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Before the
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Washington, D.C. 20009

AUG 16 1993

In the Matter of 1990 Cable Royalty Distribution Proceeding	CRT Docket No. 92-1-90CD

DIRECT CASE
OF THE

JOINT SPORTS CLAIMANTS

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In the Matter of 1990 Cable Royalty Distribution Proceeding	CRT Docket No. 92-1-90CD

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JOINT SPORTS CLAIMANTS

Pursuant to the Tribunal's notice of March 29, 1993, published at 58 Fed. Reg. 17387 (April 2, 1993), and the Tribunal's order of July 1, 1993, Major League Baseball, the National Basketball Association, the National Hockey League, and the National Collegiate Athletic Association ("Joint Sports Claimants"), representing their more than 200 member clubs and institutions, hereby submit their direct case in the 1990 Cable Royalty Distribution Proceeding.

The Joint Sports Claimants will present the following witnesses during their direct case:

-- David J. Stern, Commissioner of the National Basketball Association. (Tab A)

-- Paul I. Bortz, President of Bortz & Company, Inc., Denver, Colorado. (Tab B)

-- Dr. Peter H. Lemieux, Managing Director of Information Architects, and Lecturer at the Massachusetts Institute of Technology, Cambridge, Massachusetts. (Tab C)

-- Jerry Maglio, Division President of Tele-Trend Communications, Inc., Englewood, Colorado, and former Senior Vice President for Marketing and Programming at United Artists Cable, Denver, Colorado. (Tab D)

-- Bryan Burns, President of the Paragon Alliance, New York, New York, and former Senior Vice President of Major League Baseball. (Tab E)

-- David D. Alworth, Executive Director of Broadcasting for Major League Baseball. (Tab F)

The Joint Sports Claimants are filing with the Tribunal the originals of all testimony as executed by the above witnesses, with the exception of David J. Stern and Jerry Maglio. The executed originals of their testimony will be filed with the Tribunal as soon as the originals are received from the witnesses.

For the Tribunal's convenience, included with the direct case being submitted to the Tribunal are copies of the written testimony of the Joint Sports Claimants' witnesses in the 1989 proceeding (Tabs G-R). This testimony and the other portions of the 1989 and prior records are being incorporated by reference, as set forth in the attached memorandum.

The Joint Sports Claimants are not seeking any portion of the Syndex Fund, and have no objection to the Tribunal's allocating all remaining Syndex royalties to

the MPAA. The Joint Sports Claimants are requesting that they and all parties receive a share of 1990 royalties that is commensurate with the results of JSC's 1990 survey of cable operator program valuations. Specifically, JSC are requesting 33 percent of the basic fund and a share of the 3.75 royalties that is at least five percentage points higher than their basic fund award.

Respectfully submitted,

JOINT SPORTS CLAIMANTS

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August 16, 1993

CERTIFICATE OF SERVICE

I, Patricia A. Copeland, a secretary for the firm of Arnold & Porter, do hereby certify that I have this 16th day of August 1993, mailed by First Class, United States mail, postage paid, the foregoing "Direct Case of the Joint Sports Claimants" to the following individuals:

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NATIONAL BASKETBALL ASSOCIATION
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DAVID J. STERN
COMMISSIONER

TESTIMONY OF DAVID J. STERN
COMMISSIONER OF THE NATIONAL BASKETBALL ASSOCIATION

I am presenting this testimony before the Copyright Royalty Tribunal in support of the claim for 1990 cable television compulsory licensing royalties filed by the Joint Sports Claimants ("JSC") -- the National Basketball Association, Major League Baseball, the National Hockey League and the National Collegiate Athletic Association.

Qualifications

I have been associated with the NBA for a period of more than 26 years. Prior to becoming Commissioner in 1984, I was General Counsel (1978-81) and then Executive Vice President, Business and Legal Affairs (1981-84) for the NBA. I served as outside counsel to the NBA during the years 1967-78, while a member of the law firm of Proskauer Rose Goetz & Mendelsohn in New York City.

Throughout my association with the NBA, I have had intimate involvement with all matters pertaining to the NBA's broadcast and cable television interests. Among other things, I have been responsible for negotiating all seven of the NBA's national cable television contracts, as well as the six national broadcast television contracts, that the NBA has entered into since 1978. In addition, I have had responsibility for developing NBA television policy and formulating the NBA's positions on broadcast and cable television issues before the Congress, Federal Communications Commission and the Copyright Royalty Tribunal ("CRT").

Position of the Joint Sports Claimants

After considering the evidence presented by JSC and the other parties in the 1989 proceeding, the CRT increased the award to JSC from approximately 17 percent to approximately 25 percent. The NBA and each of the JSC members are appreciative of the CRT's action. Nevertheless, we continue to believe that the marketplace values our programming more highly than is reflected in the CRT's 1989 award. Likewise, we believe that the award made to program syndicators in the 1989 proceeding -- more than twice the sports award -- significantly exceeds the value of that programming.

We urge the CRT to provide JSC (and all other claimants) with an award that corresponds to that evidenced by the 1990 survey of cable operator program valuations conducted on behalf of the JSC. According to this survey, cable operators would allocate approximately 35 percent of their distant signal royalty payments to acquire non-network sports programming provided by JSC. The survey further demonstrates that movies are valued approximately the same as sports and that syndicated programs are valued approximately half as much as sports.

Discussion of JSC's Position

When I testified before the Tribunal in the 1989 proceeding, I discussed the unprecedented growth in the popularity of the NBA through the 1980s, which corresponded to significant increases in the number of national and local NBA game telecasts and in rights fees paid to the League and its teams. I also discussed the reasons that sports programming generally and NBA programming in particular are highly valued. I will not repeat that testimony here -- except to note my view that sports programming broadcast by superstations and distant signals was valued by cable operators at least as highly in 1990 as

it was in 1989. This view is consistent with the results of our 1989 and 1990 surveys.

It should be noted that in our view, since the copyright royalties paid by cable operators under the compulsory license bear no relationship to the fair market value of sports programming, the Copyright Act precludes an allocation for 1990 that would even approach the fair market value of our programming carried by superstations and other distant signals. Furthermore, the widespread and uncontrolled national dissemination of our programming on superstations undermines our ability to grant telecasters and advertisers exclusivity in marketplace transactions, and thereby negatively affects the value of our television rights.

However, given the current Congressional scheme of compulsory licensing, the JSC should at least receive an allocation for 1990 that properly reflects the relative value of sports programming in relation to other types of programming, as reflected in our 1990 survey of cable operators. We respectfully request that the awards to all claimants be set at the levels reflected in that survey. Thank you for your time and consideration.

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

_____

David J. Stern

TESTIMONY OF
PAUL I. BORTZ

PRESIDENT OF BORTZ & COMPANY, INC.

I am Paul I. Bortz, president of Bortz & Company, Inc.

I am sponsoring Sports Exhibit #1, a report entitled "Cable Operator Valuation of Distant Signal Non-Network Programming". This report was prepared under my supervision and direction. A copy of my resume is attached to Sports Exhibit #1.

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

Paul I. Bortz

Paul I. Bortz

8/9/93

Date

Bortz & Company, Inc., Tower One Suite 1425, 1515 Arapahoe Street
Denver, CO 80202, (303) 893-9902

SPORTS
EXHIBIT 1

Cable Operator Valuation of Distant Signal Non-Network Programming

Bortz & Company

CABLE OPERATOR VALUATION OF DISTANT SIGNAL NON-NETWORK PROGRAMMING

— Submitted to —

The Copyright Royalty Tribunal in the 1990 Cable Royalty Distribution Proceeding

— Prepared by —

Bortz & Company, Inc.
Denver, Colorado

August 1993

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SECTION I. INTRODUCTION AND SUMMARY

Bortz & Company submitted a report to the Copyright Royalty Tribunal (CRT) in the 1989 cable royalty distribution proceeding that included the results of two cable operator surveys -- one dealing with the year 1989 and the other dealing with the year 1990. The surveys measured the comparative value cable operators placed on the various types of distant signal non-network programming they carried in those years, focusing upon how cable operators would likely have allocated their program rights payments among the various program types.

The two surveys, which employed essentially the same methodology, demonstrated that there were no substantial differences in cable operator program valuations between 1989 and 1990. In each year, sports programming received the largest allocation (over one-third) followed by movies; both of these categories were valued about twice as highly as syndicated programming.

Following the submission of this report in the 1989 proceeding, Bortz & Company has conducted two additional cable operator surveys -- one for 1991 and one for 1992. The 1991 survey employed essentially the same methodology as the 1989 and 1990 surveys. The 1992 survey, however, was changed to respond to certain concerns expressed by the Tribunal in its final decision in the 1989 proceeding. As such, the 1992 survey represents the culmination of an evolutionary process designed to continually improve the study and thus reflects the synthesis of our experience in measuring the value of distant signal non-network programming.

The results of the 1991 and 1992 surveys are generally comparable to the results obtained in the 1989 and 1990 surveys. The principal difference evident is an increasing disparity in the values accorded to sports and movies, with the gap between the two categories increasing from three percentage points in 1989 to 13 points in 1992:

	Sports	Movies	Syndicated Programming
1989	34.2%	31.2%	16.9%
1990	37.2	30.1	14.5
1991	36.3	25.7	15.6
1992	38.8	25.6	16.0

As this suggests, the survey changes made in response to CRT concerns have not resulted in any lesser valuation being accorded sports. That valuation, if anything, has risen relative to movies, while the values accorded syndicated programming have remained relatively constant.

This report is being submitted to the CRT in the 1990 cable royalty distribution proceeding. We understand that an important issue in that proceeding concerns the extent to which the 1990 survey reflects the relative amounts that cable operators would have paid for different types of 1990 distant signal non-network programming (absent the compulsory license). In our opinion, the results of the most recent surveys

(1991 and 1992) and post-1989 industry developments described later in this report strengthen the conclusion that the 1990 survey results provide the best possible evidence of those relative payments.

SECTION II. OVERVIEW OF SURVEYS

This section presents a brief overview of surveys addressing the relative value of the different categories of distant signal non-network programming to cable operators. A brief historical perspective on the research is set forth initially, followed by a description of research methodology, and a summary and discussion of study results.

A. Historical Background

1. 1983 and prior surveys. Bortz & Company principals (as members of Browne, Bortz & Coddington, Inc. [BBC]) were initially retained by the Joint Sports Claimants to determine the comparative value of distant signal non-network programming in 1983. With the assistance of Drs. Michael Wirth (Professor and Chairperson of the Department of Mass Communications) and George Bardwell (Professor of Mathematics and Statistics) of the University of Denver, BBC designed a study employing a constant sum survey technique to determine cable operators' valuation of distant signal non-network programming. The survey was executed by Burke Marketing Research (one of the largest market research firms in the United States), with administrative involvement by Bortz & Company. In developing the study, BBC sought to improve upon earlier constant sum studies that had been performed by the Batten, Barton, Durstine & Osborn, Inc. (BBDO) Research Department on behalf of the Joint Sports Claimants and submitted in the 1978, 1979 and 1980 CRT proceedings. In particular, BBC sought to be responsive to concerns expressed by the Tribunal with respect to the prior BBDO studies and thus made several improvements in an effort to address those concerns.

This initial BBC study was presented to the Tribunal in the 1983 proceeding, as was an independent study completed by the ELRA Group for the National Association of Broadcasters (NAB). The results of the BBC and ELRA surveys were similar; and the findings of both studies were also generally consistent with those of the earlier BBDO surveys. The Tribunal, however, expressed concerns with the BBC and ELRA studies submitted for 1983 -- while acknowledging the improvement from the prior studies.

2. 1986 survey. Bortz & Company was retained by the Joint Sport Claimants to develop a survey for 1986. However, the 1986 case was settled and therefore the results of this study were not presented in the 1986 proceeding. Results for 1986, which were presented to the CRT in the 1989 proceeding, were similar to those of the 1983 BBC and ELRA surveys.

3. 1989 survey. The Joint Sports Claimants retained Bortz & Company to develop another study for the 1989 proceeding. The study design reflected additional efforts to respond to concerns expressed by the Tribunal -- in this instance focusing on issues raised in the CRT's decision in the 1983 case. Survey and sample design again reflected the input of Drs. Wirth and Bardwell, as well as the assistance of Dr. Len Reid (Professor and Head of the Department of Advertising at the University of Georgia) who testified in the 1989 proceeding. Burke Marketing Research executed the survey. Results of the 1989 study were presented to the Tribunal in the 1989 pro-

assess the relative value of programming categories in terms of the ability of each category to attract and to retain subscribers.

2. Constant sum technique. As mentioned previously, a constant sum technique is employed for determining cable operator valuation of the various types of distant signal non-network programming actually carried by systems. This approach requires the respondent to allocate a percentage of a finite pool to each of the program categories. An increased valuation to one program type can only be made at the expense of another. The constant sum approach is the most appropriate survey research technique when (as here) a comparative, rather than absolute, value measure is being sought. This is a well-recognized market research tool which was discussed by other witnesses in the 1989 proceeding and is commonly utilized in other cable industry research studies.

3. Cable system sampling. The cable system operator sampling plan for each study (going back to 1983) was developed by Dr. Bardwell and (except for 1986) reflects a stratified random sampling approach (with the stratification based on copyright royalty payments) applied to the universe of Form III cable systems. These systems generally account for over 95 percent of cable royalty payments. Sampling plans have been designed to provide a statistically valid predictor for the allocation of royalty payments by all Form III cable systems. A simple (rather than stratified) random sample[1] was utilized in the 1986 study.

4. Survey execution. Telephone surveying was conducted by Burke Marketing Research in 1983 and all subsequent studies. In all of the studies, only interviewers who specialize in surveying professional and managerial personnel have been utilized; interviewers have not been told the name of the client or given any information, other than that on the questionnaire, regarding the nature of the study.

5. Response rate. Response rates of 77 percent or higher have been obtained on the key constant sum question in all of the studies conducted, yielding program valuation estimates with a high degree of statistical validity. In our experience, these response rates are well above industry norms for survey research.

C. Responses to CRT Concerns

Ten different constant sum surveys, conducted by Bortz & Company principals and others, have been performed since the commencement of the CRT proceedings. Beginning in 1983 the basic approach and methodology have remained essentially the same. However, Bortz & Company has made a number of refinements over the years to address concerns raised by the CRT.

1. Respondent qualifications. The early BBDO surveys were directed at top executives of cable multiple system operators (MSOs). Beginning in 1983, BBC redesigned the survey to focus on interviewing management personnel at the cable system level in order to obtain responses from the person at the system "most familiar with programming carried by the system". The interviewers initially asked for the sys-

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[1] A simple random sample is also statistically representative of the universe of cable systems but does not control for the amount of royalties paid by individual cable systems.

tem general manager; if this was not the person "most familiar", the interviewer asked to be directed to the appropriate individual.

The Tribunal determined in the 1983 proceeding that the BBC survey "was designed to ascertain the proper individual."[2] The same qualifier was used in the 1989 through 1991 studies. 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.[3]

We believe respondents to the 1989 through 1991 surveys were qualified and were likely involved in program budgeting. As detailed in Appendix A, 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 well over a decade, it is our 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."

2. Category definitions. Since the survey was first introduced into these proceedings, the Tribunal has expressed concern regarding the wording of descriptions of the various programming types. In the 1983 study, BBC developed category definitions which improved upon those used in earlier surveys; ELRA also provided new category definitions. The BBC categories were retained in the 1986 through 1991 surveys while two new categories were added in the 1986 to 1992 surveys to represent the Devotional and Canadian Claimants.

We believe the descriptions used in these surveys provided respondents with clearly distinguishable and readily understood categories for which they were able to allocate value. We also acknowledge the potential for certain "fringe" programming to be interpreted as belonging in one category when for the purposes of the CRT proceedings it may belong in another. However, categories must be defined as concisely as possible. Moreover, we believe the use of examples is inappropriate in that it necessarily excludes programming types not included as examples. It should be noted that we are 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.[4] In response, Bortz & Company modified the category definitions in the 1992 survey to conform more closely to definitions developed by the CRT and to further aid respon-

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[2] Federal Register, Vol. 51, No. 72, April 15, 1986, p. 12810.
[3] Federal Register, Vol. 57, No. 61, April 27, 1992, p. 15301.
[4] Ibid., pp. 15295, 15300.

dents in accurately distinguishing among categories. In particular, adjustments were made to the syndicated and station-produced programming categories. These refinements are described in more detail in Section V.

3. Public television and Canadian programming. In all of the BBC and Bortz & Company surveys, 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. The CRT expressed concern regarding this approach in both 1983 and 1989. Bortz & Company agrees 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 royalty rate). At the same time, we 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.[5]

In 1989, the Tribunal dealt with this issue by accepting an adjustment to the value determined for these claimants; a similar adjustment could be made with regard to the later surveys. It is also important to ensure that systems carrying public television and Canadian stations are represented proportionately to the total universe of Form III systems; this was not true in 1989 and 1990. Again, an adjustment similar to that made by the CRT for 1989 could by made for 1990.

4. Respondent recall. In the 1983 proceeding, the Tribunal expressed concern regarding the ability of respondents to recall programming actually carried in 1983, given that the BBC study presented in the 1983 proceeding was not actually conducted until 1985. To address this concern, surveys for 1989 through 1992 were conducted at the end of and immediately following the year in question. In its 1989 Determination, the CRT acknowledged that this was an improvement, but continued to be concerned that respondents would have been unable to recall all of the individual programs they were being asked to value.[6]

Bortz & Company believes that the timing of the recent surveys is the most appropriate in that it allows respondents to consider the value of programming immediately following the period in which it aired. Most important with respect to recall, however, is the recognition that cable system operators (in our 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 market place dealings (as in our surveys) programming decisions are made by cable operators without identifying every individual title. We believe that the respondents to surveys did have such a dominant impression of the programming on distant signals -- particularly during the 1989 to 1993 time period when the reimposition of syndicated exclusivity rules (effective in 1990) and rate reregulation and must carry (effective in 1993) generally prompted cable operators to reassess carriage of particular distant signals.

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[5] Ibid., pp. 15299 - 15300.
[6] Ibid., p. 15300.

5. Signal carriage data. The Tribunal criticized the BBDO surveys for failing to focus respondents on the actual distant signals carried. To address this criticism, the BBC study for 1983 and all subsequent surveys have incorporated actual signal carriage information obtained from Copyright Office Statements of Account. It should be noted that the 1989 survey was based on signal carriage data for the second half of 1988, with respondents asked to identify any carriage changes for 1989. To provide the most accurate signal carriage information possible, the 1990 through 1992 surveys utilized Statements of Account for the first half of the year in question.

6. Budget allocation process. In its 1983 Determination, the Tribunal raised questions regarding the formulation of the constant sum question and its relationship to tasks actually performed by cable operators. The 1983 constant sum question asked respondents to allocate "value" assuming that the total value of distant signal non-network programming was 100 percent. Bortz & Company modified the 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.[7] Implicit in this assessment is the notion that further consideration might lead to different responses. As noted before, we believe responses to our survey reflect dominant impressions of programming value formed by respondents in their ongoing decision-making 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.

7. Call backs. In the 1989 proceeding, the MPAA criticized Bortz & Company's study on the basis that the repeated call backs which were necessary to obtain completed interviews raised questions as to the validity of the survey responses. The MPAA Claimants said that a maximum of three attempts should be made to any one respondent. However, Burke completed virtually all of the interviews in the 1989 through 1992 studies during the first or second direct communication with the respondent. Other call attempts reflect efforts to identify and/or reach the appropriate respondent and are common in executive interviewing.

D. Survey Results

1. Budget allocation. In each of the four studies conducted over the period 1989 to 1992, cable operators valued sports programming more highly than any other category of distant signal non-network programming. Survey results indicate that all

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[7] Ibid., p. 15301.

Form III cable operators in the United States would have allocated 34 to 39 percent of distant signal non-network programming budget to the sports category:

	Distant Signal Programming Valuation Studies, 1989 to 1992			
	1989	1990	1991	1992
Live professional and college team sports	34.2%	37.2%	36.3%	38.8%
Movies	31.2	30.1	25.7	25.6
Syndicated shows, series and specials	16.9	14.5	15.6	16.0
News and public affairs programs	11.8	11.9	14.8	12.4
Devotional and religious programming	4.3	3.6	4.3	3.9
PBS and all other public television programming	1.3	2.7	2.9	3.0
Canadian programming	0.2	--	0.5	0.3
Total	99.9%*	100.0%	100.1%*	100.0%

*Does not equal 100.0 percent due to rounding.

Movies consistently received the second highest allocation ranging from 26 to 31 percent (although it declined from 1989 to 1992), followed by syndicated programming.

2. Programming popularity and advertising usage/importance. Responses to two other survey questions confirm operator's 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 71 to 76 percent of Form III systems over the 1989 to 1992 period. By comparison, the next most frequently mentioned categories were movies (30 to 45 percent of systems) and syndicated programming (21 to 30 percent of systems).

Moreover, among cable systems which used distant signal non-network programming in their advertising and promotional efforts, 90 to 96 percent featured sports programming as part of these efforts. Movies and syndicated programming were utilized in marketing efforts by 50 to 73 and 34 to 48 percent of operators, respectively. More than three-fifths of operators considered sports the most important programming type from an advertising and promotional perspective in all four studies; movies again ranked second following sports, with 12 to 19 percent of respondents considering this category most important.

E. Discussion of Results

1. Explanation. Even with incorporating all of the changes made since the first surveys presented to the CRT, results over the years have remained relatively constant. In 1990 (as in other years), sports received the highest allocation with more than one-third of total value. The results of the 1990 and other constant sum surveys

are consistent with our experience -- we believe cable operators valued sports on distant signals in 1990 more highly than other distant signal non-network programming, just as they did in 1989 and continue to do today. As we explained in the report submitted in the 1989 proceeding:[8]

> "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. In a television environment characterized by an ever increasing number of viewing alternatives, such programming and the viewer loyalty it engenders become even more valuable.
>
> Distant signal carriage of a particular team has much broader appeal than to fans of that team alone; it opens a window to a whole league. Whether it is 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."

The importance and value of distant signal sports has, if anything, increased over the 1989 to 1992 period with the expanded distribution of superstation WGN (carrying the National Basketball Association Champion Chicago Bulls and adding Major League Baseball's Chicago White Sox in 1990) and the strong on-field performances of the National League Champion Atlanta Braves (carried on superstation WTBS) in 1991 and 1992. These factors may be reflected in the growing gap between sports and movies in the survey results from 1989 to 1992.

2. Relationship of survey results to CRT awards. We understand that the CRT has placed substantial reliance upon "viewing" data provided by MPAA and Nielsen. We further understand that "viewing", as MPAA uses that term, is based upon two factors -- the number of hours that a program is broadcast multiplied by the number of distant cable households that watch that program during the average quarter hour.

We explained in the 1989 proceeding that in our experience, MPAA "viewing" data do not provide a reliable indication of the relative amounts that cable operators would pay for different types of distant signal programming. Those amounts are more closely reflected in the constant sum surveys that have been provided to the CRT.

As Bortz & Company acknowledged in prior proceedings, the constant sum surveys provide only the buyers' perspective. In determining the relative amounts that

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[8]Bortz & Company Inc., Cable Operator Valuation of Distant Signal Non-Network Programming, 1989, pp. 3-4.

cable operators would pay, one must also account for the sellers' perspective (i.e., the owner of the programming). The price at which a copyright owner would license a program to a cable operator in one market must counterbalance any resulting lost revenues -- that is, where a broadcast station in the same market pays less for the same program or refuses to purchase that program because that station could not be licensed exclusive rights. In choosing not to accord full weight to constant sum results in its 1989 Determination, the CRT relied upon the fact that the constant sum surveys do not reflect the sellers' perspective.[9]

The reinstatement of syndicated exclusivity rules by the FCC make the sellers' perspective less significant in 1990 than in prior years for movies and syndicated programming. As a result of the syndicated exclusivity rules, these programming owners now have control over the distant signal distribution of their product; any movie or syndicated program carried by a cable operator after January 1, 1990 was carried only in those markets where the syndicator had chosen not to license exclusive rights. In contrast, the syndicated exclusivity rules do not afford such protection for sports interests -- who remain unable to license exclusive rights to a broadcast station in a given market. Therefore, we believe that the results of the 1990 through 1992 surveys provide an even closer reflection of what cable operators would likely pay in the free marketplace than prior surveys.

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[9]Federal Register, Vol. 57, No. 61, April 27, 1992, p. 15301.

SECTION III. DISTANT SIGNAL PROGRAMMING VALUATION: SUBSCRIBER PERSPECTIVES

Survey respondents were asked to evaluate distant signal program categories in terms of their popularity with subscribers.

A. Question Design[1]

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 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. Results from each system were accorded a statistically equal weight (see Appendix A).

B. Survey Results

In each of the 1989 through 1992 surveys, sports programming was mentioned by 70 percent or more of subscribers, followed by movies (cited by 30 to 45 percent of respondents):

	Percent Mentioned as "Most Popular with Subscribers"			
Response	1989	1990	1991	1992
Live professional and college team sports	73.1%	71.3%	73.6%	76.2%
Movies	44.6	42.8	29.8	41.0
Syndicated shows, series and specials	30.1	31.1	23.0	21.0
News and public affairs programs	6.4	6.7	20.7	19.0
PBS and all other public television programming	1.1	0.6	5.3	7.3
Devotional and religious programming	1.0	0.6	0.0	2.1
Canadian programming	0.2	0.1	0.0	0.0
Other[2]	5.6	6.1	2.9	11.4
Total*	162.1%	159.2%	155.3%	178.0%

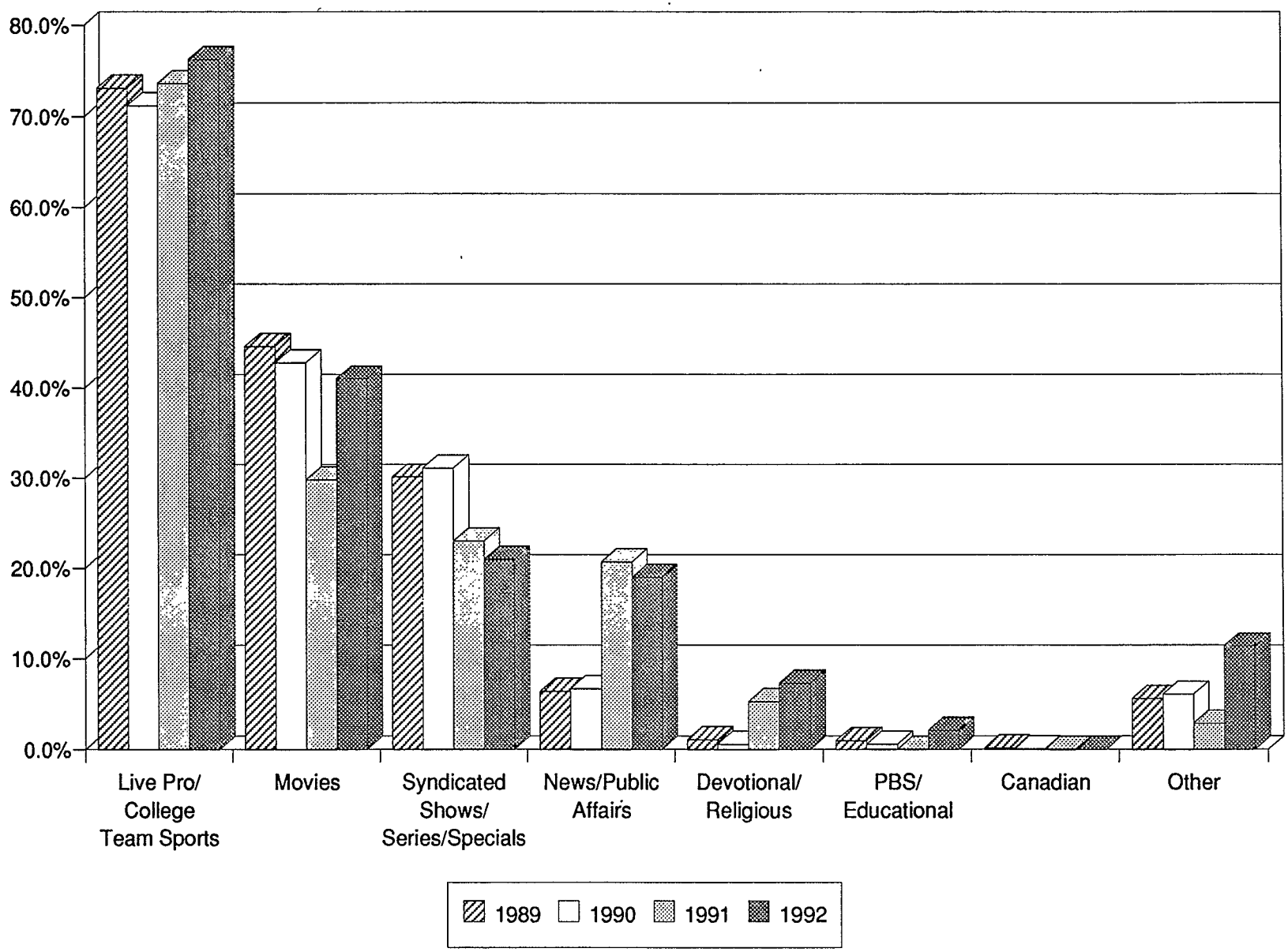
*Total exceeds 100.0 percent due to multiple responses.

