Nielsen were classified to one of two categories: either Local or Devotional. If our information indicated the program was broadcast by multiple stations, the program was assigned to the Devotional category. If the sample station reported them to us as local, we assigned them to the local category.
- 5. The Sports category includes team-to-team play for: NFL, MLB, NBA, NHL, NASL, College Basketball and football. All sport-related titles were reviewed for possible inclusion in the Sports category.

All programs not yet assigned were examined to determine whether they were broadcast by multiple stations. Generally, if a program aired on a single station and the station had reported it to us as local, it was placed in Local. If a station reported that the program was syndicated, or if the same title aired on two or more stations, it was placed in Syndicated Series, Specials, and Movies. All programs in this category were manually reviewed for accuracy. When we came upon two unknown programs of the same name, broadcast by different stations, we undertook to determine whether they were two separate programs or whether it was the same program. being broadcast by two stations.

Programs such as local church services and local news programs were placed in Local. Programs determined to be locally-produced as per claims filed at the Copyright Office were assigned to the Local category.

Syndex rules

In 1990, the FCC reestablished the Syndex rules which require cable systems to black out syndicated programming on distant signals as requested by local broadcasters. Sample stations, WGN and WWOR, each established a local and a national feed to avoid blackouts in their schedules. We began to separate the satellite viewing to WGN and WWOR from the off-air viewing so that we could handle the Syndex protection when it came up for our regular syndicator clients. This change was not fully implemented until the latter part of 1990. These procedures were used for all three studies.



With respect to program QHs for which syndex was not requested, all viewing to the national feed was included with the local viewing. If WGN or WWOR air a program for which syndex protection was requested, the local feed's viewing outside of the local area was not counted. The program which was protected was not included in the typing of the programs for the MPAA report. The national feed program and viewing were not included, because they did not originate from the over-the-air WGN or WWOR signals.

Aggregation of Viewing Data

A listing of each program category's time periods was determined for each station. Estimates of the total minutes viewed to each group of program/stations were then made by adding the individual station totals for each program type to produce the final results for each category. The results are shown on the following pages:

NIELSEN MEDIA RESEARCH NSI SWEEP MONTHS FEBRUARY, MAY, JULY, NOVEMBER 1990

			Syndicated Series				
<u>Key</u>	<u>Total</u>	<u>Local</u>	Specials, Movies	<u>Devotional</u>	<u>Sports</u>	<u>Other</u>	<u>Non-Commercial</u>
QHS	1316789	156306	728303	62773	11099	61298	297010
%QHS	100	12	55	5	1	5	23
#DSV	10349074	. 698119	8584334	74268	610629	5871	375852
%DSV	100	7	83	1	6	*	4

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NIELSEN MEDIA RESEARCH METERED MPAA ANALYSIS JANUARY 1 - DECEMBER 31, 1991 FULL YEAR STUDY

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<u>Key</u> #QHS	<u>Total</u> 3445451	<u>Local</u> 484058	Syndicated Series <u>Specials, Movies</u> 2017311	Devotional 195665	<u>Sports</u> 36773	<u>Other</u> 96029	<u>Non-Commercial</u> 615615
%QHS	100	14	59	6	1	3	18
#DSV %DSV	29748201 100	1939792 7	24912582 84	115573 *	2119961 7	65232 *	595061 2

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NIELSEN MEDIA RESEARCH METERED MPAA ANALYSIS JANUARY 1 - DECEMBER 31, 1992 FULL YEAR STUDY

			Syndicated Series				
<u>Key</u> #QHS	<u>Total</u> 4285200	<u>Local</u> 549140	<u>Specials, Movies</u> 2394837	<u>Devotional</u> 243714	<u>Sports</u> 41268	<u>Other</u> 67602	<u>Non-Commercial</u> 988639
%QHS	100	13	56	6	1	2	23
#DSV	33298933	2614830	27016941	205862	2138896	68369	1254035
%DSV	100	8	81	1	6	*	4

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Standard Errors

As required by the rules, we have produced Standard Errors for the Meter Analyses. As noted earlier, Standard Error (SE) is a measure of the variation which can be expected between the results from a sample and those which would be associated a complete census. Relative error is a reflection of size of one standard error compared to the result measured. Sixty-five times out of 100 the result measured would be within one standard error of a census, 90% of the time it would be within two standard errors and 99% of the time it would be within three Standard Errors. Standard Errors provide a measure of the confidence a user can have in the results of a study. Standard Error is a reflection of a variety of factors including sample size, the magnitude of the result, the number of sampling points or duration, the correlation of viewing and the number of discreet households which viewed the program type. Attachment D contains the number of

It is highly likely that distant viewing to most sample stations would yield very small ratings and would thus have large relative errors. Aggregating the data you are increases the total ratings generated by each program type, thus lowering significantly the standard and relative errors associated with the results. Since the Copyright Arbitration Royalty Panel is only interested in the totals, the low standard error associated with these numbers is the key.

The results and the standard and relative errors for the NPM based study are as follows:

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NPM STUDY FEBRUARY, MAY, JULY, NOVEMBER 1990

% Mins SE (%) RE (%)	<u>Local</u> 7 0.29 4	Syndicated Series <u>Specials, Movies</u> 83 0.74 . 1	Devotional 1 0.05 5	<u>Sports</u> 6 0.31 5	<u>Other</u> * 23	<u>Non-Commercial</u> 4 0.68
<u>Range At</u> <u>3 SE's (99%)+</u>						
High Low	7.9 6.1	85.2 80.8	1.15 .85	6.9 5.1	* *	6.1 1.9

The results using 3 Standard Errors indicate that 99 times out of 100 the results of a census of distant viewing to all stations with distant cable carriage would show the percentage of total viewing for syndicated series, specials and movies to fall between 80.8 and 85.2 percent.

* Indicates below minimum reporting standards

+ This is the broadest test, most statisticians use 2 SE's when interpreting results.

METERED MPAA ANALYSIS NSI SWEEP MONTHS ONLY FEBRUARY, MAY, JULY, NOVEMBER 1991

		Syndicated Series				
	<u>Local</u>	<u>Specials, Movies</u>	<u>Devotional</u>	<u>Sports</u>	<u>Other</u>	<u>Non-Commercial</u>
% Mins	6	83	*	7	1	3
SE (%)	0.50	0.90	*	0.43	0.41	0.60
RE (%)	8	1	*	6	41	20
<u>Range At</u> <u>3 SE's (99%)+</u>						
High	7.5	85.7	*	8.3	2.2	4.8
Low	4.5	80.3	*	5.7	*	1.2
			IETERED MPAA	ANALYSIS		
		TAN	FULL YEA	AR	A1	
		JAN	UARY I - DECEN	IBER 31, 19		
		Syndicated Series	-			
	<u>Local</u>	Specials, Movies	Devotional	Sports	<u>Other</u>	<u>Non-Commercial</u>
% Mins	7	84	*	7	*	2
SE (%)	0.44	0.68	*	0.38	*	0.37
RE (%)	6	1	*	5	*	19
Range At						
<u>3 SE's (99%)+</u>						
High	8.3	86.4	∓	8.1	*	3.1
Low	5.7	81.6	*	5.9	*	.9

* Indicates below minimum reporting standards
+ This is the broadest test, most statisticians use 2 SE's when interpreting results.

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METERED MPAA ANALYSIS NSI SWEEP MONTHS ONLY FEBRUARY, MAY, JULY, NOVEMBER 1992

		Syndicated Series				
	<u>Local</u>	Specials, Movies	<u>Devotional</u>	<u>Sports</u>	<u>Other</u>	<u>Non-Commercial</u>
% Mins	8	81	*	6	*	4
SE (%)	0.51	0.86	*	0.34	*	0.66
RE (%)	7	1	*	6	*	17
<u>Range At</u> <u>3 SE's (99%)+</u>						
High	9.5	83.6	*	7.0	*	6.0
Low	6.5	78.4	*	5.0	*	2.0

METERED MPAA ANALYSIS FULL YEAR JANUARY 1 - DECEMBER 31, 1992

		Syndicated Series				
	<u>Local</u>	Specials, Movies	<u>Devotional</u>	<u>Sports</u>	<u>Other</u>	<u>Non-Commercial</u>
% Mins	8	81	1	6	*	4
SE (%)	0.53	0.79	0.15	0.31	*	0.53
RE (%)	7	1	15	5	*	14
<u>Range At</u> <u>3 SE's (99%)+</u>						
High	9.6	83.4	1.5	6.9	*	5.6
Low	6.4	78.6	.5	5.1	\$	2.4

* Indicates below minimum reporting standards
+ This is the broadest test, most statisticians use 2 SE's when interpreting results.

ATTACHMENT B

HOUSEHOLD SAMPLE SELECTION --- 1989/90

A. SAMPLE PLAN

Nielsen Television Index (NTI) provides estimates of in-home audiences of network television programs and is based upon a national sample of U.S. television-equipped households, including Alaska and Hawaii. The NTI sample consists of approximately 4,000 metered television households. It is dispersed geographically to facilitate territorial and regional reporting, includes non-telephone as well as telephone households, and both urban and rural households. More than 5,000 sample neighborhoods and sample housing units are selected for the NTI sample.

B. SAMPLE DESIGN

The NTI sample is a multi-stage stratified area probability sample of U.S. housing units, including Alaska and Hawaii, with each housing unit having an equal chance of selection. In addition, the sample design includes several levels of stratification and uses selection procedures to optimize the desired distribution of the sample at each stage of selection.

FIRST STAGE

The first selection stage involves the assignment of all counties to Primary Sampling Units (PSU's) also referred to as Primary Areas (PA's). Each PA consists of a county or group of counties and contains a minimum of 5000 housing units.* PA's are defined as:

- 1. Each of thirteen metered market DMA's as of January 1987.
- 2. Each of 7 separate Standard Consolidated Statistical Area (SCSA)**
- 3. Each of 241 separate Standard Metropolitan Statistical Areas (SMSA)**
- 4. Remaining individual counties or combinations of contiguous communities with a minimum of 5,000 housing units.

The total number of PA's is 1822 with 1127 PA's consisting of one county and 695 PA's consisting of two or more counties.

The effect of increasing the size of PA's by combining counties of less than 5,000 housing units is to reduce the amount of clustering by spreading the sample of housing units over a larger number of counties, thereby decreasing the sampling error of most estimates.

A total of 131 PA's containing more than 87,900 housing units are included in the sample with certainly and designated as self-representing. These self-representing PA's comprise a total of 668 counties and contain about 70 percent of all U.S. housing units.

The remaining PA's, designated as non-self-representing units, are combined into geographic groups. In addition, non-self-representing PA's are assigned to strata defined by Nielsen territory, Nielsen county size, cable penetration, and PA geographic group. The number of sample PA's allocated for selection from each stratum is proportionate to the number of housing units in each stratum.

Within the strata, a total of 314 sample PA's are randomly selected with probability proportionate to size using housing units as the measure of size. These 314 sample PA's consist of about 470 sample counties. Combined with the certainty sample PA's, the total number of sample counties for the NTI sample is 1138.

- * Based on 1980 Census of Housing
- ** As defined by the U.S. Office of Management and Budget at the time of the 1980 Census.