Results are shown graphically on Figure III-1.

[1]Slight wording changes exist in the surveys for various years; survey questionnaires for 1989 through 1992 are included as Appendix B.

[2]The "other" category as recorded by the interviewers included certain responses which were reclassified to other categories upon review by Bortz & Company.

FIGURE III-1. DISTANT SIGNAL PROGRAM POPULARITY AMONG SUBSCRIBERS, BY PROGRAM TYPE, 1989 THROUGH 1992



SECTION IV. DISTANT SIGNAL PROGRAMMING VALUATION: ADVERTISING PERSPECTIVES

Respondents were also queried regarding the use of non-network programming from distant signal stations in advertising and promotional efforts.

A. Question Design[1]

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 (Q. 2).

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.

Finally, respondents were asked which of the program types used in advertising and promotion (including those identified on either an aided or unaided basis) was most important to their marketing efforts.

B. Survey Results

In each of the 1989 through 1992 surveys, sports programming was used most frequently in advertising and promotional efforts:

	Percent of Systems Using Programming Category*			
Response	1989	1990	1991	1992
Live professional and college team sports	90.3%	90.0%	89.9%	95.6%
Movies	73.0	71.2	53.0	50.3
Syndicated shows, series and specials	45.2	45.7	47.5	33.8
News and public affairs programs	17.6	18.4	16.9	23.6
PBS and all other public television programming	0.7	0.8	3.4	8.1
Canadian programming	0.0	0.0	1.8	2.8
Devotional and religious programming	4.0	4.1	3.2	0.5
Other	19.5	28.3	7.4	8.8
Total**	250.3%	258.5%	223.1%	223.5%

*All percentages based only on respondents using distant signal programming for advertising and promotion.

**Totals exceed 100.0 percent due to multiple responses.

[1]Slight wording changes exist in the surveys for various years; survey questionnaires for 1989 through 1992 are included in Appendix B.

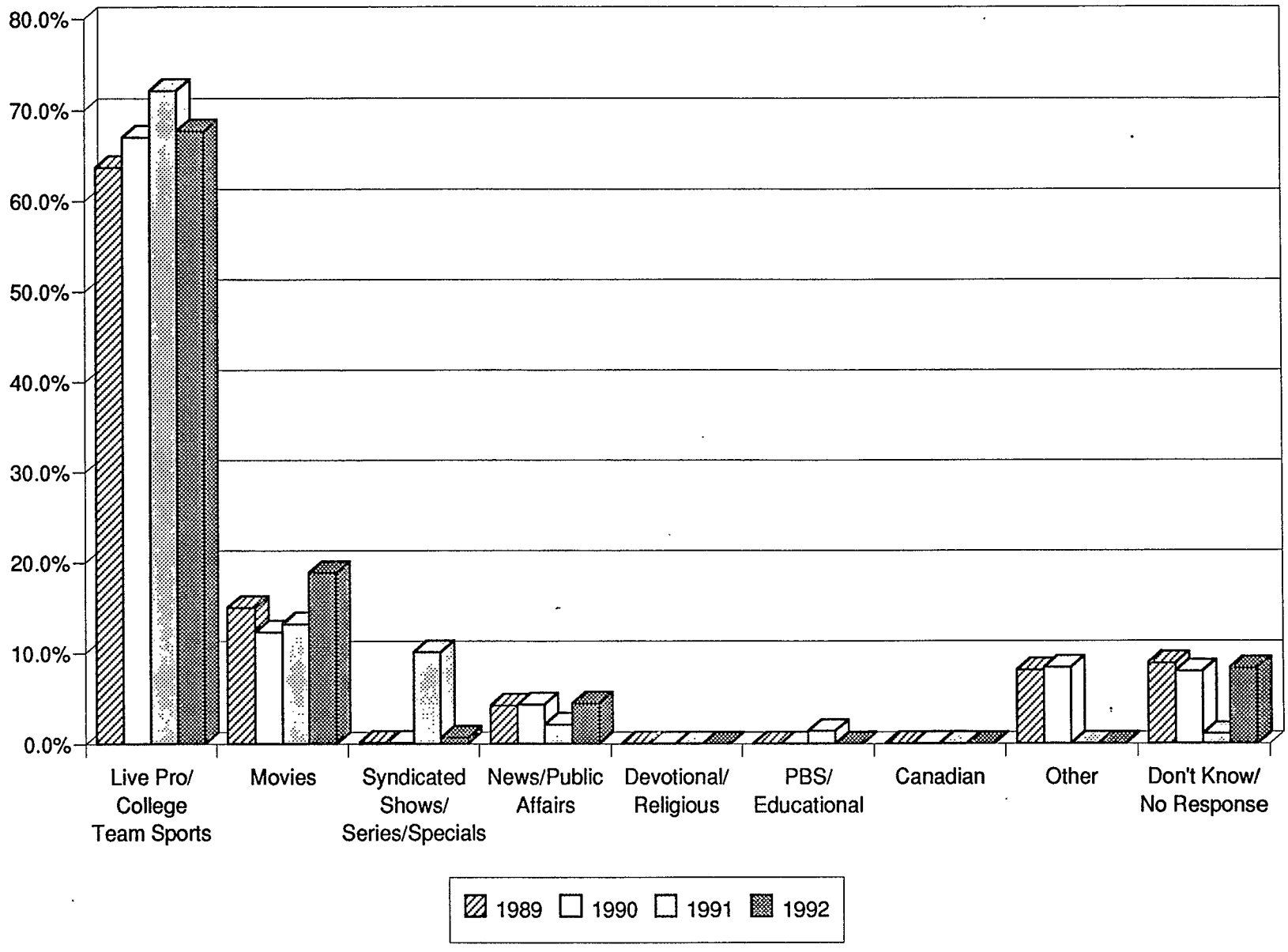
Sports programming has also consistently ranked as the most important to feature in advertising and promotional efforts, receiving this designation from at least 60 percent of respondents in each survey:

	Percent "Most Important"			
Response	1989	1990	1991	1992
Live professional and college team sports	63.7%	67.0%	72.1%	67.7%
Movies	15.0	12.3	13.2	18.8
News and public affairs programs	4.2	4.3	2.1	4.4
Syndicated shows, series and specials	0.1	0.1	10.1	0.7
PBS and all other public television programming	0.0	0.0	1.4	0.0
Devotional and religious programming	0.0	0.0	0.0	0.0
Canadian programming	0.0	0.0	0.0	0.0
Other	8.1	8.4	0.0	0.0
Don't know/no response	8.9	8.0	1.1	8.3
Total*	100.0%	100.1%*	100.0%	99.9%*

*Does not equal 100.0 percent due to rounding.

Figure IV-1 illustrates these results.

FIGURE IV-1. USE OF DISTANT SIGNAL PROGRAMMING IN CABLE ADVERTISING AND PROMOTION, MOST IMPORTANT PROGRAM TYPE, 1989 THROUGH 1992



SECTION V. DISTANT SIGNAL PROGRAMMING VALUATION: ALLOCATION OF PROGRAMMING BUDGET

The value of any programming to cable operators, including distant signal programming, lies primarily in its ability to attract and retain subscribers. As such, the key survey question in each of Bortz & Company's studies has been designed to measure the relative value to cable operators, in terms of attracting and retaining subscribers, of the different categories of non-network distant signal programming carried by their systems. Consistent with the task faced by the Copyright Royalty Tribunal, operators were asked to express this relative value allocation in terms of a percentage of a finite pool (a programming "budget") which would have been spent on each type of programming.

This section sets forth key survey question results for 1989 through 1992 and also provides a comparison with results of similar studies covering 1983 and 1986 distant signal programming.

A. Question Design[1]

As indicated in Section II, Bortz & Company utilized a constant sum approach for estimating cable operators' valuation of the various types of distant signal non-network programming, requiring the respondent to allocate a percentage of a finite pool to each of the program categories.

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 in all four surveys, depending upon whether or not the respondent's cable system carried distant PBS/educational and/or Canadian stations. For 1990 (as well as 1989 and 1991), the categories were:

- Movies.
- Live professional and college sports.

[1]Certain wording and structural changes were made in this question, especially in 1992. While some of these changes are discussed below, readers should also refer to Section II (C. Responses to CRT Concerns) for further discussion and to Appendix B -- which provides the survey questionnaire used in each study.

- ❑ Syndicated shows and series.
- ❑ 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).

Categories used in 1992 contained slightly different wording than that used in prior studies (see Appendix B).

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

Respondents were asked to estimate the relative value to their system of these programming categories, thinking in terms of the percentage of a fixed dollar amount they would spend for each programming type.

In 1989 through 1991, 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 reread to allow the respondent to write down their estimates and provide them to the interviewer. In all years, the program types were randomly ordered to prevent ordering bias. In 1992, the interviewer then reviewed the program categories and estimates with the respondent, providing the respondent an opportunity to revise the estimates if necessary. As discussed in Section II, both the writing down of categories and responses and the category by category review of responses in the 1992 survey reflect changes made in response to comments from the Tribunal.

This question was the last of a series of questions relating to the relative value of distant signal programming. The preliminary questions (discussed above), were intended to ensure that the respondents would be prepared to perform the requested programming value allocation.

B. Survey Results[2]

In each of the 1989 through 1992 studies, sports programming was accorded the largest percentage allocation among the various categories, receiving 34 to 39 percent of the value. Movies consistently ranked second (25 to 31 percent), although the disparity between sports and movies increased steadily from 1989 to 1992. In fact, the rank order of the seven programming types remained unchanged over the four year period:

	Distant Signal Programming Valuation Studies, 1989 to 1992			
	1989	1990	1991	1992
Live professional and college team sports	34.2%	37.2%	36.3%	38.8%
Movies	31.2	30.1	25.7	25.6
Syndicated shows, series and specials	16.9	14.5	15.6	16.0
News and public affairs programs	11.8	11.9	14.8	12.4
Devotional and religious programming	4.3	3.6	4.3	3.9
PBS and all other public television programming	1.3	2.7	2.9	3.0
Canadian programming	0.2	--	0.5	0.3
Total	99.9%*	100.0%	100.1%*	100.0%

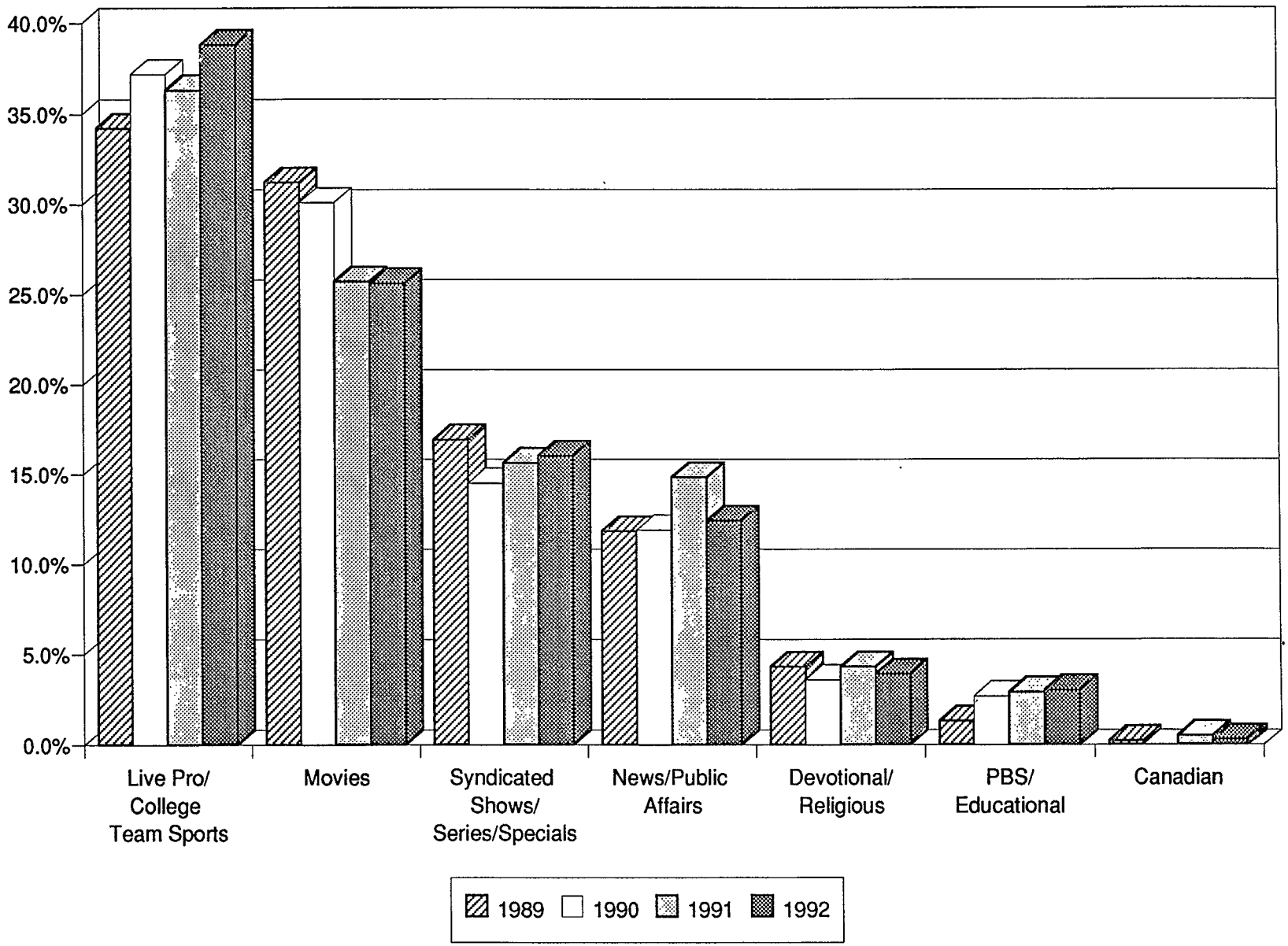
*Does not equal 100.0 percent due to rounding.

Survey responses from 1989 through 1992 are illustrated graphically on Figure V-1.

In addition to studies conducted annually from 1989 through 1992, surveys were completed for 1986 (by Bortz & Company) and for 1983 (by Browne, Bortz & Coddington, managed by Bortz & Company principals) utilizing a similar questionnaire design as in the 1989 to 1991 surveys. Respondents in these surveys also accorded sports the largest percentage of a distant signal programming budget: 36.1 percent in 1983 and 38.5 percent in 1986. The relative value rankings of the top four categories in 1983 and 1986 were the same as the rankings in 1989 through 1992 -- with sports followed by movies, syndicated programming and news and public affairs. As noted above, the 1986 study utilized a simple random sample (rather than a stratified sampling design).

[2]Results by strata and unweighted results are set forth in Appendix C.

FIGURE V-1. CABLE OPERATOR ALLOCATION OF VALUE BY DISTANT SIGNAL PROGRAM TYPE, 1989 THROUGH 1992



APPENDIX A. METHODOLOGY

Appendix A describes the methodology used in questionnaire design, sampling and interviewing for the cable operator surveys completed from 1989 through 1992, as well as providing statistical evaluation of survey results. The survey instruments are set forth in Appendix B.

A. Questionnaire Design

As described elsewhere in this report, the survey instrument for each year was drafted by Bortz & Company, giving consideration to earlier Bortz & Company survey instruments and responding to issues raised by the Tribunal for 1989 and prior proceedings (see Section II). Drs. Samuel Book and Michael Wirth provided input into the questionnaire design for 1992. Dr. Wirth assisted in questionnaire design for all prior surveys dating back to the original survey instrument developed in 1983. Dr. Len Reid also assisted in the design of the 1989 survey instrument. Data as to carriage of distant signal broadcast stations by cable operators were compiled by Bortz & Company (Burke Marketing Research in 1990) from Statements of Account which were filed with the Copyright Office.

A pilot test of the 1992 survey instrument was conducted by Burke Marketing Research from December 1 to December 8, 1992. A total of 17 systems were in the pilot sample frame; interviews were completed with nine. A pilot test was also completed by Bortz & Company for the 1989 study from November 8 to December 1, 1989. Due to the similarity of the questionnaires in 1990 and 1991 to the 1989 instrument, no pilot tests were completed in those years.

B. 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. In 1990, the same sample drawn for the 1989 study was employed.

A stratified random sampling approach was utilized, with the stratification based on copyright royalty payments. Only Form III systems were surveyed; 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. This approach has been used in all of the Bortz & Company surveys dating back to 1983 except for a simple random sample used in 1986.

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:

1989

Royalty Stratum	Number of Systems	Mean Royalty	Percent of Total Royalties	Royalty Standard Deviation	Sample Size
$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	17.8	163,945	35
Total/Average	1,977	46,992	100.0%		244[1]

1990[2]

Royalty Stratum	Number of Systems	Mean Royalty	Percent of Total Royalties	Royalty Standard Deviation	Sample Size
$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	17.8	163,945	35
Total/Average	1,977	46,992	100.0%		244[3]

[1]The 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.

[2]The 1990 study used the same sample drawn for 1989 and the same universe data.

[3]The sample initially included 244 systems. However, 28 systems were discarded -- two for which no distant signal information was provided on the Statement of Account, two which were no longer Form III systems, and the remainder as a result of Statements of Account which could not be located at the Copyright Office at the time of the survey.

1991

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	38	386,000	17.7	156,060	38
Total/Average	2,013	40,449	100.1%*		222[4]

*Does not equal 100.0 percent due to rounding.

1992

Royalty Stratum	Number of Systems[5]	Mean Royalty	Percent of Total Royalties	Royalty Standard Deviation	Sample Size
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]

*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 and 1991. Random selections of systems were made by Dr. Bardwell in 1989 and 1991 and by Bortz & Company in 1992 based on parameters established by Dr. Bardwell.

C. Survey

Telephone surveying in all four studies 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 in 1989, 1991 and 1992. Burke administered the 1990 study internally without assistance from

[4]The 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.

[5]Represents the total number of Form III 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 III systems.

[6]The 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.

Bortz & Company. Only interviewers specializing in surveying professional and managerial personnel were utilized. Supervisors (including Mr. Trautman in 1989, 1991 and 1992) listened to interviews during the pilot tests and over the initial phases of the studies 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:

Study Year	Survey Period
1989	December 4, 1989 to March 8, 1990
1990	December 26, 1990 to March 26, 1991
1991	March 4, 1992 to May 7, 1992
1992	December 9, 1992 to April 13, 1993

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, virtually every completed interview required only one or two direct contacts with the respondent.

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.

D. Survey Completion

Interviews were complete with between 80 and 90 percent of cable systems included in the sample frame provided to Burke Marketing Research:

	Questionnaires Administered	Surveys Completed	Response Rate	Response Rate to Q4
1989	237	198	83.5%	78.9%
1990	216	173	80.0	80.0
1991	221	198	89.6	88.7
1992	233	189	81.1	76.8

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 through 1991. 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 (1992) or most familiar with programming carried (1989 to 1991). 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 in all four studies:

Job Title	1989 Number of Respondents	1989 Percent of Total	1990 Number of Respondents	1990 Percent of Total	1991 Number of Respondents	1991 Percent of Total	1992 Number of Respondents	1992 Percent of Total
General Manager/Regional Manager/President/CEO	112	56.6%	64	37.0%	127	64.1%	135	71.4%
VP Marketing/Marketing Director/Marketing Manager	60	30.3	71	41.0	47	23.7	44	23.3
VP Programming/ Programming Director/ Programming Manager	4	2.0	10	5.8	3	1.5	6	3.2
Marketing Coordinator/Asst.	–	–	7	4.0	2	1.0	–	–
Programming Coordinator	–	–	1	0.6	1	0.5	–	–
Asst. General Manager/Asst. VP	–	–	3	1.7	1	0.5	–	–
Office Manager/Bus. Manager/ Govt. Affairs	8	4.0	7	4.0	10	5.1	1	0.5
Chief Technician/Op. Manager	4	2.0	3	1.7	3	1.5	1	0.5
Public Relations Director/ Communications or Promotional Manager	–	–	–	–	3	1.5	–	–
Sales Manager/Representative	4	2.0	5	2.9	–	–	2	1.1
Customer Service Manager	2	1.0	–	–	–	–	–	–
Other	4	2.0	2	1.2	1	0.5	–	–
Total	198	99.9%*	173	99.9%*	198	99.9%*	189	100.0%

*Does not equal 100.0 percent due to rounding.

E. Estimation Procedures

In all four 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. 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:

Let h = stratum index,

p_{ih} = proportionate value of program type x estimated by sample system i in stratum h from questionnaire,

t_{ih} = total revenue of sample system i in stratum h.

T_h = total royalty of all (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 sample systems responding in stratum h,

N_h = total number of systems in stratum h,

$$T_x = \sum_{h=1}^{4} \frac{\sum_{i-1}^{n_h} x_{ih}}{\sum_{i-1}^{n_h} t_{ih}} T_h$$ = estimated total value of program type x,

$$s^2_{xh} = \sum_{1}^{n_h} x^2_{ih} - \frac{(\sum_{1}^{n_h} x_{ih})^2}{n_h} / n_h$$ = sample variance of value of program type x in stratum h,

$$s^2_{th} = \sum_{1}^{n_h} x^2_{ih} - \frac{(\sum_{1}^{n_h} t_{ih})^2}{n_h} / n_h$$ = sample variance of royalty in stratum h,

$$R_h = \frac{\sum_{1}^{n_h} x_{ih}}{\sum_{1}^{n_h} t_{ih}}$$ = ratio estimate of proportionate value of program type x for stratum h,

$$r_h = \frac{n_h \sum_{1}^{n_h} x_{ih} t_{ih} - \sum_{1}^{n_h} x_{ih} \sum_{1}^{n_h} t_{ih}}{n_h^2 s_{xh} s_{th}}$$ = Pearson's correlation coefficient between x_h and t_h in stratum h,

$$V(T_x) = \sum_{1}^{4} \frac{N_h}{n_h - 1}(N_h - n_h)(s_{xh}^2 + s_{th}^2 R_h^2 - 2R_h r_h s_{xh} s_{th})$$ = variance of estimate of total value of program x.

Statistical estimation procedures for Questions 2 and 3.

Let h = stratum index,

n_h = number of sample systems responding in stratum h,

N_h = total number of systems in stratum h,

N = total systems in sample frame,

t_{xh} = total number of positive answers for given cell for question x in stratum h,

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

then $P_x = \sum_{h=1}^{4} p_{xh} N_h / N$ = estimated proportion positive answers for given cell for question x,

$$V(P_x) = \frac{1}{N^2} \sum_{h=1}^{4} \frac{N_h}{n_h - 1}(N_h - n_h) p_{xh}(1 - p_{xh})$$ = variance of estimated proportion P_x.

F. Evaluation of Survey Estimates

The 95 percent confidence intervals for the estimates included in this report for the years 1989 through 1992 are set forth below.

1989

Question 4. Operator Programming Allocation

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	34.2%	±2.5
Movies	31.2	2.0
Syndicated shows and series	16.9	1.5
News and public affairs	11.8	1.3
Devotional and religious	4.3	0.9
PBS, educational and other public television	1.3	0.6
Canadian	0.2	0.2
Total	99.9%*	

*Does not equal 100.0 percent due to rounding.

Question 2. Distant Signal Programming Popularity Among Subscribers

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	73.1%	±8.3
Movies	44.6	9.5
Syndicated shows and series	30.1	8.6
News and public affairs	6.4	4.1
PBS, educational and other public television	1.1	1.3
Devotional and religious	1.0	1.3
Canadian	0.2	0.3
Other	5.6	4.5

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

Category	Percent Allocation	Absolute Confidence Interval
Yes	34.9%	±8.9
No	65.1	
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	90.3%	±9.4
Movies	73.0	15.3
Syndicated shows and series	45.2	17.5
News and public affairs	17.6	14.1
Devotional and religious	4.0	7.9
PBS, educational and other public television	0.7	0.6
Canadian	--	--
Other	19.5	14.5

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

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	63.7%	±15.5
Movies	15.0	10.1
News and public affairs	4.2	7.9
Syndicated shows and series	0.1	0.1
PBS, educational and other public television	--	--
Devotional and religious	--	--
Canadian	--	--
Other	8.1	10.8
Don't know/no response	8.9	NA
Total	100.0%	

1990

Question 4. Operator Programming Allocation

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 other public television	2.7	1.2
Canadian	--	--
Total	100.0%	

Question 2. Distant Signal Programming Popularity Among Subscribers

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	71.3%	±8.6
Movies	42.8	9.5
Syndicated shows and series	31.1	8.9
News and public affairs	6.7	4.3
PBS, educational and other public television	0.6	1.1
Devotional and religious	0.6	1.1
Canadian	0.1	0.2
Other	6.1	4.7

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

Category	Percent Allocation	Absolute Confidence Interval
Yes	36.4%	±9.0
No	63.6	
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	90.0%	±9.8
Movies	71.2	15.8
Syndicated shows and series	45.7	17.6
News and public affairs	18.4	14.4
Devotional and religious	4.1	8.1
PBS, educational and other public television	0.8	0.7
Canadian	--	--
Other	28.3	NA

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

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	67.0%	±14.8
Movies	12.3	7.0
News and public affairs	4.3	8.1
Syndicated shows and series	0.1	0.2
PBS, educational and other public television	--	--
Devotional and religious	--	--
Canadian	--	--
Other	8.4	11.0
Don't know/no response	8.0	NA
Total	100.1%*	

*Does not equal 100.0 percent due to rounding.

1991

Question 4. Operator Programming Allocation

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	36.3%	±1.9
Movies	25.7	1.8
Syndicated shows and series	15.6	1.3
News and public affairs	14.8	1.6
Devotional and religious	4.3	0.7
PBS, educational and other public television	2.9	0.9
Canadian	0.5	0.4
Total	100.1%*	

*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 sports	73.6%	±8.0
Movies	29.8	7.7
Syndicated shows and series	23.0	7.6
News and public affairs	20.7	7.2
PBS, educational and other public television	5.3	3.8
Devotional and religious	--	--
Canadian	--	--
Other	2.9	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	61.2	
Total	100.0%	

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

Category	Percent Allocation	Absolute Confidence Interval
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 other public television	3.4	3.9
Devotional and religious	3.2	3.1
Canadian	1.8	2.8
Other	7.4	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 other public television	1.4	2.8
Devotional and religious	--	--
Canadian	--	--
Other	--	--
Don't know/no response	1.1	NA
Total	100.0%	

1992

Question 4. Operator Programming Allocation

Category	Percent Allocation	Absolute Confidence Interval*
Live professional and college team sports	38.8%	±2.2
Movies	25.6	1.7
Syndicated shows, series and specials	16.0	1.3
News and public affairs programs	12.4	1.7
Devotional and religious programming	3.9	0.6
PBS and all other public television programming	3.0	1.4
Canadian programming	0.3	0.3
Total	100.0%	

*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 team sports	76.2%	±7.9
Movies	41.0	8.8
Syndicated shows, series and specials	21.0	7.4
News and public affairs programs	19.0	7.2
PBS and all other public television programming	7.3	4.4
Devotional and religious programming	2.1	2.6
Canadian programming	--	--
Other	11.4	6.0

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

Category	Percent Allocation	Absolute Confidence Interval
Yes	31.5%	±8.2
No	68.5	
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 team sports	95.6%	±7.6
Movies	50.3	17.6
Syndicated shows, series and specials	33.8	16.1
News and public affairs programs	23.6	15.3
PBS and all other public television programming	8.1	10.3
Canadian programming	2.8	5.3
Devotional and religious programming	0.5	1.0
Other	8.8	10.4

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

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college team sports	67.7%	±16.6
Movies	18.8	13.2
News and public affairs programs	4.4	7.6
Syndicated shows, series and specials	0.7	1.0
Devotional and religious programming	--	--
PBS and all other public television programming	--	--
Canadian programming	--	--
Don't know/no response	8.3	NA
Total	99.9%*	

*Does not equal 100.0 percent due to rounding.

APPENDIX B. SURVEY INSTRUMENTS

1989

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 1989 AND ARRANGE CALL BACK. IF NOT, ASK TO SPEAK WITH THE PERSON MOST FAMILIAR WITH THE PROGRAMMING CARRIED BY THE SYSTEM DURING 1989.)

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 DURING 1989. REPEAT INTRODUCTION AND Q.1.
.....		

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

Call Letters	City	Affil

INSERT DISTANT SIGNAL CALL LETTERS, CITY AND AFFILIATE

2b. Did you discontinue 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 WERE 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 _____ (excluding National Hockey League and Major League Baseball games and U.S.-produced programs)	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 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 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 was the most important to feature in subscription and retention advertising and promotion? Which was the next most important? Which was least important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

	Q.3b. Unaided	Q.3c. Aided	Q.3d. Important Most	2nd	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.S.-produced 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 relative 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, REMOVING ANY DISCONTINUED STATIONS [Q.2b.] AND ADDING ANY NEW STATIONS [Q.2c.])

Again thinking back to 1989, assume you had 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 Sequence		Percentage
( )	Movies	_____
( )	Live professional and college sports	_____
( )	Syndicated shows and series	_____
( )	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.

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 FAMILIAR WITH PROGRAMMING CARRIED BY THE SYSTEM DURING 1990. REPEAT INTRODUCTION AND Q.1.
.....		

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

Call Letters	City	Affil

INSERT DISTANT SIGNAL CALL LETTERS, CITY AND AFFILIATE

2b. During 1990, what types of programming on the stations mentioned previously, other than any national netwrok programming form 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 _____ (excluding National Hockey League and Major League Baseball games and U.S. produced programs) 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 1990 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 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 next most important? Which was least important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

	Q.3b. Unaided	Q.3c. Aided	Q.3d. Important Most	2nd	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.S.-produced 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 relative 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 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 Sequence		Percentage
( )	Movies	_____
( )	Live professional and college sports	_____
( )	Syndicated shows and series	_____
( )	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.

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

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

Call Letters	City	Affil

INSERT DISTANT SIGNAL CALL LETTERS, CITY AND AFFILIATE

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 1
Live professional and college team sports 2
Syndicated shows, series and specials 3
News and public affairs 4
PBS and all other programming carried by public television station _____ 5
Devotional / religious programming 6
Canadian programming carried by _____ (excluding National Hockey League and Major League Baseball games and U.S.-produced programs) 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 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 most important to feature in subscription and retention advertising and promotion? Which was the next most important? Which was least important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

	Q.3b. Unaided	Q.3c. Aided	Q.3d. Important 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	4	4	4	4	4
PBS and all other programming carried by public television 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 and U.S.-producedprograms and series)	7	7	7	7	7
Other (SPECIFY BELOW)					
_____	8	8	8	8	8
_____	9	9	9	9	9
_____	10	10	10	10	10

4. Finally, I would like you to estimate the relative 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 non-network 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 Sequence		Percentage
( )	Movies	_____
( )	Live professional and college team sports	_____
( )	Syndicated shows, series and specials	_____
( )	News and public affairs	_____
( )	PBS and all other programming carried by public television station _____	_____
( )	Devotional / religious programming	_____
( )	Canadian programming carried by _____ (excluding National Hockey League and Major League Baseball games and U.S. produced programs)	_____
TOTAL		_____

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

1992

SYSTEM OPERATOR PROGRAMMING QUESTIONNAIRE[1]

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.

[1]This and subsequent questionnaires reflect those used in the year immediately following the period for which programming values were allocated (e.g., for surveys completed in 1993 for the subject year 1992). Very slight differences exist in the wording of questions on surveys completed during the subject year (e.g., in 1992 for 1992). In all four surveys, questionnaires were modified to reflect 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. Modifications were done by hand in preceding years.

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

Call Letters	Com/ Non/ Can	Affil	City	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?

Yes 1
No ..... 2 GO TO Q.4

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:)

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")

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 most important programming type to feature in subscriber acquisition and retention advertising and promotion? Which was the next most important programming type ? Which programming type was least important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

Random Sequence		Q.3b. Unaided	Q.3c. Aided	Q.3d. Important 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

4a. Now, I would like you to estimate the relative 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) _____, and Canadian 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 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 Sequence		Percent
( )	Movies broadcast during 1992 by the U.S. commercial stations I listed.	_____
( )	Live professional and college team sports broadcast during 1992 by the U.S. commercial stations I listed.	_____
( )	Syndicated shows, series and specials distributed to more than one television station and broadcast during 1992 by the U.S. commercial stations I listed.	_____
( )	News and public affairs programs produced by or for any of the U.S. commercial stations I listed, for broadcast during 1992 only by that station.	_____
( )	PBS and all other programming broadcast during 1992 by U.S. noncommercial station _____.	_____
( )	Devotional and religious programming broadcast during 1992 by the U.S. commercial stations I listed.	_____
( )	All programming broadcast during 1992 by Canadian station _____.	_____
TOTAL	.....	_____

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 C. SURVEY RESULTS BY STRATUM AND UNWEIGHTED

For comparative purposes and to assess the consistency of responses, Bortz & Company also calculated responses to the constant sum question by stratum and on an unweighted basis. Results illustrate a high level of consistency across strata and correspond closely with those reported in Section V.

Results by Stratum

Relatively little variation was evident in responses by stratum in any of the four surveys completed from 1989 through 1992. Sports received the highest allocation in all instances:

1989

Royalty Payment Classification (Second Period 1988)	N	Sports	Movies	Syndicated	News & Public Affairs	Devo-tional/ Religious	PBS/ Educa-tional	Can-adian
$0-31,699	48	33.8%	30.2%	14.2%	14.2%	6.4%	1.3%	0.0%
$31,700-109,999	53	32.3	32.3	19.0	11.2	3.8	1.3	0.1
$110,000-299,999	64	37.5	31.4	15.1	10.6	2.9	1.9	0.6
$300,000 or more	22	34.7	29.8	20.5	11.3	3.3	0.5	0.0
Total	187	34.2	31.2	16.9	11.8	4.3	1.3	0.2

1990

Royalty Payment Classification (First Period 1990)	N	Sports	Movies	Syndicated	News & Public Affairs	Devo-tional/ Religious	PBS/ Educa-tional	Can-adian
$0-31,699	45	36.5%	28.3%	13.8%	14.0%	5.8%	1.5%	0.0%
$31,700-109,999	48	36.8	27.8	15.7	12.0	3.5	4.1	0.1
$110,000-299,999	61	35.7	32.8	15.1	11.7	3.1	1.7	0.0
$300,000 or more	19	37.0	29.3	14.8	13.5	3.0	2.5	0.0
Total	173	37.2	30.1	14.5	11.9	3.6	2.7	0.0

1991

Royalty Payment Classification (First Period 1991)	N	Sports	Movies	Syndicated	News & Public Affairs	Devo-tional/ Religious	PBS/ Educa-tional	Can-adian
Less than $22,000	55	34.6%	24.9%	15.6%	16.1%	5.3%	3.6%	0.0%
$22,000 - 59,999	35	35.7	25.2	13.6	15.3	5.7	4.3	0.1
$60,000 - 249,000	74	37.5	26.6	15.8	13.7	3.5	2.4	0.5
$250,000 and over	32	36.1	26.5	18.5	13.5	3.2	1.6	0.6
Total	196	36.3	25.7	15.6	14.8	4.3	2.9	0.5

1992

Royalty Payment Classification (First Period 1992)	N	Sports	Movies	Syndicated	News & Public Affairs	Devo-tional/ Religious	PBS/ Educa-tional	Can-adian
Less than $22,000	48	38.1%	26.5%	14.9%	13.3%	4.9%	1.9%	0.4%
$22,000 - 59,999	32	37.0	25.5	15.1	13.8	4.5	3.4	0.6
$60,000 - 249,000	63	36.0	26.3	18.4	12.2	3.9	3.1	0.2
$250,000 and over	36	43.3	24.9	14.4	12.4	3.5	0.8	0.7
Total	179	38.8%	25.6%	16.0%	12.4%	3.9%	3.0%	0.3%

Unweighted Results

In all four studies, unweighted results are quite consistent with those calculated on a weighted basis (by amount of royalty payment):

1989

Category	Percent Allocation
Live professional and college sports	34.8%
Movies	31.1
Syndicated shows and series	16.6
News and public affairs	11.8
Devotional and religious	4.1
PBS, educational and other public television	1.4
Canadian	0.2
Total	100.0%

1990

Category	Percent Allocation
Live professional and college sports	36.4%
Movies	29.9
Syndicated shows and series	14.9
News and public affairs	12.6
Devotional and religious programming	3.9
PBS, educational and other public television	2.4
Canadian	0.0
Total	99.9%*

*Does not equal 100.0 percent due to rounding.

1991

Category	Percent Allocation
Live professional and college sports	36.1%
Movies	25.9
Syndicated shows and series	15.8
News and public affairs	14.6
Devotional and religious	4.3
PBS, educational and other public television	2.9
Canadian	0.3
Total	99.9%*

*Does not equal 100.0 percent due to rounding.

1992

Category	Percent Allocation
Live professional and college team sports	38.2%
Movies	25.9
Syndicated shows, series and specials	16.1
News and public affairs programs	12.8
Devotional and religious programming	4.2
PBS and all other public television programming	2.4
Canadian programming	0.4
Total	100.0%

APPENDIX D. RESUMES

PAUL I. BORTZ

EXPERIENCE:

August 1988 to present . . . 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, United Artists and the National Hockey League.

Assignments have included:

- Business plans for new cable and broadcast program services, including detailed analyses of programming economics and of cable operator demand for specific types of programming.
- Valuation and negotiation of sports cable and broadcast television contracts.
- Financial evaluation of cable, broadcast television and radio properties.
- Market research addressing consumer demand for cable television and the relative importance of various factors including pricing, programming and packaging of services.
- Analysis of international broadcast, cable and programming opportunities.

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

- Capital Cities/ABC, Inc.
- Citibank, N.A.
- Continental Cablevision
- Daniels & Associates
- ESPN, Inc.
- JCPenney Company, Inc.
- Lifetime
- National Association of Broadcasters
- National Cable Television Association
- Public Broadcasting Service (PBS)
- United Artists Cable

Sports rights valuations (radio, television, cable) and assistance in developing sports television policies and other league and franchise matters have been provided for clients including:

- *Nationally:*
  - National Basketball Association (NBA)
  - National Hockey League (NHL)
  - Major League Baseball (MLB)
- *Major League Baseball* franchises and a franchise applicant:
  - Cleveland Indians
  - Detroit Tigers
  - Florida Marlins
  - Milwaukee Brewers
  - New York Yankees
  - Oakland Athletics
  - St. Louis Cardinals
  - Texas Rangers
- *National Hockey League* franchises including:
  - Buffalo Sabres
  - San Jose Sharks
  - Tampa Bay Lightning
- *NBA* franchises including:
  - Boston Celtics
  - Chicago Bulls
  - Dallas Mavericks
  - Denver Nuggets
  - Golden State Warriors
  - Houston Rockets
  - Los Angeles Clippers
  - Milwaukee Bucks
  - Minnesota Timberwolves
  - New Jersey Nets
  - Portland Trail Blazers
  - San Antonio Spurs
  - Seattle Supersonics
  - Washington Bullets

1979 to July 1988 . . . 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.

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

1969 to 1978 . . . 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.

1961 to 1969 . . . 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 Forbes, Broadcasting, CableVision, and Electronic Media 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.

JAMES M. TRAUTMAN

EXPERIENCE:

July 1988 to present . . . Vice President, Bortz & Company, Inc. . . . specialist in economic and financial analysis for media and professional sports organizations.

Examples of projects managed include:

- Prepared business plans, evaluated prospects and/or estimated the value of numerous proposed cable programming ventures and existing basic cable networks. Ventures analyzed have ranged from planning stage concepts to "niche" services in the early stages of development (e.g., The Travel Channel) to widely penetrated networks such as Lifetime and ESPN. Analyses included detailed pro forma financial projections, assessment of program service growth prospects and evaluation of market positioning. Similar analyses have been performed with regard to several regional cable sports networks.

- Analyzed financial prospects and estimated fair market value of more than 100 cable television properties both domestically and internationally. An assessment of current and future cable television economics has also been developed on an ongoing basis for a major financial institution.

- Analyzed financial prospects and estimated fair market value for over 50 television station properties, including both affiliates and independents in markets ranging from the largest to the smallest. Analyses evaluate market trends and likely future market capture in terms of both revenue and audience, resulting in the development of pro forma financial projections. Clients include Citibank, N.A., Bank of America, Group W Landmark Communications, the Gillett Group and others.

- For Capital Cities/ABC., Inc., assisted in the evaluation of several business opportunities including analysis of developments in cable programming and the home video software market.

- Conducted several projects which analyzed the economic and competitive environment of various telecommunications technologies including multichannel multipoint distribution services (MMDS), direct broadcast satellite systems (DBS) and cellular radiotelephone service (CRTS). Clients included Capital Cities/ABC, Tymshare, National Cable Television Association (NCTA), Bonneville International, and Uniden Corporation.

- Assisted in preparations for testimony in several legal proceedings for cases involving cable programming ventures, cable television systems, and major professional sports leagues.

1983 to July 1988 . . . Senior Associate, Browne, Bortz & Coddington, Inc. . . . project work similar to that described above.

EDUCATION:

M.B.A., Finance (1990), University of Colorado
B.S., Economics (1982), Claremont McKenna College, Claremont, California

OTHER:

Co-Author of Great Expectations: A Television Manager's Guide to the Future and Sports on Television: A Whole New Ballgame.

GEORGE E. BARDWELL

EDUCATION:

- B.S., Electrical Engineering, University of Colorado, 1944
- Certificate, Officer Training, Naval Electronics, Bowdoin College, Maine, 1945
- Certificate, Officer Training, Naval Radar, Massachusetts Institute of Technology, Boston, 1945
- M.S., Business Management, University of Colorado, 1949
- PhD, Mathematics, University of Colorado, 1961
- Postdoctoral Fellow, Alfred Sloan Foundation, Bowdoin College, 1966

EMPLOYMENT AND SERVICE:

- U.S. Navy, 1943-1947 (Ensign)
- Electronic Research Engineer, Philadelphia Navy Yard, 1946-1947
- Instructor, University of Colorado, 1948
- Research Associate, Bureau of Business & Social Research, 1949-1960
- Mathematical Statistician, U.S. Bureau of Census, Preparation as I.C.A. Sampling Advisor to Government of Pakistan, 1957 (on leave)
- Associate Professor, Department of Statistics and Research, University of Denver, 1961; Chairman, 1962-1963
- Joint Associate Professor, Department of Statistics and Research and Department of Mathematics, 1963; also Assistant Director, Computing Laboratories, Denver Research Institute, 1963
- Vice President, Medical Data Corporation, 1968-1970
- Professor, Mathematics and Statistics, University of Denver, 1971 to date
- Labor Arbitrator, 1962 to date

RESEARCH ACTIVITY: (Complete list available on request)

Studies of health, housing, demographic characteristics of populations, school enrollment, land utilization, marketing; program evaluation, development of computerized record systems, mathematical analysis of management and engineering problems, probability sample design.

CONSULTING ACTIVITY: (List available on request)

Consultant to various governmental agencies and commissions, private industries, legal and accounting firms including extensive experience in litigation.

PUBLICATIONS: (Partial list; complete and current list available on request)

1. (with Carll, R.; Carmichael, F.L.; Theordorides, A.; Merry, P.R.) Colorado's Highway Needs and Highway Financing, Governor's Long Range Highway Planning Commission, 1951, 174 pp.

2. Characteristics of the Dog Population in the City and County of Denver in the Control of Rabies, Department of Health and Hospitals and the University of Denver, 1956, 16 pp.

3. (with Welles, J.G.) A Study of Certain Aspects of Stadium Development for Denver, Denver Research Institute, 1957, 114 pp.

4. "Design of the Sample in the Study of Colorado's Personal Income Tax," Colorado-Wyoming Academy of Science, 1959, Abstract Vol. IV, No. 11.

5. "On a Generalization of the Poisson Distribution," Annual Meeting, American Association for the Advancement of Science, 1959.

6. (with Merry, P.R.) "Measurement of the Effect of Colorado's Highway 85 and 87 upon Business Activity of By-passed Communities and upon Land Values and Land Use," Colorado-Wyoming Academy of Science, 1959, Abstract Vol. IV, No. 11.

7. (With Seligson, H.) Organized Labor and Political Action in Colorado: 1990-1960, Commerce Clearing House, 1960, 67 pp.

8. "On Certain Characteristics of Some Discrete Distributions," Biometrika, University of London, Vol. 47, 1960, pp. 473-475.

9. (with Merry, P.R.) Measuring the Economic Impact of Limited Access Highways on Business Activity of By-passed Communities, Land Value and Land Use, Bulletin 268, Highway Research Board, National Academy of Sciences, National Research Council, 1960, pp. 37-73; also in Japanese in Kosoki-doro Chosahki, Tokyo, 1961.

10. (with Seligson, H.) Labor Management Relations in Colorado, Sage Books, 1961, 330 pp.

11. Basic Mathematics, Pruett Press, 1964, 140 pp.

12. (with Brittan, M.; Kuark, Y.) Mathematical Foundations, Pruett Press, 1964, 177 pp.

13. (with Crow, E.) "A Two-parameter Family of Hyper-Poisson Distributions," Journal of the American Statistical Association, Vol. 59, 1964, pp. 133-141.

14. (with Sherman, E.) Medicare for the Aged in Colorado, Joint Budget Committee of the Colorado Legislature, 1963, 60 pp.; also in Rocky Mountain Social Science Journal, Vol. 1, 1964, pp. 188-199.

15. (with Mahar, J.) A Method of Measuring Short-term Impacts of Technological Change on Employment and Occupations, Office of Manpower Automation and Training (OMAT) and Denver Research Institute, 1965, 92 pp.

16. "Some Statistical Features of the Relationship between Rocky Mountain Arsenal Waste Disposal and Frequency of Earthquakes," Mountain Geologist, Vol. 3, No. 1, pp. 37-41, 1966; also published in Geological Society of America, Engineering Case History Number 8, Works of Man, 1970.

17. Characteristics of Negro Residence in Denver: 1950-1966, Denver Commission on Community Relations, 1966, 23 pp.

18. (contributor) Poverty and Jobs in Denver (Zubrow, R.A.; Kendall, W.D.; Miller, E.S.; Burgess, P.L.) Economic Development Administration, U.S. Department of Commerce, 1969, 229 pp.

19. Testimony & Memoranda, U.S. District Court, Civil Action No. C-1499, Wilfred Keyes, et al., v. School District No. One, Denver Colorado, June, July 1969, February 1970, 1975, 1979, 1982, 1984.

20. Segregation-A Social Account, Colorado Civil Rights Commission, State of Colorado, 1971, 94 pp.

21. Since 1972, over 250 labor arbitration decisions have been written including awards published in Labor Arbitration Awards, Commerce Clearing House, cf: 76-1, ARB ¶ 8167, 1975; 80-2 ARB ¶ 5080, 1979; 80-2 ARB ¶ 8338, 1980.

    Over this same period, written reports and testimony have been prepared for and presented in over 100 appearances before U.S. Postal Commission, Interstate Commerce Commission, legislative bodies and district courts in a number of states, cf: ICC Finance Dockets 22688, et al.; 25103 et al.; 28799 et al.; 30000 et al.; 37374 et al.; 37865 et al.; 30400 et al.; Certain Statistical Aspects of UCRS, R.L. Hines & Associates, 1983; Indianapolis Airport Authority v. APCOA, 1977-79; Missouri Pacific & UP Railroads v. Department of Local Affairs, State of Colorado, 82-C-1445, 1983-84; statistical monitoring of consent decree in G.L. v. Zumwalt, 564 F. Supp. 1930, 1983.

HONORS AND MEMBERSHIPS:

- Omicron Delta Kappa, Eta Kappa Nu, Tau Beta Pi, Sigma Xi
- American Men of Science
- American Statistical Association (District 9 Representative, 1965-1966); Editorial Collaborator, Journal American Statistical Association, 1965, 1966, 1969.
- Federal Mediation and Conciliation Service Arbitration Panel, 1966 to date
- American Arbitration Association panel, 1967 to date
- Man of Year Award, Park Hill Action Community and Temple Buell College, 1969
- Distinguished Teaching Award, University of Denver, 1970
- Special Recognition Award, American Civil Liberties Union, 1971
- National Academy of Arbitrators, 1975 to date; Regional President, 1983

SUPPLEMENT TO RESUME OF EDUCATION AND EXPERIENCE
GEORGE E. BARDWELL

From 1980 to date, the following firms or agencies have engaged my consulting services:

LEGAL FIRMS:

Sullivan & Worcester, Boston
Holland & Hart, Denver
Arnold & Porter, Washington, DC
Reynard & Booms, Denver
DeWitt, McAndrews & Sundby, Madison, WI
Hogan & Hartson, Washington, DC
Sherman & Howard, Denver
Hornbein, MacDonald, Fattor & Buckley, Denver
McGuire, Hearns & Cornwell, Denver
Cheryl Peake, P.C., Denver
James Dodd, P.C., Denver
Haglund, Garnsey, Kahn & Donnell, Denver
Holme, Roberts & Owen, Denver
McManus & Miles, Denver
Cathie A. Shattuck, P.C., Denver
Garund, Sullivan & Bryans, Denver
Edward M. Bendelow, P.C., Denver
NAACP Legal Defense & Educational Fund, Inc., New York
Legal Aid of Western Missouri, Kansas City
American Civil Liberties Union -- Childrens' Rights Project, New York
Legal Aid Society of Metropolitan Denver, Denver

GOVERNMENTAL AGENCIES:

Colorado Department of Revenue
Colorado Department of Local Affairs
Colorado State Attorney General
Colorado Energy Research Institute
Colorado Lottery
Colorado Commission on Higher Education
U.S. Department of Justice
Denver City and County Office of Policy Analysis
Colorado Department of Environmental Affairs
Regional Transportation District
Colorado Civil Rights Commission

CONSULTING FIRMS:

Browne, Bortz & Coddington, Inc. (BBC, Inc.), Denver
R.L. Hines and Associates, Inc., Washington, DC
George C. Schaffer Associates, Inc., Washington, DC
Denver Research Institute
Mechanical Systems Analysis, Denver
Mathematica Policy Research, New York and Denver
Gruen Plus Gruen Associates, San Francisco
G.P. Ivancie, DDS, Denver
ENTERCOM, Inc., Denver
Bortz & Company, Inc., Denver

PRIVATE CORPORATIONS:

Kansas City Southern Railroad, Kansas City
Denver and Rio Grande Western Railroad, Denver
Blue Cross-Blue Shield of Colorado
American Television and Communications Corp., Denver
Colorado Association of Public Employees
Colorado Education Association

ACCOUNTING FIRMS:

Newman & Sicke, Colorado
Coopers & Lybrand, Colorado
Tom A. Ward & Co., Colorado
Yale & Seffinger, Colorado
Yanori, Watson, Lyons & Co., Colorado

MICHAEL O. WIRTH

EXPERIENCE:

1987 to present . . . University of Denver, Department of Mass Communications. Professor/Chairperson; and Adjunct Professor of Law, University of Denver College of Law.

1985 to 1987 . . . University of Denver, Department of Mass Communications. Associate Professor/Chairperson; and Adjunct Professor of Law, University of Denver College of Law.

1983 to 1985 . . . University of Denver, Department of Mass Communications. Associate Professor; and Adjunct Professor of Law, University of Denver College of Law.

1977 to 1983 . . . University of Denver, Department of Mass Communications. Assistant Professor; and Adjunct Professor of Law, University of Denver College of Law.

1973 to 1977 . . . Michigan State University, Department of Telecommunication. Research Assistant NSF/MSU/Rockford Cable Project, 1976 to 1977. Teaching Assistant, 1973 to 1976.

Summer 1974 . . . Michigan State University, Department of Information Services. Technical Writing Assistant.

1969 to 1973 . . . University of Nebraska-Lincoln, Department of Agricultural Communications. Undergraduate Student Assistant.

EDUCATION:

B.S., Agricultural Honors/Agricultural Journalism, 1973, with High Distinction, University of Nebraska, Lincoln, Nebraska.

M.A., Television and Radio, 1974, Michigan State University, East Lansing, Michigan.

Ph.D., Mass Media, 1977, Michigan State University, East Lansing, Michigan. Dissertation: The Effects of Crossmedia Ownership on Television and Newspaper Prices.

CONSULTING:

Joint Legislative Cable Television Study Committee of the Michigan Legislature, 1975 to 1976.

Minnesota Cable Communications Board, 1975.

ABC Radio, 1975.

Denver Research Institute's Social System Research and Evaluation Division, 1977 to 1979.

BBC, a Denver-based communications management and economics consulting firm, 1979 to present.

American Television and Communications Corp., 1981 to 1988.

Bortz & Company, Inc., 1988 to present.

Capital Cities/ABC, 1980 to present.

National Basketball Association, 1981 to present.

Tele-Communications Inc., 1990 to 1991.

Gatseos & Associates, Inc., 1990 to present.

Eagle Direct, 1992.

Women In Cable, 1989 to present.

Communication Technologies International, 1991 to present.

The Christian Science Monitor, 1991.

PROFESSIONAL MEMBERSHIPS:

Broadcast Education Association

Association for Education in Journalism & Mass Communications

Southern Economic Association

International Communication Association

RECENT PUBLICATIONS (Partial list; complete list available on request)

A. Academic Journals

1. (with Wollert, James) "Public Interest Programming: Taxation by Regulation." Journal of Broadcasting, Summer 1979, pp. 319-330.