A. SECOND STAGE

The second stage consists of the selection of Census Bureau Block Groups (BG's) and Enumeration Districts (ED's) used for the 1980 Census. BG's and ED's are small geographic areas used for census enumeration. They have defined boundaries, and generally contain between 200 and 400 housing units.

In self-representing PA's, BG's and ED's are stratified by PA, Nielsen territory, Nielsen county size, cable penetration, percent Black plus Spanish households (1980 Census) and percent of households with children (1980 Census).

The thirteen metered market PA's are further stratified by county or sub-county to provide greater geographic control and distribution of the sample BG's and ED's.

In non-self-representing PA's, BG's and ED's are stratified by PA, percent Black plus Spanish households and percent of households with children.

The number of sample BG's and ED's selected are allocated to strata proportionate to housing units. Within the strata, BG's and ED's are randomly selected with probability proportionate to housing units. A total of five sample BG's and ED's are selected within each non-certainty sample PA.
Approximately one percent of the 1980 Census BG's and ED's contained zero housing units at the time of the 1980 Census. These areas are linked to an adjacent Census BG and ED containing housing units and are surveyed if their associated BG or ED is selected. This method provides for complete coverage of all land areas in the U.S. at the time of the survey and gives all new housing units constructed in such areas, since the 1980 Census, the same chance of selection.

THIRD STAGE

A third stage consists of the selection of blocks within sample BG's for which the Census provides individual block housing unit counts. Blocks with fewer than 100 housing units are combined with other blocks to achieve a minimum block size of 100 housing units. Sample blocks are randomly selected with probability proportionate to housing units in each block or combined blocks.

FOURTH STAGE

The sample selection through the first three stages is done in the office. The remaining sample survey operations are done in the Field by persons trained and supervised by Nielsen's Statistical Research Department, This stage consists of enumeration of housing units within the sample blocks and ED's, and selection of the sample housing units. In total more than one million housing units are enumerated and more than 250,000 housing units are listed.

In BG's for which single blocks or combined blocks are selected, the procedures are as follows:

- 1. Using Census BG maps, the Nielsen Field Surveyor locates the selected block(s) and enumerates the housing units in each block(s) using a predetermined pattern.
- 2. The Field Surveyor then randomly selects the sample housing unit using a prescribed probability selection method.
- 3. The Field Surveyor lists the address of the predesignated housing unit and addresses of adjacent housing units.

In ED's for which block statistics are not available, the following procedures are used:

- 1. Census ED maps, the Nielsen Field Surveyor subdivides the ED into "blocks" using streets, railroads, rivers, etc. as boundaries. The "blocks" are numbered in a geographic sequence using a predetermined starting point and pattern for traveling through the ED for the enumeration of the housing units.
- 2. The housing units are counted within each block and cumulated. The sample "block" is randomly selected with probability proportionate to the number of housing units in the block.
- 3. The Field Surveyor then randomly selects the sample housing unit using a prescribed probability selection method. The Field Surveyor lists the address of the predesignated housing unit and

addresses of adjacent housing units.

4. In cases where street addresses are not available, each of the listed housing units are located on maps. A description of each housing unit is included by the Field Surveyor to later enable the Nielsen Field Representative to locate the predesignated sample housing unit.

The desired number of predesignated sample housing units per survey area is one. To achieve an equal chance of selection for each housing unit, the sampling rate used to select sample housing units within the sample area is one housing unit per the 1980 Census number of housing units for the area.

This rate is applied to the actual number of housing units enumerated by the surveyor in the sample area. The number of housing units found at the time of the surveyor count could differ from the 1980 Census housing units because of or construction or demolition. If the ratio of the number of housing units counted by the surveyor and the 1980 Census number of housing units is one, then the number of sample housing units obtained will be one-, if the ratio is greater than one, then, additional sample housing units may be selected; if the ratio is less than one, then no sample housing units may be selected. By using this ratio for each sample survey area, each housing unit has an equal chance of selection. If only one housing units, then sample housing units would have been selected with different probabilities.

Households with a television set occupying the predesignated sample housing units are later recruited for the panel sample by Nielsen Field Representatives. Vacant housing units are checked periodically to determine if they have become occupied. It so, they are recruited for the panel sample. The housing units listed following the predesignated housing unit are available as substitute housing units in the event the sample household refuses to cooperate.

C. SAMPLE REVISION

Twice each year the NTI sample of housing units is revised. Newly constructed housing units are brought into the sample, demolition is replaced and shifts in population are accounted for through use of updated household estimates.

About 95% of residential construction in the United States is done in areas that require building permits. Each year the Census Bureau obtains data on the number of housing units authorized for construction by each building permit office in the U.S. This information is purchased by Nielsen for use in updating the NTI sample to include such new construction. Selection of newly constructed housing units is done as follows:

- 1. The building permit offices are listed alphabetically within the sample counties which are geographically sequenced across the U.S.
- 2. The number of housing units authorized for construction is obtained for each building permit office and cumulated.

- 3. The accumulated list of housing units is sampled systematically using the same sampling rate used for the NTI sample. This work is done in the Nielsen office.
- 4. Field Surveyors trained by the Statistical Research Department are sent to the selected building permits . In each office, the surveyor systematically arranges the permits (usually by issue date), identifies the randomly selected sample housing unit(s), and obtains the geographic locaoftion. Similar information is obtained for additional new housing units to be used as substitutes in the event the selected household refuses to cooperate.
- 5. The surveyor locates the sample housing units and obtains the address or other geographic description. Housing units still under construction or not yet started remain in the sample, and are periodically visited to verify construction progress and occupancy.

In areas for which building permit information is not available (approximately 5% of the U.S.), Field Surveyors resurvey the sample areas and determine housing units constructed since the previous count. These newly constructed housing units are sampled at the same rate as used for the NTI sample. These areas are surveyed every three years.

The revision procedures include maintaining the NTI sample housing units at a constant size. This is achieved by the removal of randomly selected housing units from the operational sample.

D. SYSTEMATIC SAMPLE REPLACEMENT

The NTI sample design provides for turnover (replacement) of sample households on a scheduled basis. Each month sample households are specified to the Field for replacement. No household will remain in the sample longer than two years. Replacement households are generally selected from the same areas as the households to be removed from the sample.

HOUSEHOLD SAMPLE SELECTION--1990/91

A. SAMPLE PLAN

Nielsen Television Index (NTI) provides estimates of in-home audiences of network television programs and is based upon a national sample of U.S. television-equipped households, including Alaska and Hawaii. The NTI sample consists of approximately 4,000 metered television households. It is dispersed geographically to facilitate territorial and regional reporting, includes non-telephone as well as telephone households, and both urban and rural households. More than 5,000 sample neighborhoods and sample housing units are selected for the NTI sample.

B. SAMPLE DESIGN

The NTI sample is a multi-stage stratified area probability sample of U.S. housing units, including Alaska and Hawaii, with each housing unit having an equal chance of selection. In addition, the sample design includes several levels of stratification and uses selection procedures to optimize the desired distribution of the sample at each stage of selection.

FIRST STAGE

The first selection stage involves the assignment of all counties to Primary Sampling Units (PSU's) also referred to as Primary Areas (PA's). Each PA consists of a county or group of counties and contains a minimum of 5,000 housing units.* PA's are defined as:

- 1. Each of thirteen metered market DMA's as of January 1987
- 2. Each of 7 separate Standard Consolidated Statistical Areas (SCSA)**
- 3. Each of 241 separate Standard Metropolitan Statistical Areas (SMSA)**
- 4. Remaining individual counties or combinations of contiguous counties with a minimum of 5,000 housing units.

The total number of PA's is 1822 with 1127 PA's consisting of one county and 695 PA's consisting of two or more counties.

The effect of increasing the size of PA's by combining counties of less than 5,000 housing units is to reduce the amount of clustering by spreading the sample of housing units over a larger number of counties, thereby decreasing the sampling error of most estimates.

A total of 131 PA's containing more than 87,900 housing units are included in the sample with certainty and designated as self-representing. These self-representing PA's comprise a total of 668 counties and contain about 70 percent of all U.S. housing units.

The remaining PA's, designated as non-self-representing units, are combined into geographic groups. In addition, non-self-representing PA's are assigned to strata defined by Nielsen territory, Nielsen county size, cable penetration, and PA geographic group. The number of sample PA's allocated for selection from each stratum is proportionate to the number of housing units in each stratum.

Within the strata, a total of 314 sample PA's are randomly selected with probability proportionate to size using housing units as the measure of size. These 314 sample PA's consist of about 470 sample counties. Combined with the certainty sample PA's, the total number of sample counties for the NTI sample is 1138.

- * Based on 1980 Census of Housing
- **As defined by the U.S. Office of Management and Budget at the time of the 1980 Census.

A. SECOND STAGE

The second stage consists of the selection of Census Bureau Block Groups (BG's) and Enumeration Districts (ED's) used for the 1980 Census. BG's and ED's are small geographic areas used for census enumeration. They have defined boundaries, and generally contain between 200 and 400 housing units.



In self-representing PA's, BG's and ED's are stratified by PA, Nielsen territory, Nielsen county size, cable penetration, percent Black plus Spanish households (1980 Census) and percent of households with children (1980 Census).

The thirteen metered market PA's are further stratified by county or sub-county to provide greater geographic control and distribution of the sample BG's and ED's.

In non-self-representing PA's, BG's and ED's are stratified by PA, percent Black plus Spanish households and percent of households with children.

The number of sample BG's and ED's selected are allocated to strata proportionate to housing units. Within the strata, BG's and ED's are randomly selected with probability proportionate to housing units. A total of five sample BG's and ED's are selected within each non-certainty sample PA.

Approximately one percent of the 1980 Census BG's and ED's contained zero housing units at the time of the 1980 Census. These areas are linked to an adjacent Census BG and ED containing housing units and are surveyed if their associated BG or ED is selected. This method provides for complete coverage of all land areas in the U.S. at the time of the survey and gives all new housing units constructed in such areas, since the 1980 Census, the same chance of selection,

THIRD STAGE

A third stage consists of the selection of blocks within sample BG's for which the Census provides individual block housing unit counts. Blocks with fewer than 100 housing units are combined with other blocks to achieve a minimum block size of 100 housing units. Sample blocks are randomly selected with probability proportionate to housing units in each block or combined blocks.

FOURTH STAGE

The sample selection through the first three stages is done in the office. The remaining sample survey operations are done in the Field by persons trained and supervised by Nielsen's Statistical Research Department. This stage consists of enumeration of housing units within the sample blocks and ED's, and selection of the sample housing units. In total more than one million housing units are enumerated and more than 250,000 housing units are listed.

In BG's for which single blocks or combined blocks are selected, the procedures are as follows: 1. Using Census BG maps, the Nielsen Field Surveyor locates the selected block(s) and enumerates the housing units in each block(s) using a predetermined pattern.

2. The Field Surveyor then randomly selects the sample housing unit using a prescribed probability selection method.

3. The Field Surveyor lists the address of the predesignated housing unit and addresses of adjacent housing units.

In ED's for which block statistics are not available, the following procedures are used: 1. Using Census ED maps, the Nielsen Field Surveyor subdivides the ED into "blocks" using streets, railroads, rivers, etc., as boundaries. The "blocks" are numbered in a geographic sequence using a predetermined starting point and pattern for traveling through the ED for the enumeration of the housing units.