2. (with Wollert, James) "Public Interest Programming: FCC Standards and Station Performance." Journalism Quarterly, Autumn 1978, pp. 554-561.

3. (with Baldwin, Thomas F. and Zenaty, Jayne W.) "The Economics of Per-Program Pay Cable Television." Journal of Broadcasting, Spring 1978, pp. 143-154.

4. (with Allen, Bruce T) "Crossmedia Ownership, Regulatory Scrutiny and Pricing Behavior." Journal of Economics and Business, Fall 1980, pp. 28-42.

5. (with Wollert, James) "Deregulation of Commercial TV in the USA: Control by Government or Market." Telecommunications Policy, September 1982, pp. 155-163.

6. (with Wollert, James) "The Effects of Market Structure on Television News Pricing." Journal of Broadcasting, Spring 1984, pp. 215-224.

7. (with Bloch, Harry) "The Demand for Pay Services on Cable Television," Information Economics and Policy, Autumn 1984, pp. 311-332.

8. (with Cobb-Reiley, Linda) "A First Amendment Critique of the 1984 Cable Act." Journal of Broadcasting and Electronic Media, Autumn 1987, pp. 391-407. (Reprinted in 1988 Entertainment, Publishing and the Arts Handbook, John Viera and Robert Thorne, eds., New York: Clark Boardman Co., Ltd.)

9. (with Bloch, Harry) "Household-Level Demand for Cable Television: A Profit Analysis." Journal of Media Economics, Fall 1989, pp. 21-34.

10. "Cable's Economic Impact on Over-the-Air Television Broadcasting." Journal of Media Economics, Fall 1990, pp. 39-53.

B. Chapters in Books

1. (with Bloch, Harry) "The Broadcasters: The Future Role of Local Stations and the Three Networks," as found in Eli Noam, ed., Video Media Competition: Regulation, Economics, and Technology. (New York, Columbia University Press, 1985): pp. 121-137.

2. "Economic Barriers to Entering Media Industries in the United States," as found in Margaret L. McLaughlin, ed., Communication Yearbook 9. (Beverly Hills, SAGE Publications, Inc., 1986): pp. 423-442.

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6. "Cable Television: The Blue Sky Revisited," presented to the Broadcast Education Association Annual Conference, Dallas, Texas, April 3, 1982.

7. "First Amendment, Common Carrier and Copyright Issues in Local Cable Programming," invited speech to the Mountain States Conference of the National Federation of Local Cable Programmers, November 1982.

8. "Should Cable Television be Regulated as a Common Carrier?" presented to the Law and Economics Division of the Law and Society Association Annual Meetings, Denver, Colorado, June 1983.

9. "The Future for New Technologies: Market Research and Profitability," paper presented to the Broadcast Education Association Annual Convention, Las Vegas, Nevada, April 3, 1985.

10. "Economic Barriers to Entry: Daily Newspapers vs. Television Stations vs. Radio Stations: A Preliminary Analysis," paper presented to the Mass Communication Division of the Annual Convention of the International Communication Association (selected one of the top three papers), Honolulu, Hawaii, May 23-27, 1985.

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12. "Household-Level Demand for Cable Television: A Profit Analysis," paper presented to the Mass Communications Division of the Annual Convention of the International Communication Association, New Orleans, Louisiana, May 29-June 2, 1988.

13. "The Economic Impact of Cable on Broadcasting," paper presented to the Mass Communications Division of the Annual Convention of the International Communication Association, San Francisco, California, May 25-29, 1989.

14. "Cable System Values: Fact, Fantasy and the Future," paper presented to the Broadcast Financial Management Association Annual Conference, Dallas, Texas, April 9-12, 1989.

15. "The Economics of Cable Television," invited paper presented to the 1991 Taipei International Symposium on Cable, Taipei, Taiwan, R.O.C., June 24-25, 1991.

16. "The Future of Telecommunications: The Cable Industry and Its Opportunities," invited testimony to Making Connections: Women in the Changing World of Telecommunications, National Women's Business Council, Denver, Colorado, March 16, 1992.

17. "The Future of Commercial Television," invited presentation to the University of Denver's School of Communication Alumni Colloquium, June 18, 1992.

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10. "The Economic Impact of Cable on Broadcasting." Prepared for National Association of Broadcasters and published by NAB as part of testimony presented to the Telecommunications Subcommittee of the U.S. House of Representatives, Cable Oversight Hearings, May 11, 1988.

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Testimony of Dr. Peter H. Lemieux
Before the Copyright Royalty Tribunal
August 14, 1993

I am Peter H. Lemieux, Managing Director of Information Architects and a Lecturer in Political Science at the Massachusetts Institute of Technology. A copy of my *curriculum vitae* is attached to this testimony. I will sponsor Sports Exhibit 2, *Analysis of the 1990 Cable Copyright Royalty Fund.*

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

Peter H. Lemieux, Ph.D.

Peter H. Lemieux

Current Positions

Lecturer in Political Science, *Massachusetts Institute of Technology, 1984-*
Offer courses and conduct research in political behavior, comparative politics, and survey and quantitative research methodologies. Departmental Director of Computing. Affiliated with the Research Program in Communication Policy and the M.I.T. Communications Forum.

Managing Director, *Information Architects, Cambridge, Massachusetts, 1982-*
Principal of a consulting firm offering research services to the telecommunications and information industries. Clients have included CBS, Time-Life, RCA, the Motion Picture Association of America, the Washington Post, A. C. Nielsen, Major League Baseball, Bell Canada, Symbolics, Harvard University, and the Corporation for Public Broadcasting.

Previous Positions

Polling Consultant, *The Boston Globe, 1986-1988*
Conducted periodic election and public opinion polls for the *Globe*. Major projects included tracking the 1988 Presidential primaries in New Hampshire and Massachusetts, probing citizens' views about the effectiveness of procedures to combat drunken driving, and investigating racial attitudes in the various neighborhoods of the City of Boston.

Associate Director for Research, *Television Audience Assessment, Inc., Cambridge, Mass., 1981-82.*
Principally responsible for the development of a new system of audience measurement based on research into viewer reactions to television programs. Financial support was provided by major satellite program networks, multiple cable system operators, and the John and Mary Markle Foundation.

Research Director, *Kalba Bowen Associates, Cambridge, Massachusetts, 1979-81.*
Conducted various studies of telecommunications industrial and regulatory policies in areas like direct broadcast satellites, home video systems, multichannel subscription television, and educational telecommunications.

Visiting Fellow, *Department of Economics, Harvard University, 1978-79.*
Independent study and research in microeconomic theory and public finance under the auspices of a fellowship from the National Science Foundation.

Assistant Professor of Political Science, *University of Rochester, 1975-79.*
Taught courses and conducted research on comparative political behavior, policy analysis, and the application of quantitative statistical methodologies to social research.

Education

Ph.D., Political Science, Massachusetts Institute of Technology, 1977.
A.B. with honors, Government, Harvard College, 1971.

Awards

Who's Who in the East, 1981- .
Postdoctoral fellowship, National Science Foundation, 1978-79.
Gabriel. A. Almond dissertation award, American Political Science Association, 1978.

Expert Testimony

Before the Federal Communications Commission, Docket 83-1009, 1984.
Conducted a study of the national spot television advertising market in support of a submission by the Motion Picture Association of America in the multiple ownership docket.

Before the Copyright Royalty Tribunal, Various Dockets, 1980-91.
Testified on numerous occasions on behalf of professional sports leagues concerning copyright issues arising from the carriage of sports telecasts on distant television stations imported by cable television systems.

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SPORTS
EXHIBIT 2

Analysis of the 1990 Cable Copyright Royalty Fund

Author

Dr. Peter H. Lemieux

A Report Submitted to:

The Copyright Royalty Tribunal

On Behalf of:

The Joint Sports Claimants

August 14, 1993

Information Architects

Box 419, Cambridge, MA 02142

Analysis of the 1990 Cable Copyright Royalty Fund

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Analysis of the 1990 Cable Copyright Royalty Fund

Executive Summary

This report presents some summary findings concerning the structure of the 1990 cable copyright royalty fund and examines how this fund has changed since my report to the Tribunal for the 1989 proceeding. I also report on royalties paid at the 3.75% rate applied to television signals whose importation was formerly prohibited by the Federal Communications Commission's now defunct signal-carriage rules, a subject not covered in my report on the 1989 fund. The principal findings are:

- Distant-signal cable carriage of two of the three "original" satellite-delivered superstations – WTBS, Atlanta, and WGN, Chicago – continued to grow in 1990, while carriage of the third such signal, WWOR, New York, declined. While the syndicated programming on all three of these stations was not subject to the newly-imposed "syndicated exclusivity" rules, WTBS and WGN telecast a more extensive schedule of professional and collegiate sporting events than did WWOR. Indeed those two stations broadcast more live sporting events than any other television station in the country.

- Distant-signal carriage of the four "newer" superstations – WPIX, New York; WSBK, Boston; KTLA, Los Angeles; and, KTVT, Dallas – also declined in 1990. However, the syndicated programming schedules on all of these stations were subject to cable "blackouts" under the syndicated exclusivity rules.

- Taken together, however, instances of carriage of the seven superstations rose from 52 percent in 1989 to 54 percent in 1990. The basic royalties generated by these seven stations alone rose from 75 percent in 1989 to 77 percent in 1990.

- Turning now to the 3.75% fund, we find that 380 Form-3 cable systems paid nearly $21 million in royalties in the second half of 1990 to carry fully-distant signals that were formerly prohibited under the now-defunct FCC rules. This much higher royalty rate meant that carriage of an independent station on a 3.75% basis cost cable operators an average of 38 cents per subscriber per month, compared to only 4 to 13 cents for such signals carried at the basic royalty rate. Network affiliates carried at the 3.75% rate cost about 9 cents per subscriber per month, while basic fees for network affiliates ranged from 1 to 3.5 cents.

- Of those 380 cable systems, 319, or 84 percent, paid 3.75% fees *only* to carry signals that telecast live professional and collegiate sporting events. These 319 systems accounted for 88 percent of all the royalties paid by systems importing fully-distant signals on a 3.75% basis. In contrast, fewer than 4 percent of the 380 systems paid a 3.75% royalty to import signals that carried no sports programming; these payments totalled less than one percent of the 3.75% fund.

- Finally, if we compare the carriage of signals that generated 3.75% royalties to signal carriage at the basic rate, we find that the seven superstations accounted for nearly 77 percent of the instances of fully-distant 3.75% carriage, but 60 percent of fully-distant instances at the basic royalty rate.

1.0 The Composition of the 1990 Copyright Royalty Funds

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, those serving communities that are generally located farther than thirty-five miles from the cable system. The Act specifies a rate structure for those television signals whose carriage was authorized under Federal Communications Commission in effect in 1976 and a method for adjusting those rates for inflation. Throughout this report I shall refer to royalties paid under this rubric as the "basic" royalty fund. In addition, the Act established a Copyright Royalty Tribunal to determine the proper distribution of these fees to the various owners of the copyrighted programming carried over the distant television stations.

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 importation of distant signals, while the other removed the "syndicated exclusivity," or "syndex," rule requiring 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 the FCC's action, the Tribunal conducted a rate-setting proceeding to set new royalty rates for the programming now allowed by the change in the rules. In its 1982 decision the Tribunal assigned a rate of 3.75 percent of cable system "basic" revenues 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.[1] 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 an expanded version of syndicated exclusivity. This report will present some fundamental information concerning the pattern of royalty payments made by cable operators in 1990 and show how the cable copyright royalty funds have changed since our last report to the Tribunal in 1989.[2]

Table 1 on the next page presents the distribution of all royalties collected for the second accounting periods of 1989 ("1989-2") and 1990 by type of fund. Payments to the basic royalty funds in both years totalled roughly three times the amount paid for carriage of signals under the 3.75 percent fee.

Both the royalty fees cable operators pay, and the amount of detail they must supply in their filings, vary according to the total revenues of the cable system. While some 13,702 cable systems paid royalties for signal carriage during the second half of 1990, Table 1 shows that 97 percent of all royalties collected came from the 2,117 so-called "Form-3" systems, those whose gross semi-annual revenues from basic cable service totalled at least $292,000. Operators of Form-3 systems are required to identify each local and distant television station they carry to document the royalty payments made. This information permits us to determine the amount of royalties paid for each distant signal. I will limit my attention to Form-3 systems because of their preponderance in the royalty funds and their more detailed signal information.

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[1] This figure excludes revenues from "premium" cable programming for which subscribers pay a per-channel monthly fee, such as Home Box Office (HBO) and the various regional sports programming services like the New England Sports Network (NESN), and "pay-per-view" services like individual movies or boxing matches.

[2] 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.

Fees Paid by Type of Fund

	1989-2		1990-2	
	Amount	Percent	Amount	Percent
Basic Fees	$59,151,836	57.1	$63,625,237	75.0
3.75% Fees	22,311,855	21.5	21,058,430	24.8
Syndex Fees	22,132,389	21.4	117,507	0.2
Total	$103,596,080	100.0	$84,801,174	100.0

Fees Paid by Type of Cable System

	1989-2				1990-2			
	Number	Percent	Royalties	Percent	Number	Percent	Royalties	Percent
Form-1	7,997	64.0	$223,916	0.2	8,936	65.2	$258,204	0.3
Form-2	2,464	19.7	2,058,581	2.0	2,649	19.3	2,253,999	2.7
Form-3	2,032	16.3	101,313,583	97.8	2,117	15.5	82,288,971	97.0
Total	12,493	100.0	$103,596,080	100.0	13,702	100.0	$84,801,174	100.0

Sources:
All data are taken from the Statements of Account filed by cable operators as complied by the Cable Data Corporation. Data for 1989-2 can be found in Lemieux, *The Structure and Growth of the Cable Copyright Royalty Fund,* p. 2. Results for 1990-2 Form-3 systems were tabulated by Information Architects from computer files furnished by the Cable Data Corporation and dated May 11, 1993. Figures for Form-1 and Form-2 systems in 1990-2 were provided by CDC on August 13, 1993.

Table 1: The Composition of the Cable Copyright Royalty Funds: 1989-2 and 1990-2

2.0 Royalty Payments by Type of Signal

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.[3] Table 2 presents a breakdown of patterns of distant-signal carriage and basic royalties paid according to the type of signal for both 1989-2 and 1990-2.[4]

2.1 Patterns of Signal Carriage in 1990-2

During 1990-2, the 2,117 Form-3 cable systems carried, on average, 3.38 distant signals, for a total of 7,150 different "instances of carriage," down just slightly from a year earlier when instances totalled 7,173, or 3.53 per Form-3 system.[5] Yet, while approximately 770 different television stations were carried on a distant basis in those years, *nearly half of the instances of carriage in 1990 consisted of just three signals – WTBS, Atlanta; WGN, Chicago; and, WWOR, New York, the three original satellite-delivered "superstations."* These three stations, a mere 0.4 percent of the 769 different distant signals carried in 1990-2, accounted for 49 percent of all instances of carriage and 70 percent of the basic royalty fees paid by Form-3 cable operators in 1990-2. In other words, one of every two distant signals carried by Form-3 cable systems was one of these three superstations, and the royalties they generated constituted seven out of every ten dollars collected from Form-3 systems.

Four other independent stations have joined these three on the satellites in recent years: WPIX, New York; WSBK, Boston; KTLA, Los Angeles; and, KTVT, Dallas-Fort Worth. While not as dominant as the three original superstations, which had all achieved this status before 1979, these four nevertheless command a substantial share of the royalty fund. While representing only one-half of one percent of all retransmitted distant signals, these four stations accounted for about four percent of the instances of carriage, and seven percent of all basic royalties. *Collectively the seven superstations represented over half the instances of distant-signal carriage and generated nearly eighty percent of all basic royalties paid by cable operators.*

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 1990. 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, and WWOR augmented their telecasts of professional sporting events with games between members of the National Collegiate Athletic Association.

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[3] 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 attributed 0.25 DSE. Thus a cable system carrying as distant signals an independent station, a Canadian station, an educational station, and a network-affiliated station would pay royalties for 2.50 DSE's (=1.00+1.00+0.25+0.25). In this report, however, I shall be discussing "instances of carriage," which treats all types of signals equally. On this basis, our hypothetical cable system would generate four instances of carriage, one for each signal carried.

[4] All tabulations for 1990-2 in this report were conducted by Information Architects using a copy of the computerized database compiled by the Cable Data Corporation from cable operators' Statements of Account. Because CDC is constantly updating its database as operators file revised SOA's, exact comparability between the results presented here and similar tabulations from CDC cannot be guaranteed. The results here are based on data collected through May 11, 1993.

[5] As in 1989, this figure includes the carriage of signals generating both basic and 3.75% royalty payments.

	Number of Signals				Instances of Carriage				Basic Royalties (Thousands of Dollars)			
			Pct. of Total				Pct. of Total				Pct. of Total	
	89-2	90-2	89-2	90-2	89-2	90-2	89-2	90-2	89-2	90-2	89-2	90-2
Original Superstations	*3*	*3*	*0.4*	*0.4*	*3,367*	*3,533*	*46.9*	*49.4*	*$38,120*	*$42,958*	*67.2*	*70.3*
WTBS					1,853	1,941			22,470	25,611		
WGN					984	1,089			9,619	11,196		
WWOR					530	503			6,030	6,151		
Newer Superstations	*4*	*4*	*0.5*	*0.5*	*347*	*294*	*4.8*	*4.1*	*4,589*	*3,977*	*8.1*	*6.5*
WPIX					189	149			2,115	1,763		
WSBK					87	79			1,465	1,126		
KTLA					36	35			738	809		
KTVT					35	31			270	279		
All Superstations	*7*	*7*	*0.9*	*0.9*	*3,714*	*3,827*	*51.8*	*53.5*	*42,709*	*46,935*	*75.3*	*76.8*
Other Independents	213	214	*27.6*	*27.8*	1,228	1,147	*17.1*	*16.0*	8,917	8,849	*15.7*	*14.5*
Network Affiliates	396	386	*51.4*	*50.2*	1,638	1,568	*22.8*	*21.9*	2,768	2,812	*4.9*	*4.6*
Educational	131	136	*17.0*	*17.7*	488	517	*6.8*	*7.2*	1,157	1,309	*2.0*	*2.1*
Canadian	21	23	*2.7*	*3.0*	102	88	*1.4*	*1.2*	1,176	1,206	*2.1*	*2.0*
Mexican	3	3	*0.4*	*0.4*	3	3	*0.0*	*0.0*	9	11	*0.0*	*0.0*
All Other Signals	*764*	*762*	*99.1*	*99.1*	*3,459*	*3,323*	*48.2*	*46.5*	*14,029*	*14,187*	*24.7*	*23.2*
All Signals	*771*	*769*	*100.0*	*100.0*	*7,173*	*7,150*	*100.0*	*100.0*	*$56,738*	*$61,122*	*100.0*	*100.0*

Sources: 1989: Lemieux, *Structure and Growth*, p. 7.
1990: Statements of Account as compiled by the Cable Data Corporation and analyzed by Information Architects.

Table 2: Patterns of Signal Carriage, 1989-2 and 1990-2 Compared

The other 214 independent television stations retransmitted as distant signals accounted for 1,147 instances of carriage, or 16 percent of the total. The 386 different stations affiliated with one of the three major television networks that were carried as distant signals in 1990-2 accounted for 1,568 (22 percent) of the instances of carriage. However, because the Copyright Act assesses a royalty fee four times greater for independents than for affiliates, the independents generated nearly 16 percent of basic royalties compared to just 4.9 percent for network affiliates.

Cable operators retransmitted 136 different noncommercial, educational stations on a distant basis in 1990-2, accounting for 517 instances of carriage or 7.2 percent. Because educational stations receive the same treatment as network affiliates under the Copyright Act, their carriage generated 2.1 percent of basic royalties. Turning finally to the foreign stations, 23 different Canadian stations were carried on American cable systems, accounting for 1.2 percent of the instances and 2.0 percent of the royalty pool. Three Mexican stations were carried as distant signals and generated about $11,000 in total basic royalty payments.

2.2 Changes in the Basic Fund: 1989-1990

As Table 2 shows, distant retransmissions of most types of commercial television stations fell between 1989 and 1990. Among the superstations only two, WTBS and WGN, saw their distant carriage increase in 1990, while retransmissions of the other five signals declined to greater or lesser degrees.

Because the reinstituted 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 market, under the new regime the value of a particular distant signal depends directly on the extent to which its programming is not duplicated on local stations. 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, telecasts only older shows like *Andy Griffith* to which no local broadcasters own exclusive rights. WWOR, in contrast, does broadcast more recent syndicated series like *Taxi* in the New York market, but these shows are stripped out of the satellite retransmission of WWOR to cable systems and programming not subject to exclusivity is substituted. In contrast, the other four satellite-delivered superstations did not employ such measures to adjust to the new exclusivity regime. It is thus not surprising that all four of the newer superstations, like the other independent stations not carried by satellite, saw declines in distant-signal carriage between 1989 and 1990.

It is striking, nevertheless, that only two signals, WTBS and WGN, saw substantial increases in their distant-signal carriage in 1990. What distinguishes these two stations from the others is their relatively greater emphasis on professional and collegiate sports telecasts. Moreover, the third original superstation, WWOR, carries considerably fewer sporting events than either WTBS or WGN, and it was the only one of the three whose distant carriage fell in 1990 despite having a programming schedule not subject to syndicated exclusivity.

3.0 The 3.75% Royalty Fund

Thus far I have limited my attention to the basic royalty pool. In the remaining pages I turn to the 3.75% royalty fund composed of fees paid for the right to carry programming on signals formerly prohibited by the signal carriage rules that were eliminated in 1981. Although the composition of this fund was discussed in my report to the Tribunal for its 1983 Cable Copyright Proceeding,[6] I did not examine this fund specifically in my report for the 1989 proceeding.

Only Form-3 cable systems located in a television market pay royalties under the 3.75% rubric; systems located wholly outside any television market were never subject to signal carriage rules and thus are exempt from these royalty payments. Moreover, 3.75% royalty fees are not assessed for the retransmission of noncommercial educational stations or "specialty" (foreign-language or religious) stations, since cable operators were allowed to import an unlimited number of such signals under the now defunct carriage rules.

In 1990-2, 418 Form-3 systems paid slightly over $21 million to carry formerly prohibited distant signals, up from 199 systems paying just under $7 million in 1983-2. However, 38 of those 418 systems, or just over nine percent, paid a 3.75% royalty *only* to carry one or more signals on a "partially-distant" basis. Because the reasons for partially-distant carriage are typically quite different from those governing the decision to carry a signal on a fully-distant basis, I shall limit my attention to only these fully-distant signals, reducing the number of systems under consideration to 380.[7] Overall, these 380 cable operators imported 452 independent stations and 88 network affiliates on a fully-distant basis subject to the 3.75% royalty fee.[8]

The much higher royalty fee 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 cost a cable operator about 38 cents per subscriber per month; network affiliates thus cost some 9 cents since their DSE value is one-fourth that of independent stations.[9] In contrast, independents carried at the basic rate cost cable operators on average only 4 to 13 cents per subscriber per month; the cost for network affiliates thus ranged from 1 to 3.25 cents.[10] Given these much higher

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[6] Peter H. Lemieux, *Analysis of the 3.75% Cable Copyright Royalty Fund,* submitted in evidence before the Copyright Royalty Tribunal, May, 1985.

[7] Partially-distant carriage typically occurs when a cable system is located at the edge of the thirty-five mile zone which defines the radius of a signal's local carriage. As a result, some fraction of the system's subscribers are "distant" to that signal, and thus a royalty must be paid. On average, partially-distant 3.75% carriage of independent stations amounted to 0.29 DSE, while similar carriage of network affiliates averaged 0.088, or 0.35 of the full-time network DSE value of 0.25. Usually cable operators pay the 3.75% royalty for partially-distant carriage to assure that all of their subscribers receive the same station lineup regardless of their geographic location. In all, the 38 systems carrying only partially-distant signals at the 3.75% rate paid just over $504,000 in 3.75% royalty payments, or only 2.4% of the entire fund, to carry 26 partially-distant independent stations and 78 partially-distant network affiliates.

[8] These systems also imported 9 independents and 19 network affiliates on a partially-distant basis for which slightly over $278,000 in 3.75% fees were paid, or 1.3% of all such fees paid by the 380 systems carrying at least one fully-distant signal at the 3.75% rate.

[9] The figures for 3.75% carriage were computed as follows: The 452 fully-distant independents and 88 affiliates constituted a total of 474 DSE's, for which some $20,276,000 in 3.75% royalties were collected in the six-month accounting period, or about $7,100 per DSE per month. Subscribers to these 380 systems totalled some 7,190,000, or about 18,900 per system. Dividing $7,100 by 18,900 yields the figure of 38 cents given in the text for an independent station.

[10] 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.

royalties, cable operators scrutinize more carefully the programming available on candidate 3.75% signals before making the decision to add them to their programming lineup.

As I explained in my 1983 report on the 3.75% fund, in many cases identification of "the" signal for which a 3.75% royalty was paid is arbitrary. Suppose a cable operator located in a major market with a local independent station carried both WTBS and WGN, thus filling her quota of two distant independent stations as were allowed under the now-defunct carriage rules. If she chooses to add WWOR, this would trigger the 3.75% royalty payment, but that royalty should not be attributable solely to WWOR. After all, the operator could have chosen to drop one of the other superstations to avoid the fee. Thus the only logical conclusion that can be reached is that the operator decided to pay the 3.75% royalty to carry *all three* signals, and all three ought to be considered as having generated the additional royalty payment.[11]

I have examined the carriage pattern of every system paying a 3.75% royalty in 1990-2 to determine which signals should be treated as having generated these additional payments. In all, though 452 fully-distant independent signals were added that triggered the 3.75% fee, 805 such signals can be more accurately said to have generated these payments. Because substitution of network affiliates would nearly always have been prohibited under the prior rules, the number of fully-distant affiliates generating a 3.75% payment is 89.[12]

Systems paying 3.75% fees to carry:	Number of Systems		Instances of Carriage		Royalties	
	N	%	N	%	Amount	%
Only sports signals	319	84.0	705	78.9	$18,123,708	88.2
Sports and other signals	46	12.1	172	19.2	2,278,860	11.1
Only other signals	15	3.9	17	1.9	151,305	0.7
Totals	380	100.0	894	100.0	$20,553,873	100.0

Table 3: Professional and Collegiate Sports Carriage on Fully-Distant 3.75% Signals in 1990-2

The Appendix to this report lists all cable systems that carried at least one fully-distant signal at the 3.75% rate, along with information on the carriage, if any, of sports programming on each such signal. Table 3 presents a summary of that data. Overall, 319 of those 380 systems, or 84 percent, paid a

[11] This conclusion does not apply to all signals carried on a 3.75% basis, but only those for which some form of substitution could have taken place. If, for instance, a network affiliate were added, another network affiliate could almost never be dropped in its place under the old rules (although see the footnote that follows for an exception). Nor, for instance, could an independent station carried under the "grade-B contour" rule be dropped in favor of a superstation. Similar arguments apply to any other station carried under the former carriage rules, such as specialty stations, grandfathered signals, or signals carried pursuant to a specific waiver of the rules granted by the FCC. Partially-distant signals are also not counted under this formula. See Lemieux, *Analysis of the 3.75% Cable Copyright Royalty Fund,* Appendix B, for further details. Because reports from the Cable Data Corporation follow the operator's designation of "the" 3.75% signal, they are not comparable to, and less accurate than the results presented here.