- 2. The housing units are counted within each block and cumulated. The sample "block" is randomly selected with probability proportionate to the number of housing units in the block.
- 3. The Field Surveyor then randomly selects the sample housing unit using a prescribed probability selection method. The Field Surveyor lists the address of the predesignated housing unit and addresses of adjacent housing units.
- 4. In cases where street addresses are not available, each of the listed housing units are located on maps. A description of each housing unit is included by the Field Surveyor to later enable the Nielsen Field Representative to locate the predesignated sample housing unit.

The desired number of predesignated sample housing units per survey area is one. To achieve an equal chance of selection for each housing unit, the sampling rate used to select sample housing units within the sample area is one housing unit per the 1980 Census number of housing units for the area. This rate is applied to the actual number of housing units enumerated by the surveyor in the sample area. The number of housing units found at the time of the surveyor count could differ from the 1980 Census housing units because of new construction or demolition.

If the ratio of the number of housing units counted by the surveyor and the 1980 Census number of housing units is one, then the number of sample housing units obtained will be one; if the ratio is greater than one, then additional sample housing units may be selected; if the ratio is less than one, then no sample housing units may be selected. By using this ratio for each sample survey area, each housing unit has an equal chance of selection. If only one housing unit were selected, regardless of the size of the ratio of actual housing units and 1980 Census housing units, then sample housing units would have been selected with different probabilities.

Households with a television set occupying the predesignated sample housing units are later recruited for the panel sample by Nielsen Field Representatives. Vacant housing units are checked periodically to determine if they have become occupied. If so, they are recruited for the panel sample. The housing units listed following the predesignated housing unit are available as substitute housing units in the event the sample household refuses to cooperate.

C. SAMPLE REVISION

Twice each year the NTI sample of housing units is revised. Newly constructed housing units are brought into the sample, demolition is replaced and shifts in population are accounted for through use of updated household estimates.

About 95% of residential construction in the United States is done in areas that require building permits. Each year the Census Bureau obtains data on the number of housing units authorized for construction by each building permit office in the U.S. This information is purchased by Nielsen for

use Sele 1.	in updating the NTI sample to include such new construction. Expection of newly constructed housing units is done as follows: The building permit offices are listed alphabetically within the sample counties which are geographically sequenced across the U.S.			1
2.	The number of housing units authorized for construction is obtained for each building permit office and cumulated.		ı	
R	The accumulated list of housing units is sampled systematically using the same sampling rate	ł	i	
٦.	used for the NTI sample This work is done in the Nielsen office.	:	i	
4	Field Surveyors trained by the Statistical Research Department are sent to the selected building	:	:	
7.	permit offices. In each office, the surveyor systematically arranges the permits (usually by issue	ł		
	date) identifies the randomly selected sample housing unit(s), and obtains the geographic			
	location. Similar information is obtained for additional new housing units to be used as	l.	i	
	substitutes in the event the selected household refuses to cooperate.	!	i	
5	The surveyor locates the sample housing units and obtains the address or other geographic			
5.	description. Housing units still under construction or not yet started remain in the sample, and			
	are periodically visited to verify construction progress and occupancy.	ł	;	

In areas for which building permit information is not available (approximately 5% of the U.S.), Field Surveyors resurvey the sample areas and determine housing units constructed since the previous count. These newly constructed housing units are sampled at the same rate as used for the NTI sample These areas are surveyed every three years.

The revision procedures include maintaining the NTI sample housing units at a constant size. This is achieved by the removal of randomly selected housing units from the operational sample

D. SYSTEMATIC SAMPLE REPLACEMENT

The NTI sample design provides for turnover (replacement) of sample households on a scheduled basis. Each month sample households are specified to the Field for replacement. No household will remain in the sample longer than two years. Replacement households are generally selected from the same areas as the households to be removed from the sample

HOUSEHOLD SAMPLE SELECTION--1991/1992

A. SAMPLE PLAN

Nielsen Television Index (NTI) provides estimates of in-home audiences of national television programs and is based upon a national sample of U.S. television-equipped households, including Alaska and Hawaii. The NTI sample consists of approximately 4,000 metered television households. It is dispersed geographically to facilitate territorial and regional reporting, includes non-telephone as well as telephone households, and both urban and rural households. More than 5,000 sample

neighborhoods and sample housing units are selected for the NTI sample.

B. SAMPLE DESIGN

The NTI sample is a multi-stage stratified area probability sample of U.S. housing units, including Alaska and Hawaii, with each housing unit having an equal chance of selection. In addition, the sample design includes several levels of stratification and uses selection procedures to optimize the desired distribution of the sample at each stage of selection.

FIRST STAGE

The first selection stage involves the assignment of all counties to Primary Sampling Units (PSU's) also referred to as Primary Areas (PA's). Each PA consists of a county or group of counties and contains a minimum of 5,000 housing units.* PA's are defined as: 1. Each of thirteen metered market DMA's as of January 1987

- 2. Each of 7 separate Standard Consolidated Statistical Areas (SCSA)**
- 3. Each of 241 separate Standard Metropolitan Statistical Areas (SMSA)**
- 4. Remaining individual counties or combinations of contiguous counties with a minimum of 5,000 housing units.

The total number of PA's is 1820 with 1130 PA's consisting of one county and 690 PA's consisting of two or more counties.

The effect of increasing the size of PA's by combining counties of less than 5,000 housing units is to reduce the amount of clustering by spreading the sample of housing units over a larger number of counties, thereby decreasing the sampling error of most estimates.

A total of 131 PA's containing more than 87,900 housing units are included in the sample with certainty and designated as self-representing. These self-representing PA's comprise a total of 682 counties and contain about 70 percent of all U.S. housing units.

The remaining PA's, designated as non-self-representing units, are combined into geographic groups. In addition, non-self-representing PA's are assigned to strata defined by Nielsen territory, Nielsen county size, cable penetration, and PA geographic group. The number of sample PA's allocated for selection from each stratum is proportionate to the number of housing units in each stratum.

Within the strata, a total of 322 sample PA's are randomly selected with probability proportionate to size using housing units as the measure of size. These 322 sample PA's consist of about 477 sample counties. Combined with the certainty sample PA's, the total number of sample counties for the NTI sample is 1129.

* Based on Census of Housing

**As defined by the U.S. Office of Management and Budget at the time of the 1980 Census.

A. SECOND STAGE

The second stage consists of the selection of Census Bureau Block Groups (BG's) and Enumeration Districts (ED's) used for the 1980 Census. BG's and ED's are small geographic areas used for census enumeration. They have defined boundaries, and generally contain between 200 and 400 housing units.

In self-representing PA's, BG's and ED's are stratified by PA, Nielsen territory, Nielsen county size, cable penetration, percent Black plus Spanish households (1980 Census) and percent of households with children (1980 Census).



The thirteen metered market PA's are further stratified by county or sub-county to provide greater geographic control and distribution of the sample BG's and ED's.

In non-self-representing PA's, BG's and ED's are stratified by PA, percent Black plus Spanish households and percent of households with children.

The number of sample BG's and ED's selected are allocated to strata proportionate to housing units. Within the strata, BG's and ED's are randomly selected with probability proportionate to housing units. A total of five sample BG's and ED's are selected within each non-certainty sample PA.

Approximately one percent of the 1980 Census BG's and ED's contained zero housing units at the time of the 1980 Census. These areas are linked to an adjacent Census BG and ED containing housing units and are surveyed if their associated BG or ED is selected. This method provides for complete coverage of all land areas in the U.S. at the time of the survey and gives all new housing units constructed in such areas, since the 1980 Census, the same chance of selection.

THIRD STAGE

A third stage consists of the selection of blocks within sample BG's for which the Census provides individual block housing unit counts. Blocks with fewer than 100 housing units are combined with other blocks to achieve a minimum block size of 100 housing units. Sample blocks are randomly selected with probability proportionate to housing units in each block or combined blocks.

FOURTH STAGE

The sample selection through the first three stages is done in the office. The remaining sample survey operations are done in the Field by persons trained and supervised by Nielsen's Statistical Research Department. This stage consists of enumeration of housing units within the sample blocks and ED's, and selection of the sample housing units. In total more than one million housing units are enumerated and more than 250,000 housing units are listed.

In BG's for which single blocks or combined blocks are selected, the procedures are as follows-.

- 1. Using Census BG maps, the Nielsen Field Surveyor locates the selected block(s) and enumerates the housing units in each block(s) using a predetermined pattern.
- 2. The Field Surveyor then randomly selects the sample housing unit using a prescribed probability selection method.
- 3. The Field Surveyor lists the address of the predesignated housing unit and addresses of adjacent housing units.

- In ED's for which block statistics are not available, the following procedures are used: 1. Using Census ED maps, the Nielsen Field Surveyor subdivides the ED into "blocks" using streets, railroads, rivers, etc., as boundaries. The "blocks" are numbered in a geographic sequence using a predetermined starting point and pattern for traveling through the ED for the enumeration of the housing units.
- 2. The housing units are counted within each block and cumulated. The sample "block" is randomly selected with probability proportionate to the number of housing units in the block.
- 3. The Field Surveyor then randomly selects the sample housing unit using a prescribed probability selection method. The Field Surveyor lists the address of the predesignated housing unit and addresses of adjacent housing units.
- 4. In cases where street addresses are not available, each of the listed housing units are located on maps. A description of each housing unit is included by the Field Surveyor to later enable the Nielsen Field Representative to locate the predesignated sample housing unit.

The desired number of predesignated sample housing units per survey area is one. To achieve an equal chance of selection for each housing unit, the sampling rate used to select sample housing units within the sample area is one housing unit per the 1980 Census number of housing units for the area.

This rate is applied to the actual number of housing units enumerated by the surveyor in the sample area. The number of housing units found at the time of the surveyor count could differ from the 1980 Census housing units because of new construction or demolition.

If the ratio of the number of housing units counted by the surveyor and the 1980 Census number of housing units is one, then the number of sample housing units obtained will be one; if the ratio is greater than one, then additional sample housing units may be selected; if the ratio is less than one, then no sample housing units may be selected. By using this ratio for each sample survey area, each housing unit has an equal chance of selection. If only one housing unit were selected, regardless of the size of the ratio of actual housing units and 1980 Census housing units, then sample housing units would have been selected with different probabilities.

Households with a television set occupying the predesignated sample housing units are later recruited for the panel sample by Nielsen Field Representatives. Vacant housing units are checked periodically to determine if they have become occupied. If so, they are recruited for the panel sample. The housing units listed following the predesignated housing unit are available as substitute housing units in the event the sample household refuses to cooperate.

C. SAMPLE REVISION

Twice each year the NTI sample of housing units is revised through the sampling of newly constructed housing units and the replacement of demolished sample housing units. The revisions

reflect the normal shifts in housing population which occur each year About 95% of residential construction in the United States is done in areas that require building permits. Each year the Census Bureau obtains data on the number of housing units authorized for construction by each building permit office in the U.S. This information is purchased by Nielsen for use in updating the NTI sample to include such new construction.