[12] The one discrepancy concerns a system in Wilmington, NC, which carried two distant NBC affiliates, one on a 3.75% basis. Wilmington had only two local network affiliates, so the prior rules permitted the addition of a third so that the operator could offer a full complement of the major networks. Substitution of one signal for the other would thus have been allowed under the former carriage rules.

3.75% royalty to carry only fully-distant signals with professional or collegiate sports telecasts; collectively these systems paid over $18 million in 3.75% royalty fees, or 88 percent of all 3.75% royalties collected for fully-distant carriage. In contrast, fewer than 4 percent of the 380 systems paid a 3.75% royalty to import signals that carried no sports programming; these payments totalled less than one percent of the 3.75% fund.

Finally, we can compare the distribution of signals that generated 3.75% royalties against that of signals generating basic royalties. First, since the designation of a specific 3.75% signal in the case of independent stations has been shown to be arbitrary, the identification of specific independents generating *basic* royalties in such cases is also arbitrary. In the example presented above, while the operator identified WTBS and WGN as "basic" signals, she could equally well have specified any pair of the three superstations as subject to the basic royalty rate. Thus independents that generate 3.75% fees must also be viewed as having generated basic royalties as well. For network affiliates, on the other hand, where substitution is nearly always impossible, they can be uniquely categorized as either a basic or a 3.75% signal. The same holds true for signals carried on a partially-distant basis. Educational stations, specialty signals, signals carried on a "grade-B" basis, those grandfathered under the 1972 carriage rules, or signals carried pursuant to an FCC waiver all contribute only to the basic royalty fund.

Table 4 presents a comparison of carriage patterns for all *fully-distant* signals according to whether they generated a basic or a 3.75% royalty fee.[13] As the table shows, superstations constituted nearly 77 percent of instances of fully-distant carriage that generated 3.75% royalty payments, as compared to about 60 percent of similar instances generating a basic royalty payment.

	Generated Basic Fees		Generated 3.75% Fees	
Type of Signal	N	%	N	%
Original Superstations	3,514	55.9	645	72.1
Newer Superstations	277	4.4	42	4.7
All Superstations	*3,791*	*60.4*	*687*	*76.8*
Other Independents	923	14.7	114	12.8
Networks	1,061	16.9	89	10.0
Educational	424	6.8	0	0.0
Canadian	79	1.3	4	0.4
Mexican	3	0.0	0	0.0
Total	*6,281*	*100.0*	*894*	*100.0*

Table 4: Instances of Fully-Distant Carriage by Type of Royalty Fees Generated: 1990-2

[13] Because partially-distant signals are excluded from Table 4, the totals for signals generating basic royalties differ from those presented in Table 2 where both fully-distant and partially-distant carriage is reported.

Appendix

Carriage of Fully-Distant Signals Generating
3.75% Royalty Payments in 1990-2

Carriage of Fully-Distant Signals Generating 3.75% Royalty Payments in 1990-2

Systems that Paid 3.75% Royalty to Import Only Signals Carrying Sports

MEDIA GENERAL INC		FAIRFAX CO, VA		3.75% Royalty	$545,308
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
TIME WARNER ENTERTAINMENT CO		AUSTIN, TX		3.75% Royalty	$439,835
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		AMBERLY VILLAGE, OH		3.75% Royalty	$413,397
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
ROBIN CABLE SYSTEMS		TUCSON, AZ		3.75% Royalty	$310,700
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
COMMUNITY CABLE TV INC		LAS VEGAS, NV		3.75% Royalty	$296,061
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
COLORADO SPRINGS CABLEVISION		COLORADO SPRINGS, CO		3.75% Royalty	$292,885
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
JONES INTERCABLE INC		OXNARD, CA		3.75% Royalty	$291,765
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TIME WARNER ENTERTAINMENT CO		MANHATTAN, NY		3.75% Royalty	$271,793
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
COMCAST CABLEVISION CORP		BURTON CITY, MI		3.75% Royalty	$252,335
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
MICRO CABLE COMMUNICATIONS		KENNEWICK, WA		3.75% Royalty	$249,112
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CABLE TV FUND 12-BCD		TAMPA, FL		3.75% Royalty	$236,339
Callsign	*City*	*Type*	*Sports Affiliations*		

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WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
COX CABLE SANTA BARBARA INC		SANTA BARBARA, CA		3.75% Royalty	$231,736
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
COX CABLE HAMPTON ROADS INC		VIRGINIA BEACH, VA		3.75% Royalty	$220,310
Callsign	*City*	*Type*	*Sports Affiliations*		
WDCA	WASHINGTON, DC	Independent	MLB, NBA, NHL		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
TIME WARNER ENTERTAINMENT CO		ERIE, PA		3.75% Royalty	$215,019
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
TIMES WARNER ENTERTAINMENT		ROCHESTER, NY		3.75% Royalty	$199,519
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
UACC MIDWEST INC		EVANSVILLE, IN		3.75% Royalty	$183,860
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
COMCAST CBV OF WEST PALM BEACH		W PALM BEACH, FL		3.75% Royalty	$177,723
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
TIMES WARNER ENTERTAINMENT		EAU CLAIRE, WI		3.75% Royalty	$174,546
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
PARAGON COMMUNICATIONS		HILLSBOROUGH CO, FL		3.75% Royalty	$172,443
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		HARRISONBURG, VA		3.75% Royalty	$172,370
Callsign	*City*	*Type*	*Sports Affiliations*		
WDCA	WASHINGTON, DC	Independent	MLB, NBA, NHL		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
SOUTHEAST FLORIDA CABLE		STUART, FL		3.75% Royalty	$170,259
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		

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UNITED CABLE CO-NEW HAMPSHIRE		MANCHESTER, NH		3.75% Royalty	$167,853
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
STORER CABLE OF CAROLINA INC		N CHARLESTON, SC		3.75% Royalty	$164,118
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
LONGVIEW CABLE TELEVISION CO		LONGVIEW, TX		3.75% Royalty	$163,432
Callsign	*City*	*Type*	*Sports Affiliations*		
KTVT	FT WORTH, TX	Independent	MLB, NBA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
DISTRICT CABLEVISION LTD		WASHINGTON, DC		3.75% Royalty	$162,402
Callsign	*City*	*Type*	*Sports Affiliations*		
WBAL	BALTIMORE, MD	Network	NCAA		
WJZ	BALTIMORE, MD	Network	NCAA		
WMAR	BALTIMORE, MD	Network	MLB		
LOWER BUCKS CABLEVISION INC		BRISTOL, PA		3.75% Royalty	$162,003
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
COX CABLE MIDDLE GEORGIA INC		MACON, GA		3.75% Royalty	$159,478
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WGNX	ATLANTA, GA	Independent	NBA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
ACTON CABLE PARTNERSHIP		N ANNE ARUNDEL CO, MD		3.75% Royalty	$159,387
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
JONES INTERCABLE INC		PIMA CO, AZ		3.75% Royalty	$158,294
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
PARAGON COMMUNICATIONS		ST PETERSBURG, FL		3.75% Royalty	$157,412
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
TELECABLE ASSOCIATES INC		BRYAN, TX		3.75% Royalty	$151,936
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TIME WARNER ENTERTAINMENT CO		MANKATO, MN		3.75% Royalty	$143,660
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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CROWN CABLE INC		WAUSAU, WI		3.75% Royalty	$142,469
Callsign	*City*	*Type*	*Sports Affiliations*		
WCGV	MILWAUKEE, WI	Independent	MLB, NBA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
JONES CABLE TV FUND 14-B LTD		SURFSIDE BEACH, SC		3.75% Royalty	$141,606
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
UNITED CABLE TELEVISION CORP		BOISE, ID		3.75% Royalty	$137,396
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		MILWAUKEE, WI		3.75% Royalty	$132,953
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
STORER CABLE COMMUNICATIONS		MONTGOMERY, AL		3.75% Royalty	$130,987
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TELECABLE OF SPRINGFIELD INC		SPRINGFIELD, MO		3.75% Royalty	$124,436
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TIMES MIRROR CATV-LAFAYETTE		LAFAYETTE, IN		3.75% Royalty	$123,530
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		ALTOONA, PA		3.75% Royalty	$123,350
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
TIMES MIRROR CATV-MIDLAND INC		MIDLAND, TX		3.75% Royalty	$123,174
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI OF VIRGINIA		CHESAPEAKE, VA		3.75% Royalty	$122,260
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		KINGSPORT, TN		3.75% Royalty	$121,322
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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TELEVISION CABLE SERVICE INC		ABILENE, TX		3 75% Royalty	$115,549
Callsign	*City*	*Type*	*Sports Affiliations*		
KTVT	FT WORTH, TX	Independent	MLB, NBA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CHAMBERS CABLE INC		CHICO, CA		3.75% Royalty	$111,012
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
JONES INTERCABLE INC		ALEXANDRIA, VA		3.75% Royalty	$109,899
Callsign	*City*	*Type*	*Sports Affiliations*		
WBAL	BALTIMORE, MD	Network	NCAA		
WJZ	BALTIMORE, MD	Network	NCAA		
WMAR	BALTIMORE, MD	Network	MLB		
UNITED CABLE TELEVISION CORP		OCEAN CITY, MD		3.75% Royalty	$106,782
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
STORER CABLE COMMUNICATIONS		MILFORD, DE		3.75% Royalty	$105,000
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI OF PENNSYLVANIA INC		HARBORCREEK, PA		3.75% Royalty	$104,722
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WUAB	LORAIN, OH	Independent	MLB		
VERTO CORP & UNIVERSAL TV		SCRANTON, PA		3.75% Royalty	$103,797
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WTXF	PHILADELPHIA, PA	Independent	MLB		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
PRIME CABLE OF ALASKA		ANCH-ELMENDORF AFB, AK		3.75% Royalty	$100,306
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
COMMUNICATIONS SERVICES INC		FT SMITH, AR		3.75% Royalty	$100,227
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WESTMARC DEVELOPMENT JOINT VTR		BATTLE CREEK, MI		3.75% Royalty	$100,163
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TELECABLE OF LEXINGTON INC		LEXINGTON, KY		3.75% Royalty	$99,402
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CROWN CABLE INC		HULL, WI		3.75% Royalty	$96,571
Callsign	*City*	*Type*	*Sports Affiliations*		
WCGV	MILWAUKEE, WI	Independent	MLB, NBA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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NEWCHANNELS CORPORATION		BINGHAMTON, NY		3.75% Royalty	$95,190
Callsign	*City*	*Type*	*Sports Affiliations*		
WSBK	BOSTON, MA	Independent	MLB, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
GWC 73 INC		ROCHESTER, MN		3.75% Royalty	$93,670
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
STORER CABLE TV OF FLORIDA INC		ENGLEWOOD, FL		3.75% Royalty	$89,829
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TIMES WARNER ENTERTAINMENT		ALBANY, NY		3.75% Royalty	$88,806
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WSBK	BOSTON, MA	Independent	MLB, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
SOUTHEAST FLORIDA CABLE		PALM BEACH GARDEN, FL		3.75% Royalty	$88,194
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
FAIRBANKS CABLE OF FLORIDA INC		DELRAY BEACH, FL		3.75% Royalty	$88,117
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
FALCON CLASSIC CABLE		BURKE CO, NC		3.75% Royalty	$87,399
Callsign	*City*	*Type*	*Sports Affiliations*		
WCCB	CHARLOTTE, NC	Independent	NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
C-TEC CABLE SYSTEMS MIDWEST		TRAVERSE CITY, MI		3.75% Royalty	$86,589
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WKBD	DETROIT, MI	Independent	NBA, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI CABLEVISION OF YAKIMA INC		YAKIMA, WA		3.75% Royalty	$86,381
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
STORER CABLE COMM OF MARYLAND		SALISBURY, MD		3.75% Royalty	$85,849
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TIME WARNER ENTERTAINMENT CO		TERRE HAUTE, IN		3.75% Royalty	$85,443
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WXIN	INDIANAPOLIS, IN	Independent	MLB, NBA		
COX CABLE MIDDLE GEORGIA INC		WARNER ROBINS, GA		3.75% Royalty	$83,371
Callsign	*City*	*Type*	*Sports Affiliations*		

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	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WGNX	ATLANTA, GA	Independent	NBA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TCI CABLEVISION OF WASHINGTON		BELLINGHAM, WA		3.75% Royalty	$79,239
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
STORER COMM OF BOWLING GREEN		BOWLING GREEN, KY		3.75% Royalty	$78,390
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WHAS	LOUISVILLE, KY	Network	NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
WARNER CABLE COMMUNICATIONS		CHAMBERSBURG, PA		3.75% Royalty	$73,554
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
HERITAGE CBV OF TEXAS INC		BROWNSVILLE, TX		3.75% Royalty	$72,275
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
SAMMONS COMMUNICATIONS INC		OCEAN CITY, NJ		3.75% Royalty	$71,769
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGBS	PHILADELPHIA, PA	Independent	NHL, NCAA	
TIMES WARNER ENTERTAINMENT		WICHITA FALLS, TX		3.75% Royalty	$69,887
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
FLORIDA CABLEVISION MANAGEMENT		CAPE CORAL, FL		3.75% Royalty	$68,957
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
PARAGON COMMUNICATIONS		MANATEE, FL		3.75% Royalty	$67,436
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
CENTURY OHIO CABLE TELEVISION		PORTSMOUTH, OH		3.75% Royalty	$66,614
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WUAB	LORAIN, OH	Independent	MLB	
	WXIX	CINCINNATI, OH	Independent	NCAA	
POST-NEWSWEEK CABLE INC		SIOUX CITY, IA		3.75% Royalty	$65,624
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TIMES MIRROR CATV OF OHIO INC		NEW PHILADELPHIA, OH		3.75% Royalty	$65,178
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TELESCRIPPS CABLE CO		GRAY, TN		3.75% Royalty	$64,992
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	

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WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
STORER CABLE TV OF FLORIDA INC		PT CHARLOTTE, FL		3.75% Royalty	$64,981
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
W B CABLE ASSOCIATES LTD		PALM BEACH CO, FL		3.75% Royalty	$62,894
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
MOUNTAIN CABLE CO		N ADAMS, MA		3.75% Royalty	$62,738
Callsign	*City*	*Type*	*Sports Affiliations*		
WSBK	BOSTON, MA	Independent	MLB, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
ADVOCATE COMMUNICATIONS INC		CORAL SPRINGS, FL		3.75% Royalty	$61,669
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
ROBIN CABLE SYSTEMS		GREEN VALLEY, AZ		3.75% Royalty	$61,524
Callsign	*City*	*Type*	*Sports Affiliations*		
KTLA	LOS ANGELES, CA	Independent	MLB, NBA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
MULTI-CHANNEL TV CABLE CO		CHARLOTTESVILLE, VA		3.75% Royalty	$60,627
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
STORER CABLE TV OF FLORIDA INC		VENICE, FL		3.75% Royalty	$60,251
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
HERITAGE CBV OF TEXAS INC		HARLINGEN, TX		3.75% Royalty	$59,764
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI CABLEVISION OF WYOMING INC		CHEYENNE, WY		3.75% Royalty	$59,517
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI CABLEVISION OF COLORADO		PUEBLO, CO		3.75% Royalty	$59,390
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
SAMMONS COMMUNICATIONS INC		BRISTOL, TN		3.75% Royalty	$58,370
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
NEW HERITAGE ASSOC		BISMARCK, ND		3.75% Royalty	$58,365
Callsign	*City*	*Type*	*Sports Affiliations*		

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	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
EAST ARKANSAS CABLEVISION INC		JONESBORO, AR		3.75% Royalty	$57,467
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
COMCAST CBV OF BOCA RATON		BOCA RATON, FL		3.75% Royalty	$56,362
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
ROBIN MEDIA GROUP, INC		ALCOA, TN		3.75% Royalty	$56,030
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
COMCAST CABLEVISION CORP		HUNTSVILLE, AL		3.75% Royalty	$53,583
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
COLUMBUS TELEVISION CABLE CORP		COLUMBUS, MS		3.75% Royalty	$52,643
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
MOUNTAIN CABLE CO		BURLINGTON, VT		3.75% Royalty	$52,475
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
CBV INDUSTRIES OF CENTRAL FL		WINTER GARDEN, FL		3.75% Royalty	$52,256
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
BRESNAN COMMUNICATIONS CO		MARQUETTE, MI		3.75% Royalty	$51,153
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TCI CABLEVISION OF MISSOURI		JEFFERSON CITY, MO		3.75% Royalty	$50,976
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
PARAGOULD CABLEVISION INC		PARAGOULD, AR		3.75% Royalty	$50,972
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KATV	LITTLE ROCK, AR	Network	NCAA	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WMKW	MEMPHIS, TN	Independent	MLB, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
C A T PARTNERSHIP		HATTIESBURG, MS		3.75% Royalty	$49,436
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	

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HERITAGE CABLEVISION INC		MASON CITY, IA		3.75% Royalty	$49,024
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CONTINENTAL CBV OF MICHIGAN		LANSING, MI		3.75% Royalty	$48,686
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WKBD	DETROIT, MI	Independent	NBA, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
GWC 106 INC		LA CROSSE, WI		3.75% Royalty	$47,127
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
JONES CABLE INCOME FUND I-A		OWATONNA, MN		3.75% Royalty	$46,969
Callsign	*City*	*Type*	*Sports Affiliations*		
KITN	MINNEAPOLIS, MN	Independent	NCAA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
SPOTSYLVANIA CABLE TV NETWORK		SPOTSYLVANIA, VA		3.75% Royalty	$46,965
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
MOUNTAIN CABLE CO		RUTLAND, VT		3.75% Royalty	$44,836
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
GENESEE COUNTY VIDEO CORP		BATAVIA, NY		3.75% Royalty	$44,823
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
SAMMONS COMMUNICATIONS INC		JOHNSON CITY, TN		3.75% Royalty	$44,665
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI CABLEVISION OF NEVADA INC		CARSON CITY, NV		3.75% Royalty	$44,460
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
JONES INTERCABLE INC		WALDORF, MD		3.75% Royalty	$43,404
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
C A T PARTNERSHIP		WATERTOWN, NY		3.75% Royalty	$43,276
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
NATIONAL CABLE LTD		ATLANTIS-PALM BCH, FL		3.75% Royalty	$42,886
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		

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CHILLICOTHE CABLEVISION INC		WASHINGTON COURT H, OH		3.75% Royalty	$42,180
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WXIX	CINCINNATI, OH	Independent	NCAA		
UNITED CABLE CO-NEW HAMPSHIRE		BEDFORD, NH		3.75% Royalty	$41,959
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
MULTI-CHANNEL TV CABLE CO		STAUNTON, VA		3.75% Royalty	$41,912
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
BRESNAN COMMUNICATIONS CO		DULUTH, MN		3.75% Royalty	$41,898
Callsign	*City*	*Type*	*Sports Affiliations*		
KMSP	MINNEAPOLIS, MN	Independent	NHL		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
PARAGON COMMUNICATIONS		ELMIRA CITY, NY		3.75% Royalty	$41,526
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
FALCON TELECABLE		ROCKPORT, TX		3.75% Royalty	$41,433
Callsign	*City*	*Type*	*Sports Affiliations*		
KTVT	FT WORTH, TX	Independent	MLB, NBA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
MID-HUDSON CABLEVISION INC		CATSKILL, NY		3.75% Royalty	$41,409
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
SOUTHEAST FLORIDA CABLE		GREENACRES CITY, FL		3.75% Royalty	$41,371
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
MISSISSIPPI CABLEVISION INC		ECRU, MS		3.75% Royalty	$41,150
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WMKW	MEMPHIS, TN	Independent	MLB, NCAA		
WPTY	MEMPHIS, TN	Independent	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
METROVISION-PRINCE GEORGES CO		PRINCE GEORGE CNTY, MD		3.75% Royalty	$40,669
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
FALCON FIRST COMMUNICATIONS		PLATTSBURGH, NY		3.75% Royalty	$40,096
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		

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UNIVERSAL TV CABLE SYSTEMS INC		EXETER, PA		3.75% Royalty	$39,839
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WTXF	PHILADELPHIA, PA	Independent	MLB		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
FAIRCLARK CABLE TV		CLARKSBURG, WV		3.75% Royalty	$39,482
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CROWN CABLE INC		ONALASKA, WI		3.75% Royalty	$39,019
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TELECABLE ASSOCIATES INC		GREENVILLE, MS		3.75% Royalty	$38,700
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
AVENUE TV CABLE SERVICE INC		VENTURA, CA		3.75% Royalty	$38,505
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
US CABLE TELEVISION GROUP LP		ARDMORE, TN		3.75% Royalty	$38,178
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
WZTV	NASHVILLE, TN	Independent	MLB, NCAA		
SAMMONS COMM OF VIRGINIA INC		PETERSBURG, VA		3.75% Royalty	$38,154
Callsign	*City*	*Type*	*Sports Affiliations*		
WDCA	WASHINGTON, DC	Independent	MLB, NBA, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WTTG	WASHINGTON, DC	Independent	NCAA		
SOUTHWEST CABLEVISION LTD		ROUND ROCK, TX		3.75% Royalty	$37,749
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
D D CABLE HOLDINGS, INC		CUBA CITY, WI		3.75% Royalty	$37,390
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
MEDIA GENERAL INC		FREDERICKSBURG, VA		3.75% Royalty	$36,939
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
STAFFORD CABLE TV COMPANY INC		STAFFORD, VA		3.75% Royalty	$36,927
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
FIRST CAROLINA CABLE TV LP		MANCHESTER, VT		3.75% Royalty	$36,554
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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CABLE SATELLITE ASSOCIATES		S MIAMI, FL		3.75% Royalty	$36,503
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
CENTURY HUNTINGTON COMPANY		GRAFTON, WV		3.75% Royalty	$36,363
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WPTT	PITTSBURGH, PA	Independent	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI OF NORTH CENTRAL KENTUCKY		DANVILLE, KY		3.75% Royalty	$35,617
Callsign	*City*	*Type*	*Sports Affiliations*		
WDRB	LOUISVILLE, KY	Independent	MLB, NCAA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
JONES INTERCABLE INC		PASADENA, MD		3.75% Royalty	$35,590
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
VENTURA COUNTY CABLEVISION		OJAI, CA		3.75% Royalty	$35,481
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI OF NEW YORK INC		MEXICO VILLAGE, NY		3.75% Royalty	$35,468
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
PLATTEVILLE CABLE TV CORP		PLATTEVILLE, WI		3.75% Royalty	$35,031
Callsign	*City*	*Type*	*Sports Affiliations*		
WMSN	MADISON, WI	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
BRESNAN COMMUNICATIONS CO		ESCANABA, MI		3.75% Royalty	$34,954
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
STORER CABLE COMMUNICATIONS		DOVER, DE		3.75% Royalty	$33,701
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
YOUNG'S CABLE TV CORP		SPRINGFIELD, VT		3.75% Royalty	$33,687
Callsign	*City*	*Type*	*Sports Affiliations*		
WSBK	BOSTON, MA	Independent	MLB, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
FALCON CABLE SYSTEMS CO		PORTERVILLE CITY, CA		3.75% Royalty	$33,491
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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SIMMONS CABLE TV OF KY		RICHMOND, KY		3.75% Royalty	$33,417
Callsign	*City*	*Type*	*Sports Affiliations*		
WCPO	CINCINNATI, OH	Network	NCAA		
WDRB	LOUISVILLE, KY	Independent	MLB, NCAA		
WLWT	CINCINNATI, OH	Network	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
SOUTHEAST FLORIDA CABLE		TEQUESTA, FL		3.75% Royalty	$33,175
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
MARCUS CABLE PARTNERS LP		MENOMONIE, WI		3.75% Royalty	$33,110
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CABLEVISION INDUSTRIES LP		FAYETTE, NY		3.75% Royalty	$32,685
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
US CABLE TELEVISION GROUP LP		WAVELAND, MS		3.75% Royalty	$32,259
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CABLEVISION INDUSTRIES LP		VICTOR, NY		3.75% Royalty	$32,201
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
CABLEVISION OF PENNSYLVANIA		NORRISTOWN, PA		3.75% Royalty	$31,873
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TELE-MEDIA CO OF HOPEWELL/PRIN		HOPEWELL, VA		3.75% Royalty	$31,248
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
COMMUNITY CABLE TELEVISION		KERRVILLE, TX		3.75% Royalty	$30,963
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CENCOM CABLE ENTERTAINMENT INC		FLORISSANT, MO		3.75% Royalty	$30,866
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
DONREY INC		ROGERS, AR		3.75% Royalty	$30,657
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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CENTURY HUNTINGTON COMPANY		BROOKHAVEN, WV		3.75% Royalty	$30,552
Callsign	*City*	*Type*	*Sports Affiliations*		
WPGH	PITTSBURGH, PA	Independent	NHL		
WPTT	PITTSBURGH, PA	Independent	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
STORER CABLE COMMUNICATIONS		PRATTVILLE, AL		3.75% Royalty	$30,544
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
MIDCONTINENT CABLE SYSTEMS		ABERDEEN, SD		3.75% Royalty	$29,946
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TV CABLE CORPORATION		VAN BUREN, AR		3.75% Royalty	$29,816
Callsign	*City*	*Type*	*Sports Affiliations*		
KTVT	FT WORTH, TX	Independent	MLB, NBA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CONTINENTAL CABLEVISION INC		CONCORD, NH		3.75% Royalty	$29,497
Callsign	*City*	*Type*	*Sports Affiliations*		
WFXT	BOSTON, MA	Independent	NBA, NCAA		
TEXAS COMMUNITY ANTENNAS INC		SPRINGDALE, AR		3.75% Royalty	$29,435
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
UNITED CABLE TELEVISION CORP		NAMPA, ID		3.75% Royalty	$29,144
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CARDINAL COMMUNICATIONS INC		MONTICELLO, IN		3.75% Royalty	$29,059
Callsign	*City*	*Type*	*Sports Affiliations*		
WLS	CHICAGO, IL	Network	NCAA		
WNDU	SOUTH BEND, IN	Network	MLB		
GWC 106 INC		WINONA, MN		3.75% Royalty	$28,984
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI OF KENTUCKY INC		HARRODSBURG, KY		3.75% Royalty	$28,906
Callsign	*City*	*Type*	*Sports Affiliations*		
WDRB	LOUISVILLE, KY	Independent	MLB, NCAA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TEXAS COMMUNITY ANTENNAS INC		NACOGDOCHES, TX		3.75% Royalty	$28,792
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
PARAGON COMMUNICATIONS		LAKELAND, FL		3.75% Royalty	$28,766
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		

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JONES SPACELINK INCOME PARTNER		LODI, OH		3.75% Royalty	$28,745
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
PARAGON COMMUNICATIONS		HAMILTON, NY		3.75% Royalty	$28,266
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
NATIONAL CABLE TELEVISION CORP		WELLINGTON, FL		3.75% Royalty	$28,174
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
STORER CABLE COMMUNICATIONS		ALBANY, GA		3.75% Royalty	$28,128
Callsign	*City*	*Type*	*Sports Affiliations*		
WSB	ATLANTA, GA	Network	NCAA		
SERVICE ELECTRIC CABLE TV INC		WILKES BARRE, PA		3.75% Royalty	$27,514
Callsign	*City*	*Type*	*Sports Affiliations*		
WLYH	LEBANON, PA	Network	MLB		
FALCON FIRST COMMUNICATIONS		ATHENS, AL		3.75% Royalty	$27,305
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WTRT	FLORENCE, AL	Independent	NBA		
TIMES WARNER ENTERTAINMENT		CANON CITY, CO		3.75% Royalty	$27,119
Callsign	*City*	*Type*	*Sports Affiliations*		
KWGN	DENVER, CO	Independent	MLB, NBA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
JONES SPACELINK LTD		KENOSHA, WI		3.75% Royalty	$26,858
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
CABLEVISION INDUSTRIES LP		APOLLO BEACH, FL		3.75% Royalty	$26,436
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
FAIRCLARK CABLE TV		FAIRMONT, WV		3.75% Royalty	$26,384
Callsign	*City*	*Type*	*Sports Affiliations*		
WPGH	PITTSBURGH, PA	Independent	NHL		
WPXI	PITTSBURGH, PA	Network	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		WAKEFIELD, MA		3.75% Royalty	$25,957
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		