Selection of newly constructed housing units is done as follows:

- 1. The building permit offices are listed alphabetically within the sample counties which are geographically sequenced across the U.S.
- 2. The number of housing units authorized for construction is obtained for each building permit office and cumulated.
- 3. The accumulated list of housing units is sampled systematically using the same sampling rate used for the NTI sample. This work is done in the Nielsen office.
- 4. Field Surveyors trained by the Statistical Research Department are sent to the selected building permit offices. In each office, the surveyor systematically arranges the permits (usually by issue date), identifies the randomly selected sample housing unit(s), and obtains the geographic location. Similar information is obtained for additional new housing units to be used as substitutes in the event the selected household refuses to cooperate.
- 5. The surveyor locates the sample housing units and obtains the address or other geographic description. Housing units still under construction or not yet started are periodically visited to verify construction progress and occupancy.

The revision procedures include maintaining the NTI sample housing units at a constant size This is achieved by the removal of randomly selected housing units from the operational sample.

D. SYSTEMATIC SAMPLE REPLACEMENT

The NTI sample design provides for turnover (replacement) of sample households on a scheduled basis. Each month sample households are specified to the Field for replacement. No household will remain in the sample longer than two years. Replacement households are generally selected from the same areas as the households to be removed from the sample.

HOUSEHOLD SAMPLE SELECTION--1992/1993

A. SAMPLE PLAN

Nielsen Television Index (NTI), Nielsen Syndication Services (NSS) & Nielsen Home Video Index (NHI) provide estimates of in-home audiences of national television programs and is based upon a national sample of U.S. television-equipped households, including Alaska and Hawaii. The NTI sample consists of approximately 4,000 metered television households. It is dispersed geographically to facilitate territorial and regional reporting, includes non-telephone as well as telephone households, and both urban and rural households. More than 5,000 sample neighborhoods and sample housing units are selected for the NTI sample.

B. SAMPLE DESIGN

The NTI sample is a multi-stage stratified area probability sample of U.S. housing units, including Alaska and Hawaii, with each housing unit having an equal chance of selection. In addition, the sample design includes several levels of stratification and uses selection procedures to optimize the desired distribution of the sample at each stage of selection.

FIRST STAGE

The first selection stage involves the assignment of all counties to Primary Sampling Units (PSU's) also referred to as Primary Areas (PA's). Each PA consists of a county or group of counties and contains a minimum of 5,000 housing units.* PA's are defined as: 1. Each of thirteen metered market DMA's as of January 1987

- 2. Each of 7 separate Standard Consolidated Statistical Areas (SCSA)**
- 3. Each of 241 separate Standard Metropolitan Statistical Areas (SMSA)**
- 4. Remaining individual counties or combinations of contiguous counties with a minimum of 5,000 housing units.

The total number of PA's is 1819 with 1129 PA's consisting of one county and 690 PA's consisting of two or more counties.

The effect of increasing the size of PA's by combining counties of less than 5,000 housing units is to reduce the amount of clustering by spreading the sample of housing units over a larger number of counties, thereby decreasing the sampling error of most estimates.

A total of 131 PA's containing more than 87,900 housing units are included in the sample with certainty and designated as self-representing. These self-representing PA's comprise a total of 683 counties and contain about 70 percent of all U.S. housing units.

The remaining PA's, designated as non-self-representing units, are combined into geographic groups, In addition, non-self-representing PA's are assigned to strata defined by Nielsen territory, Nielsen county size, cable penetration, and PA geographic group. The number of sample PA's allocated for selection from each stratum is proportionate to the number of housing units in each stratum. Within the strata, a total of 322 sample PA's are randomly selected with probability proportionate to size using housing units as the measure of size. These 322 sample PA's consist of about 447 sample counties. Combined with the certainty sample PA's, the total number of

sample counties for the NTI sample is 1130.

*Based on 1980 Census of Housing

** As defined by the U.S. Office of Management and Budget at the time of the

A. SECOND STAGE

The second stage consists of the selection of Census Bureau Block Groups (BG's) and Enumeration Districts (ED's) used for the 1980 Census. BG's and ED's are small geographic areas used for census enumeration. They have defined boundaries, and generally contain between 200 and 400 housing units. In self-representing PA's, BG's and ED's are stratified by PA, Nielsen territory, Nielsen county size, cable penetration, percent Black plus Spanish households (1980 Census) and percent of households with children (1980 Census). The thirteen metered market PA's are further stratified by county or sub-county to provide greater geographic control and distribution of the sample BG's and ED's.

In non-self-representing PA's, BG's and ED's are stratified by PA, percent black plus Spanish households and percent of households with children. The number of sample BG's and ED's selected are allocated to strata proportionate to housing units. Within the strata, BG's and ED's are randomly selected with probability proportionate to housing units. A total of five sample BG's and ED's are selected within each non-certainty sample PA. Approximately one percent of the 1980 Census BG's and ED's contained zero housing units at the time of the 1980 Census. These areas are linked to an adjacent Census BG and ED containing housing units and are surveyed if their associated BG or ED is selected. This method provides for complete coverage of all land areas in the U.S. at the time of the survey and gives all new housing units constructed in such areas, since the 1980 Census, the same chance of selection.

THIRD STAGE

A third stage consists of the selection of blocks within sample BG's for which the Census provides individual block housing unit counts. Blocks with fewer than 100 housing units are combined with other blocks to achieve a minimum block size of 100 housing units. Sample blocks are randomly selected with probability proportionate to housing units in each block or combined blocks.

FOURTH STAGE

The sample selection through the first three stages is done in the office. The remaining sample survey operations are done in the Field by persons trained and supervised by Nielsen's Statistical Research Department. This stage consists of enumeration of housing units within the sample blocks and ED's, and selection of the sample housing units. In total more than one million housing units are enumerated and more than 250,000 housing units are listed.

In BG's for which single blocks or combined blocks are selected, the procedures are as follows:

- 1. Using Census BG maps, the Nielsen Field Surveyor locates the selected block(s) and enumerates the housing units in each block(s) using a predetermined pattern.
- 2. The Field Surveyor then randomly selects the sample housing unit using a prescribed probability selection method.
 - 3. The Field Surveyor lists the address of the predesignated housing unit and addresses of adjacent housing units.

In ED's for which block statistics are not available, the following procedures are used:

- 1. Using Census ED maps, the Nielsen Field Surveyor subdivides the ED into "blocks" using streets, railroads, rivers, etc., as boundaries. The "blocks" are numbered in a geographic sequence using a predetermined starting point and pattern for traveling through the ED for the enumeration of the housing units.
- 2. The housing units are counted within each block and cumulated. The sample "block" is randomly selected with probability proportionate to the number of housing units in the block.
- 3. The Field Surveyor then randomly selects the sample housing unit using a prescribed probability selection method. The Field Surveyor lists the address of the predesignated housing unit and addresses of adjacent housing units.
- 4. In cases where street addresses are not available, each of the listed housing units are located on maps. A description of each housing unit is included by the Field Surveyor to later enable the Nielsen Field Representative to locate the predesignated sample housing unit.

The desired number of predesignated sample housing units per survey area is one. To achieve an equal chance of selection for each housing unit, the sampling rate used to select sample housing units within the sample area is one housing unit per the 1990 Census number of housing units for the area. This rate is applied to the actual number of housing units enumerated by the surveyor in the sample area. The number of housing units found at the time of the surveyor count could differ from the 1990 Census housing units because of new construction or demolition.

If the ratio of the number of housing units counted by the surveyor and the 1990 Census number of housing units is one, then the number of sample housing units obtained will be one; if the ratio is greater than one, then additional sample housing units may be selected; if the ratio is less than one, then no sample housing units may be selected. By using this ratio for each sample survey area, each housing unit has an equal chance of selection. If only one housing unit were selected, regardless of the size of the ratio of actual housing units and 1990 Census housing units, then sample housing units would have been selected with different probabilities. Households with a television set occupying the predesignated sample housing units are later recruited for the panel sample by Nielsen Field Representatives. Vacant housing units are checked periodically to determine if they have become occupied. If so, they are recruited for the panel sample. The housing units listed following the predesignated housing unit are available as substitute housing units in the event the sample household refuses to cooperate.

C. SAMPLE REVISION

Twice each year the NTI sample of housing units is revised through the sampling of newly constructed housing units and the replacement of demolished sample housing units. The revisions reflect the normal shifts in housing population which occur each year.

About 95% of residential construction in the United States is done in areas that require building permits. Each year the Census Bureau obtains data on the number of housing units authorized for construction by each building permit office in the U.S. This information is purchased by Nielsen for use in updating the NTI sample to include such new construction.

Selection of newly constructed housing units is done as follows: 1. The building permit offices are listed alphabetically within the sample

counties which are geographically sequenced across the U.S.

2. The number of housing units authorized for construction is obtained for each building permit office and cumulated.

- 3. The accumulated list of housing units is sampled systematically using the same sampling rate used for the NTI sample. This work is done in the Nielsen office.
- 4. Field Surveyors trained by the Statistical Research Department are sent to the selected building permit offices. In each office, the surveyor systematically arranges the permits (usually by issue date), identifies the randomly selected sample housing unit(s), and obtains the geographic location. Similar information is obtained for additional new housing units to be used as substitutes in the event the selected household refuses to cooperate.
- 5. The surveyor locates the sample housing units and obtains the address or other geographic description. Housing units still under construction or not yet started are periodically visited to verify construction progress and occupancy.

In areas for which building permit information is not available (approximately 5% of the U.S.), Field Surveyors resurvey the sample areas and determine housing units constructed since the previous count. These newly constructed housing units are sampled at the same rate as used for the NTI sample. These areas are surveyed periodically between each decennial census.

The revision procedures include maintaining the NTI sample housing units at a constant size. This is achieved by the removal of randomly selected housing units from the operational sample.

D. SYSTEMATIC SAMPLE REPLACEMENT

The NTI sample design provides for turnover (replacement) of sample households on a scheduled basis. Each month sample households are specified to the Field for replacement. No household will remain in the sample longer than two years. Replacement households are generally selected from the same areas as the households to be removed from the sample.