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NORTHLAND CABLE PROPERTIES-VI		STARKVILLE, MS		3.75% Royalty	$25,762
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		CLEARFIELD, PA		3.75% Royalty	$25,674
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWCP	JOHNSTOWN, PA	Independent	MLB, NCAA		
WARNER CABLE COMMUNICATIONS		MARTINSBURG, WV		3.75% Royalty	$25,645
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
HARRON COMMUNICATIONS CORP		CANAJOHARIE, NY		3.75% Royalty	$25,255
Callsign	*City*	*Type*	*Sports Affiliations*		
WSBK	BOSTON, MA	Independent	MLB, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TIMES MIRROR CATV OF OHIO INC		COSHOCTON, OH		3.75% Royalty	$25,217
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
STORER CABLE COMMUNICATIONS		NASHVILLE, GA		3.75% Royalty	$25,174
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
WESTMARC DEVELOPMENT JOINT VTR		PETOSKEY, MI		3.75% Royalty	$25,147
Callsign	*City*	*Type*	*Sports Affiliations*		
WKBD	DETROIT, MI	Independent	NBA, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
MICRO CABLE COMMUNICATIONS		PENDLETON, OR		3.75% Royalty	$25,068
Callsign	*City*	*Type*	*Sports Affiliations*		
KPTV	PORTLAND, OR	Independent	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI CABLEVISION OF OHIO INC		CONNEAUT, OH		3.75% Royalty	$24,919
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		ROARING SPRING, PA		3.75% Royalty	$24,859
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WPGH	PITTSBURGH, PA	Independent	NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
NEWCHANNELS CORPORATION		DEWITT, NY		3.75% Royalty	$24,644
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WSBK	BOSTON, MA	Independent	MLB, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
ROGERS CABLESYSTEMS INC		WASILLA, AK		3.75% Royalty	$24,334
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		

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WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
HERITAGE CBV OF TEXAS INC		WESLACO, TX		3.75% Royalty	$24,220
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
JONES CABLE INCOME FUND I-B/C		S SIOUX CITY, NE		3.75% Royalty	$24,153
Callsign	*City*	*Type*	*Sports Affiliations*		
KPTM	OMAHA, NE	Independent	MLB, NCAA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WESTMARC DEVELOPMENT JOINT VTR		OWOSSO, MI		3.75% Royalty	$23,885
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WKBD	DETROIT, MI	Independent	NBA, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
SOUTHWEST MISSOURI CABLE TV		CARTHAGE, MO		3.75% Royalty	$23,606
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
CONTINENTAL CBV-SIERRA VALLEY		TULARE, CA		3.75% Royalty	$23,569
Callsign	*City*	*Type*	*Sports Affiliations*		
KTTV	LOS ANGELES, CA	Independent	MLB		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
D D CABLE HOLDINGS, INC		CLOQUET, MN		3.75% Royalty	$22,824
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
INTERMEDIA PARTNERS OF W. TN.		MILAN, TN		3.75% Royalty	$22,750
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WPTY	MEMPHIS, TN	Independent	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WESTMARC DEVELOPMENT JOINT VTR		ALPENA, MI		3.75% Royalty	$22,686
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CABLEVISION INDUSTRIES LP		CLYDE, NY		3.75% Royalty	$22,337
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
BRESNAN COMMUNICATIONS CO		FORSYTH TWP, MI		3.75% Royalty	$22,194
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WKBD	DETROIT, MI	Independent	NBA, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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OHIO CABLEVISION NETWORK INC		CELINA, OH		3.75% Royalty	$22,125
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
FALCON CABLE SYSTEMS CO		HOLLISTER, CA		3.75% Royalty	$21,831
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CONTINENTAL CBV OF MA INC		MILFORD, MA		3.75% Royalty	$21,825
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
WESTMARC COMMUNICATIONS OF MN		AUSTIN, MN		3.75% Royalty	$21,493
Callsign	*City*	*Type*	*Sports Affiliations*		
KMSP	MINNEAPOLIS, MN	Independent	NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
D D CABLE HOLDINGS, INC		EVELETH, MN		3.75% Royalty	$21,492
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TELESCRIPPS CABLE CO		CAMPBELLSVILLE, KY		3.75% Royalty	$21,408
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
HERITAGE CBV OF TEXAS INC		ALTON, TX		3.75% Royalty	$21,240
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
SERVICE ELECTRIC CABLE TV INC		HAZLETON, PA		3.75% Royalty	$21,208
Callsign	*City*	*Type*	*Sports Affiliations*		
WLYH	LEBANON, PA	Network	MLB		
TCI OF ILLINOIS INC		HERRIN, IL		3.75% Royalty	$21,155
Callsign	*City*	*Type*	*Sports Affiliations*		
KPLR	ST LOUIS, MO	Independent	MLB, NHL, NCAA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TIMES MIRROR CATV-CAMBRIDGE		CAMBRIDGE, OH		3.75% Royalty	$21,078
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WUAB	LORAIN, OH	Independent	MLB		
SAMMONS COMMUNICATIONS INC		ELIZABETHTON, TN		3.75% Royalty	$21,077
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WESTERN CABLESYSTEMS II INC		WALNUT CREEK, TX		3.75% Royalty	$20,930
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WOLFE BROADCASTING CORP		FREMONT CITY, OH		3.75% Royalty	$20,904
Callsign	*City*	*Type*	*Sports Affiliations*		
WKBD	DETROIT, MI	Independent	NBA, NHL		

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WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WUAB	LORAIN, OH	Independent	MLB		
WARNER CABLE COMMUNICATIONS		MARSHFIELD, WI		3.75% Royalty	$20,671
Callsign	*City*	*Type*	*Sports Affiliations*		
WCGV	MILWAUKEE, WI	Independent	MLB, NBA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
CABLEVISION INDUSTRIES LP		ATHENS, PA		3.75% Royalty	$20,495
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
MARCUS CABLE PARTNERS LP		SPENCER, WI		3.75% Royalty	$20,473
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WLAX	LA CROSSE, WI	Independent	MLB, NBA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WESTMARC COMMUNICATIONS OF MN		ALBERT LEA, MN		3.75% Royalty	$20,232
Callsign	*City*	*Type*	*Sports Affiliations*		
KMSP	MINNEAPOLIS, MN	Independent	NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
FALCON TELECABLE		SIKESTON, MO		3.75% Royalty	$20,100
Callsign	*City*	*Type*	*Sports Affiliations*		
KPLR	ST LOUIS, MO	Independent	MLB, NHL, NCAA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
US CABLE TELEVISION GROUP LP		MADISON CO, AL		3.75% Royalty	$20,062
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
MILLINGTON CATV INC		MILLINGTON, TN		3.75% Royalty	$19,924
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		BRATTLEBORO, VT		3.75% Royalty	$19,831
Callsign	*City*	*Type*	*Sports Affiliations*		
WSBK	BOSTON, MA	Independent	MLB, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CENCOM CABLE INCOME PARTNERS		ANGLETON, TX		3.75% Royalty	$19,799
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
PRESTIGE CABLE TV OF WARRENTON		WARRENTON, VA		3.75% Royalty	$19,719
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CROWN CABLE INC		W ALLIS, WI		3.75% Royalty	$19,162
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
HERITAGE CBV OF TEXAS INC		PHARR, TX		3.75% Royalty	$18,984
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
FALCON CABLE MEDIA		SUFFOLK, VA		3.75% Royalty	$18,982
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
BENCHMARK ACQUISITION FUND I		PALM COAST, FL		3.75% Royalty	$18,951
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WAWS	JACKSONVILLE, FL	Independent	NBA	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
AMERICAN CABLESYSTEM NORTHEAST		MARLBOROUGH, MA		3.75% Royalty	$18,831
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WPIX	NEW YORK, NY	Independent	MLB	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
TIMES WARNER ENTERTAINMENT		MARSHALL, MN		3.75% Royalty	$18,754
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KITN	MINNEAPOLIS, MN	Independent	NCAA	
	KMSP	MINNEAPOLIS, MN	Independent	NHL	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
ENSTAR INCOME PROGRAM II-1		TAYLORVILLE, IL		3.75% Royalty	$18,689
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KPLR	ST LOUIS, MO	Independent	MLB, NHL, NCAA	
	KSDK	ST LOUIS, MO	Network	NCAA	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
CONTINENTAL CBV-W NEW ENGLAND		NORTHAMPTON, MA		3.75% Royalty	$18,580
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WLVI	CAMBRIDGE, MA	Independent	NBA, NCAA	
	WSBK	BOSTON, MA	Independent	MLB, NHL	
AMZAK CABLE MIDWEST INC		NEW ULM, MN		3.75% Royalty	$18,179
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TRIAX CABLEVISION USA LP INC		PEARISBURG, VA		3.75% Royalty	$17,525
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WSET	LYNCHBURG, VA	Network	NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
MOUNTAIN CABLE CO		LAKE PLACID, NY		3.75% Royalty	$17,426
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	

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TRIAX CABLEVISION USA LP INC		BUCKHANNON, WV	3.75% Royalty	$17,229
Callsign	*City*	*Type*	*Sports Affiliations*	
WPXI	PITTSBURGH, PA	Network	NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
METROVISION OF OAKLAND COUNTY		FARMINGTON HILLS, MI	3.75% Royalty	$17,215
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
TECHNIVISION INC		CORPUS CHRISTI, TX	3.75% Royalty	$17,189
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TCI CABLEVISION OF WASHINGTON		FERNDALE, WA	3.75% Royalty	$17,166
Callsign	*City*	*Type*	*Sports Affiliations*	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
COUNTY CABLE LP		GREENVILLE, TN	3.75% Royalty	$16,961
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
CABLEVISION INDUSTRIES LP		MARION, NY	3.75% Royalty	$16,756
Callsign	*City*	*Type*	*Sports Affiliations*	
WPIX	NEW YORK, NY	Independent	MLB	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
TIMES MIRROR CATV-TEXARKANA		TEXARKANA, TX	3.75% Royalty	$16,704
Callsign	*City*	*Type*	*Sports Affiliations*	
KATV	LITTLE ROCK, AR	Network	NCAA	
ALERT CABLE TV OF N CAROLINA		RED SPRINGS, NC	3.75% Royalty	$16,627
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WLFL	RALEIGH, NC	Independent	MLB, NBA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
NORTHLAND CABLE PROPERTIES-VII		BRENHAM, TX	3.75% Royalty	$16,584
Callsign	*City*	*Type*	*Sports Affiliations*	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
UNIVERSAL TV CABLE SYSTEMS INC		PLYMOUTH, PA	3.75% Royalty	$16,388
Callsign	*City*	*Type*	*Sports Affiliations*	
WPIX	NEW YORK, NY	Independent	MLB	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
WTXF	PHILADELPHIA, PA	Independent	MLB	
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
SIMMONS COMMUNICATIONS CO		ELLENVILLE, NY	3.75% Royalty	$16,374
Callsign	*City*	*Type*	*Sports Affiliations*	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
CENCOM CABLE INCOME PARTNERS		FT GORDON, GA	3.75% Royalty	$16,362
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	

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FALCON CABLE MEDIA		CAROLINA BEACH, NC		3.75% Royalty	$16,217
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
INSIGHT COMMUNICATIONS CO LP		CLARK CO, IN		3.75% Royalty	$16,128
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WTTV	BLOOMINGTON, IN	Independent	MLB, NCAA		
TCI CABLEVISION OF WASHINGTON		ANACORTES, WA		3.75% Royalty	$16,040
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
MULTI-CHANNEL TV CABLE CO		WAYNESBORO, VA		3.75% Royalty	$15,947
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TIMES WARNER ENTERTAINMENT		HAMBURG, PA		3.75% Royalty	$15,823
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI CABLEVISION OF MISSOURI		HANNIBAL, MO		3.75% Royalty	$15,716
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TELEVISION CABLE SERVICE INC		NOLAN CO, TX		3.75% Royalty	$15,449
Callsign	*City*	*Type*	*Sports Affiliations*		
KTVT	FT WORTH, TX	Independent	MLB, NBA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
C-TEC CABLE SYSTEMS MIDWEST		ROSCOMMON TWP, MI		3.75% Royalty	$15,445
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WJRT	FLINT, MI	Network	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
INTERMEDIA PARTNERS OF W. TN.		DICKSON CITY, TN		3.75% Royalty	$15,423
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
SBC CABLE CO		BENTON, IL		3.75% Royalty	$15,396
Callsign	*City*	*Type*	*Sports Affiliations*		
KPLR	ST LOUIS, MO	Independent	MLB, NHL, NCAA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
INTERMEDIA PARTNERS		MARION, NC		3.75% Royalty	$15,372
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TELESCRIPPS CABLE CO		BLUEFIELD, WV		3.75% Royalty	$15,349
Callsign	*City*	*Type*	*Sports Affiliations*		
WSET	LYNCHBURG, VA	Network	NCAA		
KILGORE CABLE TV CO		KILGORE, TX		3.75% Royalty	$15,325
Callsign	*City*	*Type*	*Sports Affiliations*		

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KTVT	FT WORTH, TX	Independent	MLB, NBA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CENTURY OHIO CABLE TELEVISION		STRUTHERS, OH		3.75% Royalty	$15,309
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WUAB	LORAIN, OH	Independent	MLB		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
COX CABLE OF OMAHA INC		OMAHA, NE		3.75% Royalty	$15,159
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
CABLEVISION ASSOCIATES V		S PADRE ISLAND, TX		3.75% Royalty	$15,059
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
SCRIPPS-HOWARD CABLE CO		SILVER SPRING SHRS, FL		3.75% Royalty	$15,021
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
MIDCONTINENT CABLE SYS CO SD		PIERRE, SD		3.75% Royalty	$14,999
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
MICRO CABLE COMMUNICATIONS		HERMISTON, OR		3.75% Royalty	$14,695
Callsign	*City*	*Type*	*Sports Affiliations*		
KPTV	PORTLAND, OR	Independent	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
D D CABLE HOLDINGS, INC		GRAND RAPIDS, MN		3.75% Royalty	$14,667
Callsign	*City*	*Type*	*Sports Affiliations*		
KMSP	MINNEAPOLIS, MN	Independent	NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
MARCUS CABLE PARTNERS LP		DANE, WI		3.75% Royalty	$14,474
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
NATIONAL CABLE LTD		DELRAY BEACH, FL		3.75% Royalty	$14,205
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
TELESAT CABLEVISION INC		ORANGE CO, FL		3.75% Royalty	$14,158
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
VISION CABLE COMMUNICATIONS		MECKLENBURG CO, NC		3.75% Royalty	$13,791
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		

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WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
MARCUS CABLE PARTNERS LP		MONROE, WI		3.75% Royalty	$13,781
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
TCI OF VIRGINIA		CULPEPER, VA		3.75% Royalty	$13,608
Callsign	*City*	*Type*	*Sports Affiliations*		
WDCA	WASHINGTON, DC	Independent	MLB, NBA, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
ALASKAN CABLE NETWORK INC		FT WAINWRIGHT AFB, AK		3.75% Royalty	$13,333
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CONTINENTAL CBV OF ILLINOIS		QUINCY, IL		3.75% Royalty	$13,279
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
TCI OF SOUTH CAROLINA INC		BENNETTSVILLE, SC		3.75% Royalty	$13,242
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TCI OF ILLINOIS INC		HARRISBURG, IL		3.75% Royalty	$13,072
Callsign	*City*	*Type*	*Sports Affiliations*		
WCEE	MT VERNON, IL	Independent	MLB, NCAA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
TELE-MEDIA CO OF SE FLORIDA		BOYNTON BEACH, FL		3.75% Royalty	$12,998
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
MIDCONTINENT CABLE SYSTEMS		DEVILS LAKE, ND		3.75% Royalty	$12,865
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		OXFORD, OH		3.75% Royalty	$12,759
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
CHAMBERS CABLE OF SUNRIVER		SUNRIVER, OR		3.75% Royalty	$12,727
Callsign	*City*	*Type*	*Sports Affiliations*		
KPTV	PORTLAND, OR	Independent	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CONTINENTAL CBV OF MA INC		BEVERLY, MA		3.75% Royalty	$12,718
Callsign	*City*	*Type*	*Sports Affiliations*		
WPIX	NEW YORK, NY	Independent	MLB		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		

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NEWCHANNELS CORPORATION	TROY, NY		3.75% Royalty	$12,642
Callsign	*City*	*Type*	*Sports Affiliations*	
WPIX	NEW YORK, NY	Independent	MLB	
WSBK	BOSTON, MA	Independent	MLB, NHL	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
SAMMONS COMMUNICATIONS INC	RUSSELLVILLE, AL		3.75% Royalty	$12,564
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
WARNER CABLE COMMUNICATIONS	KENTON, OH		3.75% Royalty	$12,517
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
ANTIETAM CABLE TELEVISION INC	BOONSBORO, MD		3.75% Royalty	$12,493
Callsign	*City*	*Type*	*Sports Affiliations*	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
FAIRBANKS COMMUNICATIONS INC	LAWRENCEBURG, IN		3.75% Royalty	$12,444
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTTV	BLOOMINGTON, IN	Independent	MLB, NCAA	
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
METROVISION OF LIVONIA	LIVONIA, MI		3.75% Royalty	$12,376
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
US CABLE OF LAKE COUNTY	KIAWAH ISLAND, SC		3.75% Royalty	$12,090
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TCI CABLEVISION OF WASHINGTON	LYNDEN, WA		3.75% Royalty	$11,802
Callsign	*City*	*Type*	*Sports Affiliations*	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
RIFKIN/CCG INC	POINT PLEASANT, WV		3.75% Royalty	$11,801
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
BLUE RIDGE CABLE TV INC	NEWBERRY, PA		3.75% Royalty	$11,579
Callsign	*City*	*Type*	*Sports Affiliations*	
WPHL	PHILADELPHIA, PA	Independent	NBA	
WTXF	PHILADELPHIA, PA	Independent	MLB	
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
TIME WARNER ENTERTAINMENT CO	HARTFORD, KY		3.75% Royalty	$11,482
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
CABLEVISION ASSOCIATES V	PT ISABEL, TX		3.75% Royalty	$11,398
Callsign	*City*	*Type*	*Sports Affiliations*	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	

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	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TCI OF ILLINOIS INC		MARION, IL		3.75% Royalty	$11,203
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
CALIFORNIA OREGON TV INC		PRINEVILLE, OR		3.75% Royalty	$11,077
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
VACATIONLAND CABLEVISION INC		BARABOO, WI		3.75% Royalty	$10,740
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WVTV	MILWAUKEE, WI	Independent	NCAA	
TELESCRIPPS CABLE CO		GLADE SPRING, VA		3.75% Royalty	$10,669
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WDBJ	ROANOKE, VA	Network	NCAA	
FULL CHANNEL TV INC		WARREN, RI		3.75% Royalty	$9,384
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WCVB	BOSTON, MA	Network	NBA	
STORER CABLE COMMUNICATIONS		TIFTON, GA		3.75% Royalty	$9,314
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TCI CABLEVISION OF COLORADO		MONTROSE, CO		3.75% Royalty	$8,982
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
WESTMARC DEVELOPMENT JOINT VTR		ST JOSEPH, MI		3.75% Royalty	$8,008
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WWMT	KALAMAZOO, MI	Network	MLB, NCAA	
WESTMARC DEVELOPMENT JOINT VTR		THOMAS, MI		3.75% Royalty	$7,964
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WKBD	DETROIT, MI	Independent	NBA, NHL	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
WARNER CABLE COMMUNICATIONS		CLEVELAND, MS		3.75% Royalty	$7,183
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KATV	LITTLE ROCK, AR	Network	NCAA	
US CABLE TELEVISION GROUP LP		MOBILE CO, AL		3.75% Royalty	$6,203
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WLOX	BILOXI, MS	Network	NCAA	
TELECABLE INVESTMENT CORP		BROWARD CO NW, FL		3.75% Royalty	$6,060
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
PITTSBURG CABLE TV INC		PITTSBURG, KS		3.75% Royalty	$5,763
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WDAF	KANSAS CITY, MO	Network	MLB	

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TCI OF ILLINOIS INC		CHARLESTON, IL		3.75% Royalty	$5,617
Callsign	*City*	*Type*	*Sports Affiliations*		
WCCU	URBANA, IL	Independent	MLB, NCAA		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
ARMSTRONG UTILITIES INC		GROVE CITY, PA		3.75% Royalty	$5,370
Callsign	*City*	*Type*	*Sports Affiliations*		
WTAE	PITTSBURGH, PA	Network	NCAA		
CABLE PROPERTIES ASSOCIATES		THREE OAKS, MI		3.75% Royalty	$5,129
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
FALCON FIRST COMMUNICATIONS		RINGGOLD, GA		3.75% Royalty	$4,804
Callsign	*City*	*Type*	*Sports Affiliations*		
WAGA	ATLANTA, GA	Network	NCAA		
CENTRAL VIRGINIA CABLE INC		WINCHESTER, VA		3.75% Royalty	$4,148
Callsign	*City*	*Type*	*Sports Affiliations*		
WFTY	WASHINGTON, DC	Independent	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
FANCH CBV OF MICHIGAN LP		OXFORD, MI		3.75% Royalty	$3,590
Callsign	*City*	*Type*	*Sports Affiliations*		
WLNS	LANSING, MI	Network	MLB, NCAA		
US CABLE TELEVISION GROUP LP		SYLVA, NC		3.75% Royalty	$3,237
Callsign	*City*	*Type*	*Sports Affiliations*		
WJBK	DETROIT, MI	Network	NCAA		
ML MEDIA OPPORTUNITY PARTNERS		WILLIAMSTON, NC		3.75% Royalty	$3,123
Callsign	*City*	*Type*	*Sports Affiliations*		
WRAL	RALEIGH, NC	Network	NCAA		
JAMES CABLE PARTNERS LP		EATONTON, GA		3.75% Royalty	$2,204
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WGNX	ATLANTA, GA	Independent	NBA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
RIFKIN/TENNESSEE LTD		LAWRENCEBURG, TN		3.75% Royalty	$1,792
Callsign	*City*	*Type*	*Sports Affiliations*		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WZTV	NASHVILLE, TN	Independent	MLB, NCAA		
TRIAX CABLEVISION USA LP INC		TITUSVILLE, PA		3.75% Royalty	$1,744
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WPGH	PITTSBURGH, PA	Independent	NHL		
WPTT	PITTSBURGH, PA	Independent	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
CHILLICOTHE CABLEVISION INC		CHILLICOTHE, OH		3.75% Royalty	$1,519
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WHIO	DAYTON, OH	Network	NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
SIMMONS CABLE TV OF KY		MADISON, IN		3.75% Royalty	$1,517
Callsign	*City*	*Type*	*Sports Affiliations*		
WISH	INDIANAPOLIS, IN	Network	NCAA		
ST LANDRY CABLE TV INC		OPELOUSAS, LA		3.75% Royalty	$1,296
Callsign	*City*	*Type*	*Sports Affiliations*		
WAFB	BATON ROUGE, LA	Network	NCAA		
INTERMEDIA PARTNERS OF W. TN.		SAVANNAH, TN		3.75% Royalty	$514
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		

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Systems that Paid 3.75% Royalty to Import Both Sports and Non-Sports Signals

PARAGON CABLE TELEVISION INC		WAUWATOSA, WI		3.75% Royalty	$323,630
Callsign	*City*	*Type*	*Sports Affiliations*		
WFLD	CHICAGO, IL	Independent			
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
CABLE TV FUND 12-A		FT MYERS, FL		3.75% Royalty	$183,640
Callsign	*City*	*Type*	*Sports Affiliations*		
WFLA	TAMPA, FL	Network			
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
VIACOM CBV OF WISCONSIN INC		GREENFIELD, WI		3.75% Royalty	$177,262
Callsign	*City*	*Type*	*Sports Affiliations*		
WFLD	CHICAGO, IL	Independent			
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
SACRAMENTO CABLE TELEVISION		SACRAMENTO, CA		3.75% Royalty	$137,335
Callsign	*City*	*Type*	*Sports Affiliations*		
KBHK	SAN FRANCISCO, CA	Independent			
KTVU	OAKLAND, CA	Independent	MLB		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WSBK	BOSTON, MA	Independent	MLB, NHL		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
CROWN CABLE INC		JANESVILLE, WI		3.75% Royalty	$120,023
Callsign	*City*	*Type*	*Sports Affiliations*		
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WTMJ	MILWAUKEE, WI	Network			
WVTV	MILWAUKEE, WI	Independent	NCAA		
MICRO CABLE COMMUNICATIONS		FT PIERCE, FL		3.75% Royalty	$109,321
Callsign	*City*	*Type*	*Sports Affiliations*		
WESH	DAYTONA BEACH, FL	Network			
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
WARNER CABLE COMMUNICATIONS		FAYETTEVILLE, AR		3.75% Royalty	$85,290
Callsign	*City*	*Type*	*Sports Affiliations*		
KARK	LITTLE ROCK, AR	Network			
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
VIACOM CBV OF WISCONSIN INC		GLENDALE, WI		3.75% Royalty	$84,942
Callsign	*City*	*Type*	*Sports Affiliations*		
WFLD	CHICAGO, IL	Independent			
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA		
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA		
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA		
HERITAGE CABLEVISION INC		CLINTON, IA		3.75% Royalty	$79,370
Callsign	*City*	*Type*	*Sports Affiliations*		

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	WFLD	CHICAGO, IL	Independent		
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
VIACOM CBV OF NORTHERN CA		PARADISE, CA		3.75% Royalty	$76,962
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KBHK	SAN FRANCISCO, CA	Independent		
	KPIX	SAN FRANCISCO, CA	Network	MLB, NBA, NCAA	
	KTVU	OAKLAND, CA	Independent	MLB	
	KTXL	SACRAMENTO, CA	Independent		
CABLE TV JOINT FUND 11		MANITOWAC RAPIDS, WI		3.75% Royalty	$69,807
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WISN	MILWAUKEE, WI	Network		
	WITI	MILWAUKEE, WI	Network		
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WTMJ	MILWAUKEE, WI	Network		
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
TCI CABLEVISION OF MISSOURI		COLUMBIA, MO		3.75% Royalty	$65,506
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KSHB	KANSAS CITY, MO	Independent		
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
CONTINENTAL CABLEVISION INC		STOCKTON, CA		3.75% Royalty	$51,036
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KOFY	SAN FRANSISCO, CA	Independent		
	KTVU	OAKLAND, CA	Independent	MLB	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
CENTURY CABLE MANAGEMENT CORP		OLD LYME, CT		3.75% Royalty	$48,937
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WBZ	BOSTON, MA	Network		
	WLVI	CAMBRIDGE, MA	Independent	NBA, NCAA	
	WPIX	NEW YORK, NY	Independent	MLB	
	WSBK	BOSTON, MA	Independent	MLB, NHL	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
D D CABLE HOLDINGS, INC		ST PETER, MN		3.75% Royalty	$46,238
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KITN	MINNEAPOLIS, MN	Independent	NCAA	
	KTMA	MINNEAPOLIS-ST PA	Independent		
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
MARCUS CABLE PARTNERS LP		ANTIGO, WI		3.75% Royalty	$46,145
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGBA	GREEN BAY, WI	Independent	MLB, NBA	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA	
	WXGZ	APPLETON, WI	Independent		
VISION CABLE COMMUNICATIONS		PINELLAS CO, FL		3.75% Royalty	$44,561
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	