NSI SWEEP MONTHS ONLY FEBRUARY, MAY, JULY, NOVEMBER 1991

	Local	Syndicated Series	Devotional	Snorts	Other	Non-Commercial	Total
# Homes	<u>100a1</u> 3277	<u>3958</u>	941	2676	114	290	4004

METERED MPAA ANALYSIS NUMBER OF HOMES VIEWING 1+ MINUTES, BY SOURCE

FULL YEAR JANUARY 1 - DECEMBER 31, 1991

		Syndicated Series					
	Local	Specials, Movies	<u>Devotional</u>	<u>Sports</u>	<u>Other</u>	Non-Commercial	Total
# Homes	3935	4376	1585	3473	262	351	4398

		1990				
	WTBS	17GAATLANTA	038591401039643856	39117629	1.000	ATTACHMENT C
••	WGN	09ILCHICAGO	018707328019548768	19128048	1.000	
	WWOR	09NYNEW YORK	012314348012151662	12233005	1.000	
	WPIX	11NYNEW YORK	003397370003017922	3207646	1.000	
	WSBK	38MABOSTON	001875322001935936	1905629	1.000	
	KTTV	11CALOS ANGELES	001072825001007847	1040336	1.000	
	KTLA	05CALOS ANGELES	000969081000880659	924870	1.000	
	WTXF	29PAPHILADELPHIA	000892473000782120	837297	1.000	
	WVIA	44PASCRANTON	000626719000777928	702324	1.000	
	KTVU	02CAOAKLAND	000652404000638253	645329	1.000	
	KTXL	40CASACRAMENTO	000642389000457036	549713	1.000	
	WTTW	11ILCHICAGO	000560275000496558	528417	1.000	
	WUAB	430HLORAIN	000522068000478135	500102	1.000	
	WKBD	50MIDETROIT	000474155000502984	488570	1.000	
	WBFF	45MDBALTIMORE	000465495000492349	4/8922	1.000	
	WPHL	17PAPHILADELPHIA	000462333000445870	454102	1.000	
	WNYW	05NYNEW YORK	000505560000396242	450901	1.000	
	KCET	28CALOS ANGELES	0004122221000220227	411902	1 000	
	WDCA	20DCWASHINGTON	000412221000389327	400774	1 000	
	KBHK	AACASAN FRANCISCO	000360409000433132	300255	1 000	
	KICU	SOUASAN JUSE	000300409000421300	374683	1 000	
	KCKA WDIV	OSCASACRAMENTO	000363775000358958	361367	1 000	
	NETY	O TIVNEW YORK	00030377937000359265	353601	1 000	
	WADU		000336412000341265	338839	1 000	
	VTUT VTUT	TIGAAIHANIA 11myst Wodtu	000351474000372922	337198	1 000	
	VIVI	1 ONNEET THERM	000385720000281575	333648	1 000	
	MT VT	5 EMACAMEDIDINGRAM	000328650000298423	313537	1 000	
	N 17 N 17	1 SMUCHIDEIDGE	000311326000294808	303067	1.000	
	KCO	OTCASAN FRANCISCO	000294567000293226	293897	1.000	
•	WNET	1 3NYNYC-NEWARK	000285934000268451	277193	1.000	
	KCAL	OGCALOS ANGELES	000267708000273565	270637	1.000	
	WTTG	05DCWASHINGTON	000264530000263742	264136	1.000	
	WFLD	32TLCHICAGO	000281561000239970	260766	1.000	
	KECB	42CACONCORD	000222337000298634	260486	1.000	
	WBAL	11MDBALTIMORE	000252679000264335	258507	1.000	
	KERA	13TXDALLAS	000255115000236229	245672	1.000	
	WXIX	190HCINCINNATI	000253618000236402	245010	1.000	
	WHA	21WIMADISON	000236433000242253	239343	1.000	
	WPVI	06PAPHILADELPHIA	000259986000216189	238088	1.000	
	KSTW	11WATACOMA	000246551000220812	233682	1.000	
	WMAR	02MDBALTIMORE	000231749000235254	233502	1.000	
	KTSF	26CASAN FRANCISCO	000193409000252906	223158	1.000	
	WGNX	46GAATLANTA	000224270000214581	219426	1.000	
	WNEP	16PASCRANTON	000233139000203693	218416	1.000	
	KWGN	02CODENVER	000228129000208037	218083	1.000	
	KRON	04CASAN FRANCISCO	000216279000219326	217803	1.000	
	WCAU	10PAPHILADELPHIA	000229213000205954	217584	1.000	
	WBBM	02ILCHICAGO	000212263000214866	213565	1.000	
	WGBS	57PAPHILADELPHIA	000223268000200504	211886	1.000	
	KXTX	39TXDALLAS	000209630000208695	209163	5.415	
	WCBS	02NYNEW YORK	000189120000200594	194857	5.415	
	KCOP	13CALOS ANGELES	000181978000182218	182098	5.415	
	KMGH	07CODENVER	000177243000159532	168388	5.415	
	WFXT	25MABOSTON	000184913000134334	159624	5.415	
	WHIO	070HDAYTON	00014/40/000155628	101018	5.415	
	KUHT	OBTXHOUSTON	000130670000135454	133002	5.415	
	KNSD	39CASAN DIEGO	000122313000129138	120720	5.415	
	WWSB	4UFLSARASOTA	000114/83000124926	113033	5.413 5 415	
	WJAR	IURIPROVIDENCE	000100245000102010	107600	5.413 5 /15	
	WIS	LUSCCOLUMBIA	000001202000105964	TOLORY	5.41D 5 /1E	
	KATV	UTARLITTLE ROCK	000030760000150340	30300 0 <i>2</i> 020	5,413 5 x75	
	WDTN	UZOHDAYTON		UCUDE 10001	J.413 5 /15	
	KXAS	USTXFORT WORTH	000020043000100043	20000	J.415	
	WCDC	19MAADAMS	000001030000103043	- 0/170	5.415	
	KAET	USAZPHQENIX	000097042000091503	07150	2.472	

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		•								
YMTY	BACALOS ANGELES	000074160000083770	•	78965	5.415					
		000099243000060654	-	74449	5 415					
WAIL	36GAATLANTA				5 415					
WFLA	OSFLTAMPA	000000448000141183		10870	3.415 .					
5.72017	TTNNACHVTTTF	000069005000068280		68643	5.415					
N41 V		000005541000126204		65010	5 115					
WJBK	02MIDETROIT	000005541000126294		03370	0.41J					
WIISA	0 9 DCWASHINGTON	000060821000068258	1.1	64540	5.415	i i	i.	i.	1	1
NOUN	Ó SVOR OGRAN	000060242000064512		62277	5 415	· ·	1	1	1	1
MCAB	USMABUSTUN	00000242000004512		22211	0,310					
KFOR	040KOKLAHOMA CITY	000058529000058253		2833T	5.415	I I	1	1	1	I I
10712	2 CTYLICITON	000053549000060518		57034	5.415	i i	i	i	i.	1.1
UKTA	ZOIAROUSION			SEDIE	5 415					
WÇIU	26ILCHICAGO	000011480000040340		00000	0.410					
WESH	02FLDAYTONA BEACH	000051600000056366		53983	5.415	1 1	1	1	1	1 1
	1 20KOWI NUONA CITEV	000051724000050899		51312	5.415					
VEIN	1 SOKOKIIAHOMA CIII			50245	5 /15					
WJAC	06PAJOHNSTOWN	0000088880000037003		50245	2.415	1 1	1	1	1	1 1
KDFW	04TXDALLAS	000050074000047418		48746	5.415					
TIDIVO	21 NUNEW VORK	000046122000045936		46029	5.415					
MINIC	SININEW IORK		1	4 4 0 0 4	E 43 E					
WTVD	11NCDURHAM-RALEIGH-FAYE	T00004612100004228/	1	44204	5.415	· · ·	:	1	:	
KUCK	GOCASAN MATEO	000042442000043474	1.1	42958	5.415		;	1		i i
RCOM		000040693000040417		10510	5 415					
WENH	-11NHDURHAM	000040621000040417		40313						
KBYU	llutprovo	000032277000045664		38971	5.415		1	1	1	
T	07VNDONNOKE	000036317000038821		37569	5.415					
WUBU	0 / VAROANORE	0000000170000000000		56307	5 415		1	i.	1	1
WGNT	27VAPORTSMOUTH	000038237000034376		30307	2.412					
KSAT	12TXSAN ANTONIO	000034426000035644	1	35035	5.415			i.		
TTTT	2 ONIN TIME A DOT TO	000033084000034136	4	33610	5.415		1	1	1	1
KITN	ZYMNMINNEAPOLIS		1		C 41 C		1			
KOCO	050KOKLAHOMA CITY	000032408000032441		32425	3.415		1	1	1	1
WAFE	OGLABATON BOUGE	000034263000028177		31220	5.415					
		000040794000000000		20788	5 415	: :	1	1		i i
WWL	U4LANEW ORLEANS	000040784000020792		20100	J.41J		1			1.1.1
KTWU	11KSTOPEKA	000029749000030051		29900	5.415		1	1		÷
VCCO	100200000000	000028867000029603		29235	5.415		1			1.1
rcs0		000020001000020000		00675	5 / 15		i.	i.		1
KFTY	50CASANTA ROSA	000027090000030262		20010	5.472			i.		
WING	58NCCONCORD	000031810000024239		28025	5.415		1			1 1
	1 251 53453	000026701000027424		27063	5.415				1	
MIVI	TOUTHIER	0000207020000007123		25702	E 415					
WPSD	06KYPADUCAH	000025348000026057		25703	5.415			1		
WGTE	300HTOLEDO	000024703000025322		25013	5.415	i i	i.		1	
		000026562000022744		24653	5.415		1		1	1.1.1
MTFY	TRUTEXINGION			DA054	5 475					
KDFI	27TXDALLAS	000023998000024110		24034	2.412		1			
KHO	0 6WASPOKANE	000042891000004161		23526	5.415			÷		
1012		000021454000024681		23068	5.415		1	1	1	1 1
WNWO	240HTOLEDO			20000	C 47 C			÷.		
WGGB	40MASPRINGFIELD	000041537000003989		22103	3.413					
KCDO	1 RADTACOMA	000023352000019468		21410	5.415					1 1
INCE Q		0000033333000030910		21071	5 415		1	1		1 1
KWQC	UGIADAVENPORT	000021323000020819	1	21011	U . 4 . U			-		
WJCT	07FLJACKSONVILLE	000025363000015045		20204	5.415			i.		
TUCY	2 OMTMET WATER	000019281000019765		19523	5.415		1	1	1	1.1
WVCI	20MTWITHMAOVED		1	10252	5 416			÷.		1.1
WOLO	25SCCOLUMBIA	000019146000019357	;	19202	0,410 				1	
KDNL	30MOST LOUIS	000016800000020252		18526	5.415	1 1	i.	i.		i i
VDDC	1 SCNCAN DIFCO	000018154000018187		18171	5.415				1	
NFD 3	IJCROAN DINGO	0000102010000000000		17004	5 415		i.	÷		
WALA	IUALMOBILE	000011121000012010		T1004	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
KTBO	140KOKLAHOMA CITY	000017164000016897		T1031	2.412					· ·
WEET	SSINFT WAYNE	000018955000014367		16661	5.415		1			
HEE L		000015750000016883		16067	5 415					1.1.1
WBNG	12NYBINGHAMTON	000013230000010805	1	10001						
WLIG	55NYRIVERHEAD	000015710000016012	1	T280T	2.412					1 - I
MINIUC	5 GUAFATEFAY	000014749000016063		15406	5.415					
HIVC		000015286000014916		15151	5.415					· ·
KUTP	4 SAZPHOENIK	00001020000014010		10204	C 49 E			1		
KHÊT	11HIHONOLULU	000014648000015069		14856	2.412					
2000		000014516000014622	1	14569	5.415			1		
KKRT	331AVEVKA THTE		1	1/321	5 415					
WXTX	54GACOLUMBUS	0000TBASS0000TT (40				1.1	1	1	1	
KT.TV	07TXTYLER	000013961000014044		14003	5.415					
4795555757		000013644000013616		13630	5.415					
KENX	LZAZPRUENIA			12116	5 415					
WTVZ	3 3 VANORFOLK	000013343000015585		10110	0.410					
W77.2	62NYKINGSTON	000004322000020742		12532	5.415					
		000008217000015579		11898	5.415					
KTWO	UZWICASPER			11 5 41	6 476					الي ا
KDTN	02TXDENTON	000023002000000000		TTOUT	5.475					
KIICT	SICASAN DIECO	000010808000011350	i	11079	5.415					
V03T	V JALONA IIJ V TOPOLIV IIJ	000011008000010931		10970	5.415					
KMTV	VJNEUMARA			10770	2 112					
WCLF	22FLCLEARWATER	0000032380000T (ATS	1	-T0:120	्र्यू स्वर्ध्वय ्य					
V D C T	02TDBOIEF	000010453000010629		10541	5.415					
VDCT		000011637000000000		10313	5.415					
WHRO	15VAHAMPTON	000011031000000500				-				