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WTMV	LAKELAND, FL	Independent	MLB, NCAA
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA
WWSB	SARASOTA, FL	Network	

CABLE TV FUND 11-B — GRAND ISLAND, NY — 3.75% Royalty — $42,070

Callsign	*City*	*Type*	*Sports Affiliations*
CBLT	TORONTO, ON	Independent	
CFTO	TORONTO, ON	Independent	MLB
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA

TELECOMMUNICATIONS INC — DURANGO, CO — 3.75% Royalty — $39,683

Callsign	*City*	*Type*	*Sports Affiliations*
KCNC	DENVER, CO	Network	
KUSA	DENVER, CO	Network	NCAA
KWGN	DENVER, CO	Independent	MLB, NBA
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA

TIMES WARNER ENTERTAINMENT — PARSONS, KS — 3.75% Royalty — $35,320

Callsign	*City*	*Type*	*Sports Affiliations*
KJRH	TULSA, OK	Network	NCAA
KSHB	KANSAS CITY, MO	Independent	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA

VISION CABLE COMMUNICATIONS — WILMINGTON, NC — 3.75% Royalty — $32,911

Callsign	*City*	*Type*	*Sports Affiliations*
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA
WNCT	GREENVILLE, NC	Network	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA
WTVD	DURHAM-RALEIGH-F	Network	
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA

CABLEVISION INDUSTRIES LP — ONEIDA, NY — 3.75% Royalty — $30,340

Callsign	*City*	*Type*	*Sports Affiliations*
CKWS	KINGSTON, ON	Independent	
WPIX	NEW YORK, NY	Independent	MLB
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA

PARAGON CABLE TELEVISION INC — PORT WASHINGTON, WI — 3.75% Royalty — $24,360

Callsign	*City*	*Type*	*Sports Affiliations*
WFLD	CHICAGO, IL	Independent	
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA

POST-NEWSWEEK CABLE INC — ARDMORE, OK — 3.75% Royalty — $23,687

Callsign	*City*	*Type*	*Sports Affiliations*
KFOR	OKLAHOMA CITY, OK	Network	
KTVT	FT WORTH, TX	Independent	MLB, NBA
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA

WARNER CABLE COMMUNICATIONS — OTTAWA, OH — 3.75% Royalty — $22,910

Callsign	*City*	*Type*	*Sports Affiliations*
WANE	FT WAYNE, IN	Network	NCAA
WHIO	DAYTON, OH	Network	NCAA
WKJG	FT WAYNE, IN	Network	

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	WPTA	FT WAYNE, IN	Network		
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
CONTINENTAL CABLEVISION INC		MANTECA, CA		3.75% Royalty	$20,151
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KGO	SAN FRANCISCO, CA	Network		
	KOFY	SAN FRANSISCO, CA	Independent		
	KPIX	SAN FRANCISCO, CA	Network	MLB, NBA, NCAA	
	KRON	SAN FRANCISCO, CA	Network		
	KTVU	OAKLAND, CA	Independent	MLB	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
SAMMONS COMM OF PENNSYLVANIA		EMMAUS, PA		3.75% Royalty	$17,186
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WBRE	WILKES-BARRE&SCR	Network	MLB	
	WNBC	NEW YORK, NY	Network		
	WNEP	SCRANTON, PA	Network		
C4 MEDIA CABLE SOUTHEAST LP		CHATSWORTH, GA		3.75% Royalty	$14,841
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WAGA	ATLANTA, GA	Network	NCAA	
	WATL	ATLANTA, GA	Independent		
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
	WXIA	ATLANTA, GA	Network		
CABLEVISION ASSOCIATES VI		LE MARS, IA		3.75% Royalty	$14,133
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KSFY	SIOUX FALLS, SD	Network		
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
VISION CABLE COMMUNICATIONS		ALEXANDRIA, LA		3.75% Royalty	$14,046
	Callsign	*City*	*Type*	*Sports Affiliations*	
	KLFY	LAFAYETTE, LA	Network		
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
TELECOMMUNICATIONS CABLE SYSTE		DONALDSONVILLE, LA		3.75% Royalty	$12,666
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WGNO	NEW ORLEANS, LA	Independent		
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
ROBIN MEDIA GROUP, INC		CROSSVILLE, TN		3.75% Royalty	$11,670
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA	
	WKCH	KNOXVILLE, TN	Independent		
	WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA	
MASADA CABLE PARTNERS LP		HARTSELLE, AL		3.75% Royalty	$10,451
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WBMG	BIRMINGHAM, AL	Network	NCAA	
	WVTM	BIRMINGHAM, AL	Network		
BOOTH AMERICAN COMPANY		BOONE, NC		3.75% Royalty	$10,043
	Callsign	*City*	*Type*	*Sports Affiliations*	
	WCCB	CHARLOTTE, NC	Independent	NBA, NCAA	
	WSOC	CHARLOTTE, NC	Network		

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WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA
WXII	WINSTON-SALEM, NC	Network	NCAA

WESTMARC DEVELOPMENT JOINT VTR NILES, MI — 3.75% Royalty — $9,128

Callsign	*City*	*Type*	*Sports Affiliations*
WFLD	CHICAGO, IL	Independent	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA

WESTMARC DEVELOPMENT JOINT VTR BOYNE CITY, MI — 3.75% Royalty — $8,795

Callsign	*City*	*Type*	*Sports Affiliations*
CBET	WINDSOR, ON	Independent	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA

NORTHLAND CABLE PROPERTIES-VI PHILADELPHIA, MS — 3.75% Royalty — $5,676

Callsign	*City*	*Type*	*Sports Affiliations*
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA
WJTV	JACKSON, MS	Network	
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA

CITATION CABLEVISION INC ALEXANDER CITY, AL — 3.75% Royalty — $5,483

Callsign	*City*	*Type*	*Sports Affiliations*
WBMG	BIRMINGHAM, AL	Network	NCAA
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA
WTTO	BIRMINGHAM, AL	Independent	
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA

WESTMARC DEVELOPMENT JOINT VTR BIG RAPIDS, MI — 3.75% Royalty — $2,004

Callsign	*City*	*Type*	*Sports Affiliations*
WGN	CHICAGO, IL	Independent	MLB, NBA, NCAA
WTBS	ATLANTA, GA	Independent	MLB, NBA, NCAA
WXMI	GRAND RAPIDS, MI	Independent	

WESTERLY CABLE TELEVISION INC WESTERLY, RI — 3.75% Royalty — $280

Callsign	*City*	*Type*	*Sports Affiliations*
WBZ	BOSTON, MA	Network	
WFXT	BOSTON, MA	Independent	NBA, NCAA
WLVI	CAMBRIDGE, MA	Independent	NBA, NCAA
WPIX	NEW YORK, NY	Independent	MLB
WSBK	BOSTON, MA	Independent	MLB, NHL
WWOR	NEW YORK, NY	Independent	MLB, NBA, NCAA

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Systems that Paid 3.75% Royalty to Import only Non-Sports Signals

TIMES MIRROR CATV-RHODE ISLAND		WARWICK, RI		3.75% Royalty	$43,705
Callsign	*City*	*Type*	*Sports Affiliations*		
WBZ	BOSTON, MA	Network			
PARAGON COMMUNICATIONS		NEWBURGH, NY		3.75% Royalty	$24,252
Callsign	*City*	*Type*	*Sports Affiliations*		
WNJU	NYC-NEWARK, NY	Independent			
UNITED CABLE TV MID-MICHIGAN		E LANSING, MI		3.75% Royalty	$17,592
Callsign	*City*	*Type*	*Sports Affiliations*		
WXYZ	DETROIT, MI	Network			
ADAMS-RUSSELL CABLE SERVICES		PEABODY, MA		3.75% Royalty	$11,120
Callsign	*City*	*Type*	*Sports Affiliations*		
WJAR	PROVIDENCE, RI	Network			
ADAMS-RUSSELL CABLE SERVICES		MAYNARD, MA		3.75% Royalty	$8,126
Callsign	*City*	*Type*	*Sports Affiliations*		
WJAR	PROVIDENCE, RI	Network			
C-TEC CABLE SYSTEMS MIDWEST		MENDHAM TWP, NJ		3.75% Royalty	$6,568
Callsign	*City*	*Type*	*Sports Affiliations*		
KYW	PHILADELPHIA, PA	Network			
WCAU	PHILADELPHIA, PA	Network			
MARCUS CABLE PARTNERS LP		BURLINGTON, WI		3.75% Royalty	$6,444
Callsign	*City*	*Type*	*Sports Affiliations*		
WBBM	CHICAGO, IL	Network			
WMAQ	CHICAGO, IL	Network			
CABLEVISION SYSTEMS CORP		DOVER TWP, NY		3.75% Royalty	$6,371
Callsign	*City*	*Type*	*Sports Affiliations*		
WRGB	SCHENECTADY, NY	Network			
ADAMS-RUSSELL CABLE SERVICES		LEXINGTON, MA		3.75% Royalty	$5,333
Callsign	*City*	*Type*	*Sports Affiliations*		
WJAR	PROVIDENCE, RI	Network			
ALERT CABLE TV OF S CAROLINA		GEORGETOWN, SC		3.75% Royalty	$4,643
Callsign	*City*	*Type*	*Sports Affiliations*		
WPDE	FLORENCE, SC	Network			
POST-NEWSWEEK CABLE INC		PT LAVACA, TX		3.75% Royalty	$3,920
Callsign	*City*	*Type*	*Sports Affiliations*		
KZTV	CORPUS CHRISTI, TX	Network			
TIMES WARNER ENTERTAINMENT		MAYFIELD, KY		3.75% Royalty	$3,890
Callsign	*City*	*Type*	*Sports Affiliations*		
WSMV	NASHVILLE, TN	Network			
FALCON CABLEVISION		THOUSAND OAKS, CA		3.75% Royalty	$3,507
Callsign	*City*	*Type*	*Sports Affiliations*		
KEYT	SANTA BARBARA, CA	Network			
WARNER CABLE COMMUNICATIONS		POQUOSON, VA		3.75% Royalty	$3,070
Callsign	*City*	*Type*	*Sports Affiliations*		
WRIC	RICHMOND-PETERSB	Network			

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BETTER TV INC OF BENNINGTON		BENNINGTON, VT	3.75% Royalty	$2,764
Callsign	*City*	*Type*	*Sports Affiliations*	
WCAX	BURLINGTON, VT	Network		

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Tele-Trend Communications, Inc.

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Englewood, Colorado 80111

TESTIMONY OF JERRY MAGLIO
1990 COPYRIGHT ROYALTY DISTRIBUTION PROCEEDING

A. PROFESSIONAL BACKGROUND

I have had more than 17 years experience in the cable television industry. Throughout that period, I have held several senior management positions with programming and marketing responsibilities.

Currently, I am President of a division of Tele-Trend Communications Inc. ("TTC"), which is developing a venture to permit cable operators to share in residential long distance revenues. I also am involved in consulting projects for several cable operators involving programming and marketing. In particular, I am helping to develop programming lineups and to determine which programming to feature in promoting cable services to subscribers and potential subscribers.

During the year involved in this proceeding (1990), I served as Senior Vice President for Marketing and Programming at United Artists Cable, a subsidiary of United Artists Entertainment Company. In 1990, United Artists Cable was the third largest cable multiple system operator ("MSO") in the country, with 85 affiliated cable systems in 25 states and more than 2.7 million subscribers.

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My primary responsibilities at United Artists were to provide strategic direction in marketing and programming, and to assist our affiliated cable systems to select programming that would maximize profits. In this capacity, I was responsible for acquiring programming from basic cable television networks, premium television services and pay per view programmers. In addition, I negotiated carriage agreements with the programming networks that were distributed through our cable systems. My office also was the principal liaison between United Artists and management personnel at our affiliated cable systems regarding the terms, conditions and costs associated with each programming option.

My responsibilities at United Artists required me to be familiar with the different types of programming available to the cable industry; how that programming was valued by cable operators and subscribers; the cost of different programming; and the considerations that went into selecting and retaining that programming.

I worked with United Artists from September 1988 to December 1991. Prior to that time, I spent approximately six years (1982-88) with Daniels & Associates, Inc., where I was Executive Vice President of Marketing and Programming. Daniels was then one of the twenty-five largest MSOs with approximately 450,000 subscribers. My responsibilities at Daniels were similar to my responsibilities at United Artists, which acquired Daniels in 1988.

Before joining Daniels, I was President of Rainbow Programming Services, a venture formed in 1980 to distribute pay TV programming services to cable systems. Rainbow was a partnership comprised of three large MSOs -- Cablevision Systems Development Company, Cox Cable, and Daniels. From 1976-80, I was Director of Marketing and then Vice President of Marketing for American Television & Communications Corp. ("ATC"), which, at the time, was the largest MSO in the United States. ATC is now owned by Time-Warner.

I received a BA in economics from the University of Notre Dame in 1968, and an MBA with a marketing emphasis from Columbia University in 1973. In 1980, I was elected President of the Cable Television Administration and Marketing Society ("CTAM"), and have served several terms on CTAM's Board. I also served 2 terms on the Board of the Cable Advertising Bureau ("CAB"). In 1983, I received the National Cable Television Association's Vanguard Award for Marketing.

B. PURPOSE AND SUMMARY OF TESTIMONY

I am submitting this testimony to the Copyright Royalty Tribunal on behalf of the National Basketball Association, the National Collegiate Athletic Association, Major League Baseball, and the National Hockey League ("Joint Sports Claimants"). I understand that the proceeding before the Tribunal involves the compulsory licensing royalties paid by cable systems to carry the non-network programming on superstations and other distant signals in 1990, and that the

Tribunal will be dividing the royalties among the copyright owners of that programming.

I also understand that the Tribunal, in dividing the royalties, attempts to ensure that each copyright owner group receives the same share of royalties that that group likely would have received in a free marketplace with no compulsory license. In the last proceeding before the Tribunal (involving the 1989 fund), sports programming received approximately 25 percent of the royalties, while movies and other syndicated programs received somewhat more than 60 percent.

The purpose of my testimony is to provide the Tribunal with the views of a cable industry executive who was closely involved in making decisions related to the carriage and valuation of distant signal programming in 1990 and prior years. I approach the issues before the Tribunal from the perspective of one who purchased programming services and then marketed those services to cable subscribers.

As my testimony explains, I believe that the cable industry in 1990 valued the sports programs on superstations and other distant signals more highly than is reflected in the Tribunal's 1989 awards. I also believe that the 60 percent award for movies and syndicated programs is much greater than the share that such programming would have received from the cable industry in 1990 in a free marketplace absent compulsory licensing.

C. THE VALUE OF DISTANT SIGNAL PROGRAMMING IN 1990

1. Cable Industry Review of Distant Signals

1990 was a watershed year for cable system operators. On January 1, 1990, new FCC syndex rules took effect that required cable operators to black out syndicated programs on distant signals if local broadcasters held exclusive licenses to those programs.

The potential effect of the syndex rules was to transform fully scheduled signals to partially scheduled signals with blackout periods. We were concerned that these "Swiss cheese" signals would create customer dissatisfaction. Accordingly, in response to the new syndex rules, United Artists, like other MSOs, conducted a comprehensive review of distant signal carriage on its systems to determine which distant signals should be kept and which should be dropped.

Local system personnel normally had the greatest familiarity with the values that their subscribers ascribed to various programming options. In addition, under the syndex rules, local broadcasters directed their blackout requests to our individual systems. Accordingly, as part of our review, we initiated a series of discussions with system general managers and other system personnel with programming responsibilities. This process began in 1989 and continued throughout 1990.

2. Purpose of Distant Signal Review

As a general proposition, United Artists' programming objective was to identify the blend of programming

that would yield the greatest subscriber demand and thus the greatest revenue. The advent of the syndex rules did not alter that goal. It did, however, force us to consider an additional factor -- the prospect that a substantial portion of a distant signal's programming would be blacked out. We thus were forced to take a hard look at whether the value of the remaining programming would outweigh the potential subscriber dissatisfaction over receiving a signal with programming gaps.

In this regard, it is significant that local systems could not sell advertising on distant signals. Also, distant signals virtually always were included in our cable systems' basic packages, and thus did not generate an independent revenue stream. The value of distant signal programming, therefore, was based solely on the extent to which it enhanced our ability to retain existing subscribers or to attract new subscribers.

3. Factors Taken Into Account During Review

The most popular distant signals in 1990 were the three original superstations, WTBS, WGN and WWOR. Each carried a significant lineup of sports programming that was particularly attractive to cable subscribers in the areas where these signals were carried. These three superstations were the least likely to be dropped not only because of their sports programming, but also because by the time the syndex rules went into effect, they had announced that they would be "syndex-proof." In the case of WTBS, none of the programming on that

station was licensed to any local broadcasters on an exclusive basis; thus, none of the WTBS programming was subject to blackout. WGN and WWOR broadcast syndicated programs that were subject to blackout. However, those programs were "covered over" with other programs on the satellite signal received by cable operators.

The most difficult decisions that the industry faced after syndex involved distant independents and distant network affiliates that were not syndex-proof. In the majority of cases, the paramount consideration in determining whether to retain any such signal was the presence of sports programming on that signal; a signal with sports was more likely to be retained because it offered programming that cable subscribers demanded. We also were likely to retain distant signals that originated in larger markets, the state capital or a community in a bordering state because these signals presented news programming that (like sports) was of special interest to local cable subscribers.

There are several reasons that the cable industry perceived sports programming on distant signals as the most valuable distant signal programming. Sports are live drama; they are perhaps the only live drama remaining on television today. Sports build the type of loyalty that is useful to subscriber retention -- particularly where subscribers can follow and develop an attachment to particular teams. Sports programming is new and non-repetitive and highly promotable.

By contrast, syndicated programming and movie packages were not as important a consideration in determining whether to retain the distant signals that were not syndex-proof. Such programming was subject to blackout under the syndex rules; even if a cable operator had not already received a blackout request for a particular movie or syndicated series, such a request always was a possibility in the future. Moreover, because of their nature and wide availability from a variety of sources, movies and syndicated programs from a particular distant signal typically do not generate the type of interest that causes people to become or to remain cable subscribers.

My understanding is that approximately half of the distant signals carried by cable operators in 1990 were distant networks and independents that were not syndex-proof. Based upon my experience in the industry, the fact that movies and other syndicated programs were available on so many different channels diminished their value in connection with our determination whether to retain particular distant signals after the syndex rules became effective in 1990. Also, by definition, blacked-out syndicated programming already was available to our subscribers, albeit on a different channel and, perhaps, at a different time. Thus, we could assure our subscribers that the programming they wanted still was available. The prevalence of VCRs meant that such programming could be taped and viewed at a subscriber's convenience. Where

such signals were retained after syndex, the presence of other programming (principally sports and in some cases news) was the deciding factor.

4. Signals Requiring Payment of the 3.75 Rate

Since 1983 cable operators have been subject to the 3.75 fee. This fee requires a cable system to pay 3.75 percent of its basic revenues to carry each distant independent signal (and just under 1 percent for each distant affiliate) that could not have been carried under former FCC rules. With the significant rise in cable revenues after 1983, the cost of carrying 3.75 signals grew substantially by 1990. Indeed, in 1990, cable operators paid approximately 40 cents per subscriber per month for each 3.75 signal and sometimes even more. That was more than virtually any other cable network. It also was significantly more than cable operators paid under the compulsory license for non-3.75 signals, which typically cost approximately 10 cents per subscriber per month.

Because of the costs involved, the cable industry took a particularly close look at the value of the programming on 3.75 signals. Based upon my experience, most cable operators did not find such value in any distant signal that did not offer a sports package; where the 3.75 fee was paid, it was paid principally to ensure subscriber access to the sports programming on superstations and other distant signals. Movies

and syndicated programming did not provide the economic value that justified paying the 3.75 fee.

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

Jerry Maglio
August 16, 1993

Testimony of Bryan Burns
Before the Copyright Royalty Tribunal
1990 Cable Royalty Distribution Proceeding
August 1993

1. Qualifications

During the period 1983-1990 I served as Senior Vice President of Major League Baseball. My principal responsibility involved the administration of Baseball's domestic and international television operations. In that capacity, I designed and helped negotiate Baseball's television rights agreements with the CBS Television Network and ESPN, Inc. Those agreements were executed in 1989 and covered the 1990-1993 seasons.

The architecture of the CBS and ESPN arrangements were a collaborative effort over a substantial period of time by dozens of individuals from the Baseball Commissioner's Office, the National and American League offices, and from the clubs. My role was to coordinate the input from all levels, design a cohesive plan, and present that plan for approval by the Commissioner of Baseball, Peter Ueberroth, and by the Broadcasting Committee, which consisted of the owners of eight clubs.

While at Baseball, I also advised the 26 member clubs with respect to a broad range of issues concerning the licensing of their local rights to broadcast stations and regional cable networks. My staff and I were actively involved in the consideration of nearly all local and regional radio, broadcast television and cable television

negotiations within the industry. We thus had a strong working knowledge of all activity in the marketplace and the topics on which the negotiations turned. It was also my role to provide the "practical considerations" side of public policy issues, such as dealing with superstations.

Prior to joining Baseball, I spent eight years as Director of Marketing and Broadcasting for the Kansas City Royals. My responsibilities with the Royals involved the negotiation of broadcast and cable rights agreements.

After leaving Baseball, I founded The Paragon Alliance. Among the company's clients are several Major League Baseball, NBA and NHL franchises; a leading television syndication firm, a DBS applicant; an international telecommunications company; professional sports leagues; national cable programmers; and a major Japanese advertising agency. With The Paragon Alliance, I commonly am involved with the considerable detail of local rights negotiations. My involvement changes from client-to-client. Some franchises have asked me to take an active role in negotiations. Others ask that I assist them in designing the rights offering down to the smallest detail. In any case, I always am actively involved in the theoretical and pricing decisions in these local rights negotiations and understand the forces that govern price and value.

2. Summary of Testimony

I am presenting this testimony on behalf of the Joint Sports Claimants (Major League Baseball, the National Basketball

Association, the National Hockey League and the National Collegiate Athletic Association) in support of their request for an increased share of the cable royalty fund.

I understand that the Tribunal, in allocating cable royalties, considers: (1) the benefit that cable operators receive from retransmitting the non-network programming on superstations and other distant signals; and (2) the harm that such retransmissions cause to the copyright owners of that programming. As I explain in this testimony, Baseball's experience with its 1990-1993 national telecasting package demonstrates the substantial benefit that cable operators receive from baseball telecasts on the superstations; it also provides evidence of the economic injury that those telecasts have caused and will cause Baseball.

3. Baseball's 1990-1993 National Telecasting Arrangements

Baseball's national telecasting arrangements changed dramatically with the commencement of the 1990 season. Throughout the 1980's two national broadcast networks, ABC and NBC, televised a total of approximately 40 games per season. In 1989, however, Baseball awarded CBS alone all the 1990-1993 national broadcasting rights, and the number of regular season telecasts was reduced from 40 to 12 (which was later increased to 16). CBS also received the rights to broadcast the 1990-1993 All Star Games, League Championship Series and World Series.

Baseball also licensed ESPN the right to televise, to more than 50 million cable subscribers throughout the United States, up to 175

games during each of the 1990-1993 seasons. The only other national cable network previously licensed by Baseball was the USA Network, which televised approximately 40 games during each of the 1980-1983 seasons. In the initial year of the agreement, the USA Network was received by approximately six million cable homes. During the last year of the agreement, the network was received by approximately 18 million cable homes.

4. The Objectives of Baseball's 1990-1993 National Telecasting Arrangements

The CBS and ESPN national telecasting arrangements were the product of countless hours of strategic planning, research and discussion within Baseball. Those arrangements were intended to deal, in significant part, with what had become a substantial problem for Major League Baseball - the development and proliferation of superstations, such as WTBS and WGN, which provided cable subscribers across the U.S. with hundreds of baseball games via the compulsory license.

The compulsory license has created national institutions out of the Atlanta Braves (promoted as "America's Team") and the Chicago Cubs (which also has an intensely loyal nationwide following). WTBS and WGN each televise more baseball games than any other broadcast station in the country. In 1990 WTBS, which reached over 40 million distant cable households, broadcast 110 Braves games; WGN, which reached over 20 million distant cable households, broadcast 140 Cubs games as well as 40 White

Sox games (which were new to WGN in 1990). A third superstation, WWOR from New York, broadcast 75 Mets games and reached over 15 million distant cable households. No other Baseball clubs have received such widespread and continuous exposure to a national audience. The other satellite-delivered superstations (WPIX from New York; KTVT from Dallas; and KTLA from Los Angeles) also served as the flagship stations of Baseball clubs in 1990.

Baseball has long been concerned that growing nationwide exposure of a few select teams worked to the serious disadvantage of a number of other league members -- particularly the financially weaker clubs. The ability of these clubs to license exclusive telecasting rights has been significantly impaired by the superstations. (While the FCC addressed the exclusivity problem for syndicated programming by adoption of the so-called "syndex" rules, it rejected a request by Baseball, other sports leagues and various broadcasters to protect the exclusive rights that sports clubs seek to license to broadcasters.)

Moreover, the clubs have not received adequate compensation from compulsory licensing royalties. For example, the licensing fee that Baseball ultimately received from ESPN (which was negotiated in the face of competition from superstations) was approximately one cent per subscriber per game. That fee would have resulted in over $90 million for just the baseball games on WTBS, WGN and WWOR in 1990 -- or more than twice the award that all the Joint Sports Claimants received for all

their programming in the 1989 cable royalty distribution proceeding.

The placing of 175 games on national basic cable was intended, in large part, to respond to the proliferation of superstation telecasts. The package was designed to create an environment -- over an eight to ten year period -- that would lessen public dependence on superstation telecasts; that would provide relatively uniform national exposure to all Baseball clubs; and that would provide Baseball with some semblance of marketplace compensation from national cable carriage. The ultimate objective was to have ESPN provide a viable alternative to the superstations (and to reduce cable dependence upon them) by giving ESPN access to what Baseball believed were going to be the most attractive games of all Baseball clubs (subject to certain blackout restrictions designed to protect the clubs' exclusivity rights).

From a business standpoint, a key component in Baseball's strategy was local advertising sales by cable systems. Under the compulsory license, cable systems may not sell commercials within the distant signals they retransmit. However, cable operators are permitted to sell commercials within the ESPN baseball telecasts. Baseball believed that the availability of such commercial spots would enhance the economic attractiveness of the ESPN package to cable operators.

In short, Baseball's cable strategy was to go "head to head" with superstations during the 1990s. The ultimate goal was to generate economic benefits for cable operators and viewing

diversity to consumers, while receiving marketplace-negotiated licensing fees.

5. The Marketplace Experience With Baseball's National Telecasting Arrangements During The 1990-1993 Seasons

When Baseball licensed its rights to ESPN in 1989, it knew that the level of public acceptance for this broad, far reaching package of 175 telecasts would depend in large measure on the extent to which superstation baseball telecasts had become entrenched in the cable marketplace. Baseball's experience under the ESPN arrangement demonstrates that superstations were in 1990 (and remain today) the carriers of choice for nationally televised baseball.

The addition of baseball had benefited ESPN, which reportedly increased its ratings when compared to the non-baseball programming presented a year earlier. However, as a result of the large number of superstation baseball telecasts, ESPN could not utilize baseball as a basis for increasing the rates charged to cable operators.