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				0045	E 41E
	KSNW	USKSWICHITA	000009715000009975	9043	2.472
۰.	WIPC	15KYLOUISVILLE	000010653000008631	964Z	5.415
•	KTVD	20CODENVER	000018742000000000	9371	5.415
	KVCT	19TXVICTORIA	000018326000000000	9163	5.415
	WSPA	07SCSPARTANBURG	000004371000013050	8711	5.415
	KWET	120KCHEYENNE	000008133000008076	8105	5.415
	WOLF	38PASCRANTON	000005473000009449	7461	5,415
	KCIT	14TXAMARILLO	000006992000007036	7014	5.415
	WEDU	0.3FLTAMPA	000006373000007098	6736	5.415
	KVTV	03MOSPRINGETELD	000006666000006606	6636	5.415
	WDNF	38WTCREEN BAY	00000000000012544	6272	5.415
	MEND Mode	26ALFLORENCE	000007637000004452	6045	5.415
	MENV	2 CHUELDONENCE	00000568300005667	5675	5.415
	TT TT TT	ATACTORY CTTY	00001109700000000	5549	5 415
		VAINDIVON CIII	000010456000000000	5232	5 415
	WIJC		000010400000000210	5050	5 415
	WTF.T	18INLAFAILTIE	000005021000005102	4701	5.410 J.410
	KWIX		000004534000004947	4/91	5.415
	WVFT	27VAROANOKE	000004739000004768	4/54	5.415
	KSAX	42MNALEXANDRIA	000004666000004562	4614	5.415
	KORO	28TXCORPUS CHRISTI	000004585000004458	4522	5.415
	WNRW	45NCWINSTON-SALEM	000004415000004546	4481	5.415
	WEAO	490HAKRON	000004363000004370	4367	5.415
	KEDT	16TXCORPUS CHRISTI	000004061000004162	4112	5.415
	WLEF	36WIPARK FALLS	000003997000003967	3982	5.415
	KXLN	45TXROSENBURG	000007496000000000	3748	5.415
	WTVP	47ILPEORIA	000003709000003607	3658	5.415
	WPBY	3 3 WVHUNTINGTON	000002626000004425	3526	5.415
	WPTO	140HOXFORD	000006869000000000	3435	5.415
	KSIN	27IASIOUX CITY	000003418000003222	3320	5.415
	WTVW	07INEVANSVILLE	000002752000003724	3238	5.415
	WCNY	24NYSYRACUSE	000003045000003034	3040	5.415
	KTAJ	16MOST JOSEPH	000002706000002714	2710	5.415
	WBOY	12WVCLARKSBURG	000002543000002580	2562	5.415
	KVOA	04AZTUCSON	00000000000004710	2355	5.415
	WCTT	12NCNEW BERN	000003149000001501	2325	5.415
	KYMA	1 1 A ZYIIMA	000003912000000314	2113	5.415
	KTIII	02AKANCHORAGE	000001765000001883	1824	5.415
	WESH	1 1 FLTALLAHASSEF	000003360000000000	1680	5 415
	KBNU	Δ2ΨΥΔΙΙΩΤΙΩΤΙΝ	000000000000000000000000000000000000000	1623	5 415
	TUDAC		00000200000000243	1455	5 415
	WEILL			1966	5 415
	WDBD	4 UMSUACKSUN	0000000000000002732	1000	5.415
	KOTN	TONEDINCOLN	000000000000000000000000000000000000000	1200	5.415 E 41E
	WAOW	USWIWAUSAU	00000234100000000	77/7	5.415
	WVEU	69GAATLANTA	00002066000000008	1037	5.415
	KGAN	02IACEDAR RAPIDS	000001635000000000	818	5.415
	WGGS	16SCGREENVILLE	000000651000000652	652	5.415
	KCAU	09IASIOUX CITY	000000363000000322	343	5.415
	WATE	06TNKNOXVILLE	000000125000000127	126	5.415
		•			

Call	Channel			Distant	Distant	Distant	
Letters	Number	State	Market	Sub (1)	Sub (2)	Sub Avg.	Weight
WTBS	17	GA,	ATLANTA	41200451	42135999	41668224	1
WGN	9	IL,	CHICAGO	20689836	21631538	21160688	1
WWOR	9	NJ,	SECAUCUS	12513798	12701926	12607862	1
WPIX	11	NY,	NEW YORK	2867121	3085916	2976519	1
WSBK	38	MA,	BOSTON	2275846	2130314	2203080	1
KTLA	5	CA,	LOS ANGELES	975070	943001	959036	1
WTXF	29	PA,	PHILADELPHIA	747532	659724	703628	1
WVIA	44	PA,	SCRANTON	694188	699273	696731	1
KTTV	11	CA,	LOS ANGELES	783933	605719	694826	1
WUAB	43	OH,	LORAIN	563766	541577	552672	1
WPHL	17	PA,	PHILADELPHIA	535579	502523	519051	1
WBFF	45	MD,	BALTIMORE	495871	517604	506738	1
WTTW	11	IL,	CHICAGO	497067	493097	495082	1
WKBD	50	мÍ,	DETROIT	529701	441711	485706	1
KCET	28	CA,	LOS ANGELES	475767	440650	458209	1
KTVU	2	CA,	OAKLAND	452023	447376	449700	1
KBHK	44	CA,	SAN FRANCISCO	439737	446492	443115	1
KICU	36	CA,	SAN JOSE	428771	430339	429555	
KTXL	40	CA,	SACRAMENTO	397528	397639	397584	l
WXIA	11	GA,	ATLANTA	393204	368536	380870	1
WABC	7	NY,	NEW YORK	390511	364898	377705	1
WNYW	5	NY,	NEW YORK	383701	358395	371048	1
KPIX	5	CA,	SAN FRANCISCO	360676	364532	362604	1
KTVT	11	TX,	FORT WORTH	355614	332387	344001	1
WNET	13	NY,	NEW YORK	327065	328863	327964	1
WJZ	13	MD,	BALTIMORE	334941	3012.05	318073	1
KFCB	42	CA,	CONCORD	306397	308862	307630	1
KTSF	26	CA,	SAN FRANCISCO	• 259104	353442	306273	1
KCAL	9	CA,	LOS ANGELES	316651	279437	298044	1
KGO	7	CA,	SAN FRANCISCO	296268	299019	297644	1
WCAU	10	PA,	PHILADELPHIA	285084	308016	296550	1
KCRA	3	CA,	SACRAMENTO	295882	290288	293085	1
WTWS	26	CT,	NEW LONDON	288167	291993	290080	1
WBAL	11	MD,	BALTIMORE	282764	296257	289511	1
WHA	21	WI,	MADISON	253824	267280	260552	1
WFLD	32	IL,	CHICAGO	258872	243277	251075	1
WMAR	2	MD,	BALTIMORE	243233	252966	248100	1
KERA	13	TX,	DALLAS	237730	239635	238683	1
WLVI	56	MA,	CAMBRIDGE	249236	226033	237635	1

KSTW	11	WA.	TACOMA	233454	240382	236918	1
KRON	4	CA.	SAN FRANCISCO	234795	238320	236558	1
WBBM	2	IL.	CHICAGO	246664	222494	234579	1
WXIX	19	KY.	NEWPORT	232625	235304	233965	1
WPVI	6	PA	PHILADELPHIA	218433	241653	230043	1
WDCA	20	DC	WASHINGTON	234695	212206	223451	1
WPRT	20	FI	MIAMI	212946	231301	222124	1
WGNY	2- 16	GA	ΔΤΙ ΔΝΤΔ	233812	208839	221326	1
KWGN	-10 2	CO,	DENVER	220197	217279	218738	1
WTTG	5		WASHINGTON	276160	155436	215798	1
WIIG	17	DC,	NEWARK	172975	256717	214846	1
WNJU	4/	1NJ,	RAN EDANCISCO	100545	101868	101207	5 562
KQED	9 2	CA,		175405	100001	191207	5 562
KIW	3	PA,	PHILADELPHIA	175405	170544	10/145	5 562
WKEF	22	OH,		109492	172344	160012	5 562
WGB2	57	PA,	PHILADELPHIA	140415	1/0400	150426	5 562
WPGH	53	PA,	PITISBURGH	130742	150130	130430	5.502
WLIW	21	NY,	GARDEN CITY	131490	139937	145/17	5.502
WCFC	38	IL,	CHICAGO	150960	119364	135162	5.502
WWSB	40	FL,	SARASOTA	118912	130139	124526	5.562
WPXI	11	PA,	PITTSBURGH	105982	121183	113583	5.562
KATV	7	AR,	LITTLE ROCK	102876	102901	102889	5.562
KSDK	5	MO,	ST LOUIS	91502	103155	97329	5.562
КМВС	9	MO,	KANSAS CITY	93095	92620	92858	5.562
WLTV	23	FL,	MIAMI	86235	89129	87682	5.562
WVTM	13	AL,	BIRMINGHAM	84937	77189	81063	5.562
KCPT	19	MO,	KANSAS CITY	84215	68393	76304	5.562
KHTV	39	TX,	HOUSTON	76008	74064	75036	5.562
KUTV	2	UT,	SALT LAKE	77658	64663	71161	5.562
КТХН	20	TX,	HOUSTON	71108	67378	69243	5.562
KSCI	18	CA,	SAN BERNARDINO	66536	66773	66655	5.562
WHDH	7	MA,	BOSTON	59924	66102	63013	5.562
WNCT	9	NC.	GREENVILLE	59876	59991	59934	5.562
WRDC	28	NC.	DURHAM	89763	27151	58457	5.562
KRIV	26	TX.	HOUSTON	59395	51782	55589	5.562
WRC	4	DC.	WASHINGTON	51226	53996	52611	5.562
WKCF	18	FL.	CLERMONT	96324	6265	51295	5.562
WLMT	30	TN.	MEMPHIS	48632	49154	48893	5.562
KCSM	60	CA.	SAN MATEO	47085	48480	47783	5.562
WCCO	4	MN	MINNEAPOLIS	49180	41460	45320	5.562
KWHY	22	CA	LOS ANGELES	44005	44796	44401	5.562
WMAO	5	II.	CHICAGO	39659	45822	42741	5.562
WPCB	40	PΔ	PITTSBURGH	42837	39423	41130	5.562
	40	WI	MILWAUKFF	37970	43400	40685	5.562
	24	τνι, ΤΝΙ	MEMPHIS	32253	43550	38402	5 562
WELL	24 12	TN,	RICHMOND	14057	60245	37601	5 562
WISC	45	11N, 3171		21678	37367	36020	5.502
WISC	د	٧٧ I,	MADISON	54010	51504	50020	2.202

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	22	ТA	BATON ROUGE	35792	34436	35115	5.562
WCIA	3	LA, II	CHAMPAIGN	34911	34266	34589	5.562
	10	MI	SALILT STE MARIE	33377	33036	33207	5.562
WTVO	36	KV	LEXINGTON	31246	33888	32567	5.562
WIYQ	18	KY,	LEXINGTON	27086	35912	31499	5.562
KEVS	12	MO	CAPE GIRARDEAU	28923	31990	30457	5.562
WIIO	35	OH	LIMA	29417	29726	29572	5.562
WEGU	27	OH OH	LIMA	29039	28161	28600	5.562
WMVS	10	WI	MILWAUKEE	27296	28407	27852	5.562
KGSW	14	NM	ALBUOUEROUE	28553	25792	27173	5.562
WHNT	19	AI.	HUNTSVILLE	26074	26591	26333	5.562
KHAI	20	HI,	HONOLULU	26546	25448	25997	5.562
KVVT	64	CA	BARSTOW	25531	25925	25728	5.562
WKBT	8	wi	LA CROSSE	25142	25846	25494	5.562
KT77	22	WA	SEATTLE	25064	25364	25214	5.562
WHP	22	ΡΔ	HARRISBURG	23925	24595	24260	5.562
WSBE	36	RI	PROVIDENCE	20161	27137	23649	5.562
WAKC	23	OH	AKRON	20381	25387	22884	5.562
KDNI	30	MO	STLOUIS	23494	19960	21727	5.562
WCHS	8	WV	CHARLESTON	20435	20631	20533	5.562
WDKV	56	KV	DANVILLE	17853	22130	19992	5.562
VDRS	15	$C \Delta$	SAN DIEGO	18909	19078	18994	5.562
KTB5 K7KC	62	MO	KANSAS CITY	20864	16021	18443	5.562
KINY	02 A	UT	SALTLAKECITY	17789	18160	17975	5.562
KTRO	- 1/1	01, 0K	OKLAHOMA CITY	17421	17555	17488	5.562
WTOC	11	GA	SAVANNAH	16793	17045	16919	5.562
KOKH	25	OK	OKLAHOMA CITY	16106	16199	16153	5.562
KURT	11	ы., н	HONOLULU	15503	16172	15838	5.562
WDSI	61	TN	CHATTANOOGA	14693	16556	15625	5.562
KW2B	11	Δ7	TUCSON NOGALES	15422	15129	15276	5.562
K A A I	6	MN	ALISTIN	14867	15051	14959	5.562
KMEB	10	HI	WAILLIKU	14424	14670	14547	5.562
KUTP	45	Δ7	PHOENIX	14892	13838	14365	5.562
	54	MD	BALTIMORE	13770	14460	14115	5.562
WDBI	12	RI	PROVIDENCE	13594	13718	13656	5.562
WINGC	34	NV	BINGHAMTON	12808	13163	12986	5.562
WOLO	24	SC	COLUMBIA	19126	5776	12451	5.562
WSEE	25	ΡΔ	FRIE	17497	7168	12333	5.562
WILLC	6	MI	MARQUETTE	12164	11949	12057	5.562
WOLE	38	Ρ Δ	SCRANTON	10019	12526	11273	5.562
WKPC	15	KY	LOUISVILLE	10883	10902	10893	5.562
VTDN	10	$C\Delta$	FONTANA	11855	9333	10594	5.562
WKAR	40 23	MI	LANSING	10242	10018	10130	5.562
WTSF	61	KY.	ASHLAND	8714	10809	9762	5.562
WTSG	31	GA.	ALBANY	12413	6381	9397	5,562
KASN	38	AR.	PINE BLUFF	9389	8295	8842	5.562
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WHEC	10	NV	ROCHESTER	8563	8528	8546	5.562
KWFT	12	OK.	CHEYENNE	8198	8239	8219	5.562
KREG	3	CO,	GLEN WOOD SPRINGS	16009	0	8005	5.562
WIINIS	21	NC	ASHEVILLE	8079	7578	7829	5.562
WEAN	21	VT	BURLINGTON	10719	4449	7584	5.562
WCAA	14	TY	AMARILLO	6933	6991	6962	5.562
KCII	17	NM	LASCRUCES	5197	8344	6771	5.562
	22 10	INIVI,	MINCIE	6630	6698	6664	5.562
WIFD	47	TY	ABILENE	13083	0	6542	5.562
VETV	56	TY	IACKSONVILLE	6297	6517	6407	5.562
WAICC	20	IX,	MARION	2483	10026	6255	5.562
WINCC	23	GA	BRUNSWICK	6016	6199	6108	5.562
WESG	21	TA	FORT DODGE	7651	3900	5776	5.562
WCTI	12	NC	NFW BERN	5664	5610	5637	5.562
WCII VAID	12	INC,	BOISE	10788	0	5394	5.562
KAID WXC7	4 22	ил	APPI FTON	6392	3791	5092	5.562
WAUL	22	NI	CAMDEN	4743	5041	4892	5.562
WIN20	20	INJ,	SOMERSET	4772	4767	4770	5.562
WKSU KTDV	29 12	кı, ID	NAMPA	4655	4763	4709	5.562
NIKV	12	NC	GREENSBORO	4630	4734	4682	5.562
WEAW	40	WI	WALISALI	928	8254	4591	5.562
WSAW	20	ΨΥ1, DA	ALLENTOWN	4407	4569	4488	5.562
	59	FA, TI	MELBOURNE	1345	7601	4473	5.562
WIKB	12	FL, GA	MACON	4295	4365	4330	5.562
WMAL	13	CA	FUREVA	4089	4180	4135	5.562
KEEI	15	CA, TNI	MEMPLIS	7619	555	4087	5.562
WHBQ	13	11N,	SDRINGEIEI D	3937	3919	3928	5.562
WGGB	40	IVIA,		3711	3738	3725	5.562
KUB	4	INIVI,	REDDING	3467	3456	3462	5.562
KIXE	9	CA,	ALTOONA	3296	3293	3295	5.562
WKBS	4/	PA,	COLUMPUS	6397	0	3199	5.562
WITE	28	Uri,		2955	3007	2981	5.562
KBSI	23	MO,	CAPE GIRARDERO	2668	2705	2687	5.562
KKTV		CU,	DEADNIG	· 0	5048	2524	5.562
WIVE	51	PA,	COLDSPORO	2321	2475	2398	5.562
WYED	17	NC,	GOLDSBORO	2121	1842	1987	5.562
WEYI	25	MI,	JADEDO	2151	3876	1938	5.562
KGNS	8	IX,		1620	1833	1727	5.562
KOLN	10	NE,		1418	1392	1405	5.562
WREG	3	IN,	MEMPHIS	212	2543	1378	5.562
WTJC	26	OH,	SPRINGFIELD	212	2545	1301	5.562
KHSH	67	ТΧ,		1011	1121	1196	5 562
KSTU	13	UT,	SALI LAKE ULI Y	2020	1 I O I	1015	5 562
WVEC	13	VA,	HAMPION	2030	0 275	275	5 567
WNAL	44	AL,	BIRMINGHAM	8/2	01J 502	507 507	5 567
WPTV	5	FL,	WEST PALM BEACH	28/	000	201	2.02



WYCC	20	IL,	CHICAGO	4	19	391	405	5.562		
KCAU	9	IA,	SIOUX CITY	32	27	330	329	5.562		
WMAE	12	MS,	BOONEVILLE		0	480	240	5.562		
WOOW	18	WI,	EAU CLAIRE	4	45	59	52	5.562		
		,	1992							
Call	Channel			Distant	Distant	Distant			1 1	
Letters	Number	State	Market	Sub (1)	Sub (2)	Sub Avg.	Weight			
WTRS	17	GA.	ATLANTA	43069978	43982840	43526409	1			
WGN	9	IL.	CHICAGO	22724881	23379330	23052105	1			
WWOR	9	NY.	NEW YORK	12187459	12102463	12144961	: 1	1 1 1		
WPIX	11	NY.	NEW YORK	2899837	2857127	2878482	1		 1	
WSBK	38	MA.	BOSTON	2118451	2084285	2101368	1 1	1 = 1 = 1		
KTLA	5	CA.	LOS ANGELES	926445	62.7899	777172	1	1 = 1 = 1		
WVIA	44	PA.	SCRANTON	732257	708953	720605	1			
WTXF	29	PA,	PHILADELPHIA	613547	609878	611712	1			
WUAB	43	OH.	LORAIN	575201	572424	573812	; 1		· · ·	
WPHL	17	PA.	PHILADELPHIA	542097	567583	554840	1	1000 1000 1000 1000 1000 100		
WTTW	11	IL.	CHICAGO	493796	507087	500441	1		1 1 	
WBFF	45	MD.	BALTIMORE	476634	487753	482193	1	$\begin{smallmatrix} 1 & & 1 & & 1 \\ 1 & & 1 & & 1 \\ \end{split}$		
WKBD	50	MI.	DETROIT	464142	467289	465715	1	an an an An an A		
KTTV	11	CA.	LOS ANGELES	443217	414970	429093	1	т т т Т Т Т Т	· · ·	
KTVU	2	CA.	OAKLAND	424997	411734	418365	1			
KCET	28	CA,	LOS ANGELES	428230	374650	401440	1	1 1 2 1 1 1		
WXIA	11	GA,	ATLANTA	369116	382370	375743	1		V	
KPIX	5	CA,	SAN FRANCISCO	376435	373310	374872	1	$\mathbf{r}_{i} = \mathbf{r}_{i} + \mathbf{r}_{i}$		
KTSF	26	CA,	SAN FRANCISCO	364303	362084	363193	1			
WABC	7	NY,	NEW YORK	359667	362967	361317	\mathbf{I}_{i} , \mathbf{I}_{i}	1 I I	i i	
WNYW	5	NY,	NEW YORK	358379	351989	355184	1			
KTVT	11	TX,	FT WORTH	342806	351604	347205	1			
KICU	36	CA,	SAN JOSE	444934	236998	340966	1			
KTXL	40	CA,	SACRAMENTO	410755	253204	331979	1			
WNET	13	NY,	NYC-NEWARK	343634	314894	329264	1			
KFCB	42	CA,	CONCORD	322482	321789	322135	1			
KGO	7	CA,	SAN FRANCISCO	307559	301307	304433	1			
KCAL	9	CA,	LOS ANGELES	277992	274590	276291	1			
WHA	21	WI,	MADISON	267939	283621	275780	1			
WXIX	19	KY,	CINCINNATI	272857	273935	273396	1			
WJZ	13	MD,	BALTIMORE	277407	256744	267075	· · · · ·	1 1 1		
WNJU	47	NJ,	NYC-NEWARK	262305	264982	263643				
WPBT	2	FL,	MIAMI	274773	238817	256795	1			
WFLD	32	IL,	CHICAGO	252.547	260183	256365				
KBHK	44	CA,	SAN FRANCISCO	254438	249300	251869				
KERA	13	TX,	DALLAS	246058	250862	248460	1			
KSTW	11	WA,	TACOMA	238211	248688	243449				
KRON	4	CA,	SAN FRANCISCO	240228	234911	23/309	1			

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NUCLATI	10	D۸	PHILADELPHIA	222970	228342	225656	1
WDCA	20	DC	WASHINGTON	223322	224924	224123	1
WDCA	20		BATON ROUGE	213787	232718	223252	1
WLPB	27	MD	BAITIMORE	242150	203290	222720	1
WBAL	11	$\frac{1}{1}$	DENVER	221307	221905	221606	1
KWGN	2	CU,	NEW LONDON	172725	252704	212714	1
WIW5	20	DA		196784	224074	210429	1
WPVI	0	FA,	I OS ANGELES	211269	208730	209999	1
KCOP	15	CA,	ΔΤΙ ΔΝΤΔ	208081	202913	205497	1
WGNA	40	CA	SAN FRANCISCO	204527	201417	202972	1
KQED	9 2	NV	NEW YORK	195607	196998	196302	1
WCB5	2	Γ1, CΛ	SACRAMENTO	214457	174990	194723	1
	56	MA	CAMBRIDGE	193823	185406	189614	5.569
WLVI	20	GA	ATIANTA	182532	185589	184060	5.569
WSB	2	OA, MO	VANGAS CITV	178152	180099	179125	5.569
KSHB	41	mo, TV		167631	173074	170352	5.569
WFAA	0	1A,	DENIVER	187865	113953	150909	5.569
KUSA	9	CO,	DENVER	141063	148417	144740	5.569
KKMA	, O		COLUMBUS	141277	136473	138875	5.569
WSYX	0	ОП, DA	DITTSBUDGH	129168	128025	128596	5.569
WPXI	11	rA,	DEVIVEB	153639	77049	115344	5.569
KMGH	1	ΔD,	LITTLE ROCK	106117	107642	106879	5.569
KAKK	4	AK,	TODERA	102827	103151	102989	5.569
KSNI	21	ND,	NEW VORK	94825	97543	96184	5.569
WNYC	21	IN I,	DUCENIX	86497	93041	89769	5.569
KAEI	ð 20	AL, CT	NEW DDITAIN	80935	82057	81496	5.569
WVII	30		SANTA BARBARA	74419	75872	75145	5.569
KEYI	3	CA,	MACUVII I F	69084	74296	71690	5.569
WSMV	4	1 IN,		72083	69250	70666	5.569
WIMJ	4	WI,	MILWAUKEE	71266	68133	69699	5,569
KSCI	18	CA,	CDEENIUII I E	62426	71774	67100	5.569
WNCT	9	NC,	UNISVILLE	62128	63047	62587	5.569
WLKY	32	KI,		60448	61343	60895	5.569
комо	4	WA,	SEATTLE MINDLEADOUS	56806	58181	57493	5.569
KITN	29	MN,	MINNEAPOLIS	52515	56780	54647	5.569
WJW	8	OH,	ULEVELAND WASUINGTON	46850	57056	51953	5.569
WETA	26	DC,	WASHINGTON	40850	50274	50090	5.569
WNED	17	NY,		45900	49524	47757	5.569
WNFT	47	FL,	JACKSONVILLE	40482	52294	46388	5.569
WMC	5	IN,	NENPEN	40482	46501	44541	5.569
WENH	11	NH,		42002	42470	42351	5.569
WLIO	35	OH,		42252	40903	41605	5.569
WISN	12	WI,	MILWAUKEE	30855	40366	40110	5.569
KXTV	10	CA,	SACKAMENIU	30071	39620	39345	5.569
WDBJ	7	VA,		390/1	36485	37564	5.569
WPTA	21	IN,	FI WAYNE	20042 26286	46878	36557	5.569
WXYZ	7	MI,	DEIKUII	20200	70020	1000	2.207



KXAN	36	TX,	AUSTIN	31785	37303	34544	5.569
WVIZ	25	OH.	CLEVELAND	0	67134	33567	5.569
WTHR	13	IN.	INDIANAPOLIS	32208	32748	32478	5.569
WYES	12	LA,	NEW ORLEANS	30819	32268	31543	5.569
WSCV	51	FL.	FT LAUDERDALE	60830	1374	31102	5.569
KOED	11	OK.	TULSA	30100	30549	30324	5.569
WNMU	13	MI.	MAROUETTE	28719	29861	29290	5.569
KHAI	20	HI.	HONOLULU	30556	26419	28487	5.569
WIFR	23	IL.	FREEPORT	27649	28441	28045	5.569
WMVS	10	WI.	MILWAUKEE	28901	25283	27092	5.569
KCPM	24	ĊÁ.	CHICO	26635	26647	26641	5.569
WRTV	6	IN,	INDIANAPOLIS	25615	26101	25858	5.569
WAFF	48	AL,	HUNTSVILLE- DECATUR	25080	25323	25201	5.569
WFSB	3	CT,	HARTFORD	24521	24216	24368	5.569
WSIU	8	IL,	CARBONDALE	23037	23399	23218	5.569
KEZI	9	OR.	EUGENE	22598	23039	22818	5.569
WDEF	12	TN.	CHATTANOOGA	24658	19154	21906	5.569
WSOC	9	NC.	CHARLOTTE	22429	19830	21129	5.569
WEHT	25	IN.	EVANSVILLE	19921	20479	20200	5.569
KMSB	11	AZ.	TUCSON	19257	19785	19521	5.569
WAWS	30	FL.	JACKSONVILLE	19080	19331	19205	5.569
WKPC	15	KY.	LOUISVILLE	12864	24856	18860	5.569
WJBK	2	MI.	DETROIT	20252	16816	18534	5.569
WLTV	23	FL.	MIAMI	15185	20869	18027	5.569
KTBO	14	OK.	OKLAHOMA CITY	17399	17671	17535	5.569
WFTV	9	FL.	ORLANDO	15352	18987	17169	5.569
WHLT	22	MS.	HATTIESBURG	16721	17073	16897	5.569
WHFT	45	FL.	MIAMI	16009	16930	16469	5.569
WKBT	8	WÍ.	LA CROSSE	18963	12748	15855	5.569
WCHS	8	WV.	CHARLESTON	16805	14117	15461	5.569
KSLA	12	LA.	SHREVEPORT	15003	15451	15227	5.569
KETS	2	AR.	LITTLE ROCK	14447	14738	14592	5.569
WMGM	40	NJ.	WILDWOOD	8003	20229	14116	5.569
WTTO	21	AL.	BIRMINGHAM	13635	13906	13770	5.569
WLTX	19	SC.	COLUMBIA	14015	13000	13507	5.569
KDTV	14	CA.	SAN FRANCISCO	12670	13340	13005	5.569
WMEA	11	ME.	BIDDEFORD	15306	9636	12471	5.569
WTAI	10	PA.	ALTOONA	10430	13219	11824	5.569
WLBZ	2	ME.	BANGOR	11201	11526	11363	5.569
WTSF	61	KY.	ASHLAND	10955	10768	10861	5.569
WOPT	24	IL.	MOLINE	10489	10389	10439	5.569
KVUE	24	TX.	AUSTIN	9982	10087	10034	5.569
WAVY	10	VA.	PORTSMOUTH	9771	9862	9816	5.569
KTWO	2	WY	CASPER	2800	16059	9429	5.569
WBAY	2	WI.	GREEN BAY	17455	0	8727	5.569

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WTRT	26	AL,	FLORENCE	8479	8497	8488	5.569
KDFI	27	TX,	DALLAS	8221	8521	8371	5.569
WJRT	12	MI,	FLINT	8370	7952	8161	5.569
KTRE	9	TX,	LUFKIN	7590	7834	7712	5.569
WOTV	68	MA.	BOSTON	7160	7344	7252	5.569
WAPT	16	MS.	JACKSON	6796	7366	7081	5.569
WIPB	49	IN.	MUNCIE	6806	6897	6851	5.569
WACH	57	SC.	COLUMBIA	6673	6737	6705	5.569
WNYB	49	NY.	BUFFALO	6545	6554	6549	5.569
WTVM	9	GA.	COLUMBUS	6201	6432	6316	5.569
KLRU	18	TX.	AUSTIN	6137	6210	6173	5.569
WCTI	12	NC.	NEW BERN	5826	5923	5874	5.569
WENY	36	NY.	ELMIRA	5772	5757	5764	5.569
WEEK	25	IL.	PEORIA	5762	5510	5636	5.569
WWCP	8	PA,	JOHNSTOWN	5298	5364	5331	5.569
KETK	56	TX,	JACKSONVILLE	4966	5196	5081	5.569
KTRV	12	ID.	NAMPA	4916	5017	4966	5.569
KWTX	10	TX.	WACO	4789	5021	4905	5.569
WBRA	15	VA.	ROANOKE	4784	4837	4810	5.569
KTTW	17	SD.	SIOUX FALLS	4195	5268	4731	5.569
WVEU	69	GA.	ATLANTA	4747	4668	4707	5.569
KMBH	60	TX.	HARLINGEN	5699	3600	4649	5.569
WEAO	49	OH.	AKRON	4371	4513	4442	5.569
WEAR	3	FL.	PENSACOLA	4151	4169	4160	5.569
WLEF	36	WI.	PARK FALLS	4050	4090	4070	5.569
WFLX	29	FL,	WEST PALM BEACH	599	7317	3958	5.569
WGRB	34	KY.	CAMPBELLSVILLE	3815	3845	3830	5.569
WTVP	47	IL.	PEORIA	3782	3589	3685	5.569
WVCY	30	WI.	MILWAUKEE	3559	3552	3555	5.569
KXII	12	OK.	ARDMORE	3432	3500	3466	5.569
KTSC	8	CO,	PUEBLO- COLORADO SPR	3410	3452	3431	5.569
WGVU	35	MI.	GRAND RAPIDS	3519	3202	3360	5.569
WIZY	46	NC.	BELMONT	· 0	6002	3001	5.569
KTAB	32	TX.	ABILENE	·2777	2818	2797	5.569
WYED	17	NC.	GOLDSBORO	2535	2608	2571	5.569
KDOC	56	CA.	ANAHEIM	4329	466	2397	5.569
KTUU	2	AK.	ANCHORAGE	1970	2161	2065	5.569
WATE	6	TN.	KNOXVILLE	3671	155	1913	5.569
WORF	39	II.	ROCKFORD	2408	1013	1710	5.569
WEKW	52	NH.	KEENE	1503	1518	1510	5.569
WMCC	23	IN.	MARION	1349	1396	1372	5.569
KTFH	49	TX.	CONROE	0	2522	1261	5.569
KAVII	25	TX.	VICTORIA	0	2312	1156	5.569
KLST	8	TX.	SAN ANGELO	1034	1075	1054	5.569
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I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on August 18, 1995

Paul Lindstrom