The sale of national advertising by superstations also limited the ability of ESPN (and CBS) to derive the baseball advertising income that it had projected. The amount of national advertising inventory available on superstations, ESPN and CBS was simply greater than demand; moreover, superstation WTBS reportedly outperformed ESPN in terms of baseball ratings. The availability and value of superstation Baseball telecasts played a dominant role in the financial problems associated with the ESPN carriage of

Baseball during 1990-93. The apparent effect of the superstations has been to change significantly the nature of ESPN's interest in a future commitment to Baseball.

Baseball and ESPN currently are negotiating the terms of a rights agreement covering future seasons. It appears that ESPN will reduce significantly the number of its regular season telecasts (while the number of baseball games on the superstations likely will remain the same). There also will be a reduction in the rights fees payable to Baseball.

In short, the marketplace has shown that even a baseball package as attractive as that presented by ESPN is unable to surmount the baseball offerings of superstations. The existence of a substantial number of baseball telecasts on superstations impedes Baseball from offering the public a greater diversity of games; it also reduces the revenues that Baseball is able to derive from licensing its product in the marketplace.

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

Bryan L. Burns
August 11, 1993

Office of the Commissioner
MAJOR LEAGUE BASEBALL

TESTIMONY OF DAVID D. ALWORTH

I am the Executive Director of Broadcasting in the Office of the Commissioner of Baseball. I am submitting this testimony in support of the claim of the Joint Sports Claimants for an increased share of the 1990 cable royalty fund. The purpose of my testimony is to provide the Tribunal with information that will help to quantify the impact that superstation telecasts have had on Major League Baesball.

Qualifications

Since 1983, when I joined Baseball, I have been involved in the formulation, negotiation and administration of Baseball's television rights agreements with the national broadcast and cable networks. I also have advised the 28 member clubs of Baseball on licensing their television rights to broadcast stations and regional cable networks. Before coming to Baseball, I served as a Production Associate with NBC Sports (1980-82); Director of Network Operations with Home Box Office (1979-80); and Production Manager with Suburban Cablevision of New Jersey (1976-78).

Baseball National TV Rights Agreements: 1989 vs. 1993

In 1989 Baseball entered into an agreement with ESPN, Inc., a satellite-delivered network which provides 24 hours per day of sports programming to virtually every cable system in the country. Pursuant to that agreement ESPN purchased the rights to televise up to 175 baseball games during each of the 1990-93 seasons. Baseball also licensed the CBS Television Network the right to televise 12 regular season baseball games, as well as the All Star Games, League Championship Series and World Series, during each of the 1990-93 seasons. (The number of regular season telecasts over CBS was later changed to 16).

I participated in the internal Baseball planning and in the discussions with ESPN and CBS that lead to the 1989 agreements. My responsibilities also have required me to work with the networks in implementing those agreements. In doing so, I have had substantial, direct contact with ESPN and CBS concerning all facets of their baseball telecasting operations during the period 1990 to the present time -- including the efforts

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of their baseball telecasting operations during the period 1990 to the present time -- including the efforts of the networks to sell commercial advertising in, and thus derive revenue from, their baseball telecasts.

Baseball's contract with CBS expires at the end of the 1993 season. I was involved in the negotiations with the national broadcast networks concerning the televising of baseball games during the 1994-99 seasons. Baseball recently approved an arrangement under which ABC and NBC will televise annually all regular season games played on a total of 12 dates, as well as the All Star Game and post-season play. Unlike the prior arrangement with CBS, the new arrangement does not guarantee Baseball any rights fee; rather, the revenues derived from the telecasting of baseball over NBC and ABC will be shared by Baseball and the networks.

In 1992 ESPN advised that it would not exercise an option to extend the 1989 agreement for the 1994 and 1995 seasons. I have been directly involved in the negotiations between Baseball and ESPN concerning national cable rights for the 1994-99 seasons. Baseball has not yet finalized a new agreement with ESPN. Any such agreement with ESPN, however, is likely to differ from the existing agreement in two important respects -- both the number of baseball telecasts over ESPN and the total rights fees to be paid Baseball will be significantly reduced. The number of telecasts will be in the range of 75 -- down from the 175 authorized under the prior agreement. While the per game rights fees will be essentially unchanged (approximately $550,000), I expect that Baseball will receive more than $50 million less each year in total rights fees from ESPN because of the fewer number of games to be televised.

Impact Of Superstations

ESPN's decision to reduce its baseball telecasts is directly attributable to the substantial number of baseball games broadcast by the superstations, the nationwide distribution of their signals via satellite and the attractiveness of those superstation broadcasts. WGN televises approximately 140 Cubs and 45 White Sox games each season. WTBS televises between 110 and 120 Braves games. And WWOR televises approximately 75 Mets games. Both before and during the recent negotiations over a national cable contract, ESPN emphasized that these superstation baseball telecasts make it uneconomical for ESPN to televise more than approximately 75 Baseball games each season.

ESPN's willingness to purchase television rights from Baseball is related to the amount of revenues that ESPN can obtain from the sale of advertising in and adjacent to its baseball telecasts. ESPN competes for the limited amount of advertising dollars with the superstations, which have come to be viewed by national advertisers as viable alternatives to national cable networks such as ESPN. The availability of numerous baseball telecasts on superstations has caused national advertisers to be less interested in purchasing advertising time from ESPN.

The popularity of superstation teams has increased the problems faced by ESPN in seeking advertising revenue. These teams have developed nationwide followings among viewers loyal to superstation telecasts; moreover, unlike ESPN, the superstations are not required to protect the exclusivity that league members have sought to accord their local flagship stations and regional cable networks. According to ESPN, the Braves' telecasts on WTBS have commanded higher average ratings than have ESPN's baseball telecasts.

Consequently, ESPN has been unable to obtain the advertising revenues that it originally projected when it purchased national cable distribution rights from Baseball. ESPN has reportedly lost millions of dollars on its baseball telecasts. This, in turn, has resulted in ESPN's lack of interest in purchasing the national cable rights to more than 75 baseball games.

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

David D. Alworth
August 12, 1993

Before the
COPYRIGHT ROYALTY TRIBUNAL
Washington, D.C. 20009

In the Matter of 1990 Cable Royalty Distribution Proceeding	)	CRT Docket No. 92-1-90CD

RECORD DESIGNATIONS OF THE
JOINT SPORTS CLAIMANTS

Pursuant to Section 301.44(c) of the Tribunal's rules, 37 C.F.R. § 301.44(c), the Joint Sports Claimants hereby incorporate by reference and designate the following portions of the records of prior cable royalty distribution proceedings for inclusion in the record of the 1990 Cable Royalty Distribution Proceeding:

1979 Cable Royalty Distribution Proceeding

Sports Exhibits 1, 3-14, 56-61

Testimony of Bowie K. Kuhn (Tr. 3567-3824)

Testimony of Charles Dolan (Tr. 1195-1322)

Testimony of Chet Simmons (Tr. 1059-1186)

Testimony of Dr. Thomas E. Neman (Tr. 176-363)

1980 Cable Royalty Distribution Proceeding

Sports Exhibits 1-9, 23, 27-31

Testimony of Bowie K. Kuhn (Tr. 560-700)

Testimony of James Lahey (Tr. 785-924)

Testimony of Dr. Peter Lemieux (Tr. 4641-4760)

Testimony of Jack Williams (Tr. 706-779)

Testimony of Jack Jacobson (Tr. 4834-4976)

Testimony of Dr. Thomas E. Neman (Tr. 931-1059)

1983 Cable Royalty Distribution Proceeding

Sports Exhibits 1-4, 5X, 6X

Testimony of David J. Stern (Tr. 703-751)

Testimony of Paul I. Bortz (Tr. 821-987)

Testimony of Dr. Peter H. Lemieux (Tr. 1301-1409)

Testimony of Richard Loftus (Tr. 994-1087)

Program Suppliers Exhibits 14-16, 18-20

Testimony of Allen R. Cooper (Tr. 589-687, 752-813, 1097-1149, 1156-1294, 1413-1440)

Statement of Stanley M. Besen

NAB Exhibits 9, 10

Testimony of Robert LaRose (Tr. 2232-2431)

1989 Cable Royalty Distribution Proceeding

Sports Exhibits 1-3, 5A, 5B, 5H-5L, 7-8, 13, 18X, 19X, 37A, 37B, 39R, 50RX

Testimony of Francis Vincent (Tr. 1682-1739)
Statement of Francis Vincent

Testimony of David Stern (Tr. 1746-1795)

Testimony of Paul Bortz (Tr. 814-1009, 1015-1208)

Testimony of Robert J. Wussler (Tr. 1796-1862)
Statement of Robert J. Wussler

Testimony of Roger Werner (Tr. 1476-1570)
Statement of Roger Werner

Testimony of Dr. Robert Crandall (Tr. 1209-1253, 1263-1387)
Statement of Dr. Robert Crandall

Testimony of Leonard N. Reid (Tr. 1388-1469, 1573-1675)
Statement of Leonard N. Reid

Testimony of Samuel H. Book (Tr. 1869-1991)
Statement of Samuel H. Book

Testimony of Dr. Peter Lemieux (Tr. 1998-2066, 4526-4658)
Statement of Dr. Peter Lemieux
Rebuttal Statement of Dr. Peter Lemieux

Testimony of Dorothy Stein (Tr. 4328-4420)
Statement of Dorothy Stein

Testimony of William Rubens (Tr. 4421-4519)
Statement of William Rubens
Affidavit of William Rubens

Testimony of Jack Valenti (Tr. 18-33)
Statement of Jack Valenti

Testimony of Alan R. Cooper (Tr. 307-369, 376-523, 534-690, 697-790, 5465-5544)
Statement of Alan R. Cooper
Rebuttal Statement of Alan R. Cooper

1989 Cable Royalty Distribution Proceeding (Continued)

Testimony of Marsha E. Kessler (Tr. 84-207, 239-307, 5176-5250)

Testimony of Nathan Katzman (Tr. 4011-4124)
Statement of Nathan Katzman

Testimony of John P. Robinson (Tr. 2658-2747)
Statement of John P. Robinson

Testimony of David W. Clark (Tr. 2257-2351)

Testimony of Paul Lindstrom (Tr. 5550-5787)
Statement of Paul Lindstrom

Testimony of John Fuller (Tr. 3048-3254, 3262-3357)

Testimony of Philip Viener (Tr. 2797-2836)

Testimony of Richard Ducey (Tr. 2365-2428, 2435-2593, 4274-4320)

Testimony of Stanley M. Besen (Tr. 4665-4910)
Statement of Stanley M. Besen

Testimony of Robert Davies (Tr. 2754-2796)

Testimony of Robert Petersen (Tr. 4131-4214)
Statement of Robert Petersen

Testimony of Dr. Glynn K. Woolridge (Tr. 2119-2154)

Testimony of Dr. Alan Rubin (Tr. 5257-5457)
Statement of Dr. Alan Rubin

Testimony of Dr. Martin R. Frankel (Tr. 5070-5170)

Testimony of John R. Woodbury (Tr. 4917-5063)
Statement of John R. Woodbury

NAB Exhibits 51R, 52R-X

Program Suppliers Exhibits 1, MEK - 8, 24X

Respectfully submitted,

JOINT SPORTS CLAIMANTS

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Counsel for National Collegiate
Athletic Association

August 16, 1993

Office of the Commissioner
MAJOR LEAGUE BASEBALL

Testimony of Francis T. Vincent, Jr.
Commissioner of Baseball

I am Francis T. Vincent, Jr., the Commissioner of Baseball. I am submitting this testimony in support of the claim for 1989 cable television royalties filed by Major League Baseball, the National Basketball Association, the National Hockey League and the National Collegiate Athletic Association (the Joint Sports Claimants).

I.

I joined Major League Baseball in April 1989 as Deputy Commissioner, and was elected Commissioner the following September. I previously had served some eight years as the chief executive officer of Columbia Pictures Industries, Inc. (Columbia). Columbia is a major producer and distributor of motion pictures and television programs with a library of over 2,700 film titles and more than 23,000 episodes; it is a member of the Motion Picture Association of America (MPAA) and ranks among the top ten syndicators of television programming in the country. After Columbia was acquired by The Coca-Cola Company (Coca-Cola) in 1982, I assumed responsibility for all of Coca-Cola's entertainment activities. A more detailed description of my background and experience is contained in the attached press release.

II.

In past distribution proceedings, the Tribunal has sought to accord each claimant the same share of cable royalties that that claimant would receive in a free marketplace unencumbered by compulsory licensing. I strongly support the Tribunal's marketplace approach, which I believe is fair and equitable to all claimants. However, I am here today because I believe -- just as strongly -- that past royalty awards have not accurately reflected that marketplace.

350 Park Avenue, New York, N.Y. 10022 (212) 339-7800

In prior proceedings, the copyright owners of movies and syndicated shows have been allocated the vast bulk of the cable royalties (approximately 70 percent). Their awards have been more than four times greater than the awards made to Baseball and the other members of the Joint Sports Claimants. Based upon my experience in both television entertainment and sports industries, I believe that the awards made to the MPAA interests far exceed the relative marketplace value of their programming. At the same time, the sports claimants have received a share that is significantly less than the relative value of their programming.

III.

I appreciate the difficult nature of the task that confronts the Tribunal in attempting to replicate a marketplace that does not exist. I do not ask that the Tribunal increase the sports award simply on the basis of my opinion as to what would happen in such a marketplace.

We are presenting the Tribunal a survey of cable operators themselves -- those who, in a free marketplace, would be the purchasers of distant signal programming. That survey confirms my view that sports programming has been undercompensated in prior distribution proceedings. The survey demonstrates that the cable industry would have allocated some 34 percent of its distant signal programming expenditures in 1989 to Baseball and other live sports programming -- or approximately double the 15 to 17 percent that the sports claimants have received in the past. Likewise, the survey shows that the copyright owners of movies and syndicated shows are entitled to approximately 48 percent, or substantially less than the 70 percent they have received in the past.

We also are presenting the Tribunal with the testimony of several experts from a variety of disciplines -- economists, market researchers, statisticians and those with considerable experience in the cable industry itself. Their testimony makes clear that our survey is a solid, professionally-conducted piece of research, and that its results are consistent with marketplace realities. The testimony addresses past Tribunal concerns with survey evidence, and provides the Tribunal with a sound basis for relying upon our 1989 survey. It also underscores the shortcomings of the MPAA "viewing" data on which the Tribunal has placed principal reliance in earlier proceedings.

IV.

In evaluating our evidence and that of the other claimants, the Tribunal should not lose sight of the significant differences between live sports programming and syndicated programming. These differences are important because they explain why the cable industry places a very high value on live sports programming.

Unlike live sports, movies and other syndicated programming are not unique or fresh; they are shown over and over. By the time movies and syndicated shows are broadcast on a distant signal, they have typically been viewed by the American public many times previously. There is also a substantial amount of movies and other syndicated programming available in the marketplace, much at a relatively inexpensive cost. Syndication provides readily available filler programming. Sports, however, offers cable something distinguishing:

> "[S]ports is cable's saving grace. It's the one area on which cable delivers original programming that is both live and compelling to a segment of viewers. Without sports, cable's just a lot of old shows and old movies at $25 a month."

Washington Post, July 14, 1989, at B2.

> "The biggest selling point a cable operator looks for in a superstation is sports. After all, any independent station can carry syndicated programming and reruns. What makes WGN unique are the Bulls and the Cubs and the White Sox and De Paul. Not "The Andy Griffith Show."

Chicago Tribune, December 21, 1990, at 7.

The differences between live sports programming and syndicated programming are particularly pronounced when one focuses on Baseball telecasts. I have no doubt that people enjoy watching reruns of "The Andy Griffith Show." But there is a certain intensity of emotion and interest that necessarily distances Baseball telecasts from "Andy Griffith" reruns.

Baseball is an integral element of our cultural heritage; it is the American pastime. People care about, and are genuinely devoted to, the sport. As the historian and educator Jacques Barzun wrote, "Whoever wants to know the

heart and mind of America had better learn Baseball." The link between Baseball and American culture has been the subject of considerable commentary. For example, my predecessor as Commissioner of Baseball, Bart Giamatti, while still president of Yale University, wrote:

> "So much does our game tell us, about what we wanted to be, about what we are. Our character and our culture are reflected in this grand game. It would be foolish to think that all of our national experience is reflected in any single institution, even our loftiest, but it would not be wrong to claim for baseball a capacity to cherish individuality and inspire cohesion in a way which is a hallmark of our loftiest free institutions."

Address to the Massachusetts Historical Society, October 17, 1985. President Bush has likewise noted:

> "[T]he primacy of the individual is the foundation on which this country was built and baseball captures that. The tradition is endless, the game timeless. More than ever, baseball remains what James Michener called 'the chosen sport of the American people.'"

Quoted in The New York Times, July 4, 1989, at 38. Some of the same thoughts are reflected in a brief video that we have produced, entitled "What is Baseball." (Sports Exhibit 6).

The important point, for purposes of these proceedings, is not whether one agrees or disagrees with such views. Rather, it is that these views are reflective of the strong emotional bond between Baseball and a large segment of the American public. From the cable operator's perspective, that bond produces an interest on the part of individuals to subscribe to cable and to continue paying the cost of cable's monthly fee.

V.

I believe that the value of Baseball telecasts to the cable industry -- as well as to broadcasters and the American public generally -- will remain strong as long as the game itself continues to be a vital part of American society. In 1989 (the year of direct concern in this proceeding), the game of Baseball was stronger than at any time in the past. As The New York Times observed in 1989:

> "Baseball, hot dogs and apple pie have been American favorites for generations. But at a time when nostalgia is in . . . baseball has survived, thriving as never before.
>
> . . . Although its popularity has never suffered, baseball seems to be going where no sport has gone before."

The New York Times, July 1, 1989, at 38. The same observation is made in a number of different articles included in Sports Exhibit 5.

Baseball's surge in popularity in the late 1980's was fueled by a national appetite for tradition and nostalgia during the 1980's. In this respect, the fortunes of Baseball - as well as other major sports -- can be contrasted with those of the television syndication business. The late 1980's were a particularly difficult time for syndicators who confronted largely a buyer's market (very much unlike the seller's market that existed in the late 1970's and early 1980's).

I do not mean to suggest that all was well for Baseball by the year 1989. Then, as now, Baseball confronted significant problems -- among which is the cable compulsory license itself. Baseball has been and remains a strong opponent of a compulsory licensing system which deprives us of control over the distribution of our product. Although some may benefit from that system, Baseball as a whole will not do so. The fact that, under compulsory licensing, we also receive significantly less compensation than would be produced in the marketplace only exacerbates our concerns.

CONCLUSION

I appreciate the opportunity to appear before the Tribunal concerning a matter of great importance to those of us in Baseball. While I respectfully disagree with certain of the decisions made by the Tribunal in past proceedings, I recognize and am sensitive to the difficulties of dividing the royalty fund among a number of competing claimants. Our objective in this proceeding is to provide the Tribunal with the record necessary to alter past awards. We urge the Tribunal to bring the sports and MPAA royalty awards in line with what a free marketplace would produce, and thus to increase significantly the sports award.

MAJOR LEAGUE BASEBALL • OFFICE OF THE COMMISSIONER

NEWS RELEASE

350 PARK AVENUE, NEW YORK, NEW YORK 10022 • (212) 339-7860

Francis T. Vincent, Jr.
Eighth Commissioner of Baseball

Francis T. Vincent, Jr. was elected to a 4-1/2-year term as Baseball's eighth Commissioner by a vote of the 26 Major League owners in Milwaukee, Wisconsin on September 13, 1989.

Mr. Vincent, the Deputy Commissioner under A. Bartlett Giamatti, will complete Mr. Giamatti's five-year term that began on April 1, 1989. Mr. Giamatti died in office on September 1, 1989.

Mr. Vincent served as Executive Vice President of The Coca-Cola Company until July 1988. He joined Columbia Pictures Industries, Inc. in July, 1978 as President and Chief Executive Officer. In March 1982, following the acquisition of Columbia by The Coca-Cola Company, he was appointed Chairman and CEO of Columbia Pictures Industries, Inc. and was elected Senior Vice President of The Coca-Cola Company and President and CEO of its Entertainment Business Sector. In April 1986, he was promoted to Executive Vice President of The Coca-Cola Company, responsible for all its entertainment activities.

Prior to joining Columbia, Mr. Vincent was Associate Director of the Division of Corporate Finance of the U.S. Securities and Exchange Commission. He was a partner in the Washington, DC law firm of Caplin & Drysdale from 1968 to 1978, where he specialized in corporate banking and securities matters. Before joining Caplin & Drysdale, he was an associate in the New York law firm of Whitman & Ransom.

Mr. Vincent received his law degree from Yale Law School in 1963 and is a member of the bar in New York, Connecticut, and the District of Columbia.

After attending The Hotchkiss School in Lakeville, Connecticut, he graduated cum laude in 1960 from Williams College, where he was a member of Phi Beta Kappa. He served as a trustee of Williams for 18 years and is currently a trustee of Carleton College.

Mr. Vincent is also a member of the Board of Directors of Culbro Corporation (NY).

Born on May 29, 1938 in Waterbury, Connecticut, Mr. Vincent resides in Greenwich, Connecticut with his wife, the former Valerie McMahon. They have been married since 1965 and have three children: Anne, and twin sons, William and Edward.

NATIONAL BASKETBALL ASSOCIATION
OLYMPIC TOWER • 645 FIFTH AVENUE • NEW YORK, N.Y. 10022 • 212-826-7000

DAVID J. STERN
COMMISSIONER

TESTIMONY OF DAVID J. STERN
COMMISSIONER OF THE NATIONAL BASKETBALL ASSOCIATION

I am presenting this testimony before the Copyright Royalty Tribunal in support of the claim for 1989 cable television compulsory licensing royalties filed by the Joint Sports Claimants ("JSC") -- the National Basketball Association, Major League Baseball, the National Hockey League and the National Collegiate Athletic Association.

Qualifications

I have been associated with the NBA for a period of more than 24 years. Prior to becoming Commissioner in 1984, I was General Counsel (1978-81) and then Executive Vice President, Business and Legal Affairs (1981-84) for the NBA. I served as outside counsel to the NBA during the years 1967-78, while a member of the law firm of Proskauer Rose Goetz & Mendelsohn in New York City.

Throughout my association with the NBA, I have had intimate involvement with all matters pertaining to the NBA's broadcast and cable television interests. Among other things, I have been responsible for negotiating all seven of the NBA's national cable television contracts, as well as the four national broadcast television contracts that the NBA has entered into since 1978. In addition, I have had responsibility for developing NBA television policy and formulating the NBA's positions on broadcast and cable television issues before Congress, the Federal Communications Commission and the Copyright Royalty Tribunal ("CRT").

Summary of Testimony

It has been more than a decade since the CRT conducted its first cable royalty distribution proceeding, which involved allocation of the 1978 fund. Since that time, two important developments have occurred in the television marketplace that underscore how sports programming has been increasingly undercompensated -- relative to other forms of distant signal programming -- by compulsory license royalty distributions.

First, the value of major sports telecasting rights generally -- and NBA rights in particular -- has increased dramatically. The increase in the value of NBA rights corresponds to the substantial rise in popularity of the NBA as a television product, and is reflected in the escalating rights payments that we have received as a result of our marketplace negotiations with cable and broadcast interests. In

fact, in 1989 (the year involved in this proceeding), the NBA entered into a new national cable network contract that calls for annual rights payments more than 90 times greater than those paid to the NBA when the CRT distributed the first cable fund in 1978.

Second, the relative value of distant signal sports programming is greater than the value of movies and syndicated shows. Indeed, I believe that, in 1989, cable operators, advertisers and cable subscribers valued sports more highly than any other type of distant signal programming, including movies, because of sports programming's "first run" appeal and loyal national following.

The Increased Value of NBA Telecast Rights

In 1979, I negotiated the NBA's first national cable television contract with the USA Network. Pursuant to that contract, a total of 150 NBA games were telecast to cable subscribers nationwide during the 1979-80, 1980-81 and 1981-82 seasons for a total rights fee of $1,500,000 -- or $10,000 per game. By contrast, the NBA's most recent national cable television contract, which I negotiated in 1989, authorizes Turner Network Television ("TNT") to televise up to 320 games during the four seasons commencing with the 1990-91 season for a total rights fee of $275,000,000 -- or nearly $900,000 per game.

The escalation in the value of NBA's national cable rights since negotiation of our original contract in 1979 is reflected in the following table:

NBA National Cable Network
Rights Payments

Season	Network	Maximum # of Games	Rights Payments
1979-80	USA	50	$ 400,000
1980-81	USA	50	500,000
1981-82	USA	50	600,000
1982-83	USA/ESPN	100	5,500,000
1983-84	USA/ESPN	100	5,500,000
1984-85	WTBS	76	9,000,000
1985-86	WTBS	75	11,000,000
1986-87	WTBS	79	12,000,000
1987-88	WTBS	81	13,000,000
1988-89	WTBS	81	23,000,000
1989-90	TNT	81	27,000,000
1990-91	TNT	80	57,000,000
1991-92	TNT	80	66,000,000
1992-93	TNT	80	74,000,000
1993-94	TNT	80	78,000,000

The significant increase in the value of our national cable rights during the past decade parallels our success in licensing NBA broadcast television rights. For example, the national broadcast contract that we negotiated with CBS in 1978 provided for a rights fee of approximately $74 million for a period of 4 years. By contrast, our national contract with NBC, negotiated in 1989, calls for rights payments of $601 million for the 1990-91 to 1993-94 seasons. Likewise, local broadcast revenues (the revenues that clubs receive as a result of their local station broadcasts) have risen from approximately $7.3 million for the 1978-79 season to approximately $43.5 million for the 1989-90 season.

Our success in licensing broadcast and cable rights during the past decade are in large part attributable to the growing popularity of NBA basketball as a television product. I have included in Sports Exhibit 5 a number of the press accounts documenting the popularity of the NBA as a television product and how the NBA, by 1989, had reached an unprecedented level of fan interest and support in the United States as well as internationally.

The Increased Relative Value of Sports Programming to Distant Signals

In my experience dealing and negotiating with television and advertising executives over the past ten years, I have observed not only a dramatic rise in the popularity of sports programming -- particularly NBA basketball -- but also the relative significance of sports programming to distant signals compared with other types of programming. In fact, I believe that, in 1989, sports programming was the most highly valued programming on distant signal stations from the perspective of cable operators, advertisers and subscribers.

Cable operators value sports programming highly because it attracts intensely loyal followers who are willing to become and remain cable subscribers. Similarly, advertisers find sports programming valuable because, more than other forms of programming, it effectively reaches the highly sought-after male 18-49 year-old audience demographic. And sports programming is attractive to cable subscribers because, unlike distant signal movies and syndicated shows, it is "first run" and unavailable from any other source. Indeed, when a sports event is telecast on a distant signal, it is making its national "debut"; by contrast, by the time the rights to a movie are sold to a distant signal, the movie has already enjoyed a long and profitable run in theaters and home video stores, and on pay-per-view, premium cable and network television.

Conclusion

In the 1978-83 cable royalty distribution proceedings, the Tribunal allocated live sports programming less than one-quarter of the allocation made for movies and syndicated programming. It is my view that these allocations do not accord with the high value that the cable industry placed upon live sports programming in the years 1978-83. I believe that the Tribunal's past allocations for sports vis-a-vis movies and syndicated shows are even less reflective of the relative value placed upon live sports programming in 1989, given the rise in value of that programming during the past decade.

The Joint Sports Claimants have commissioned a survey by Bortz & Co. of cable operators. That survey shows that cable operators in 1989 valued live sports programming on distant signals more highly than any other program category, according it some 34 percent of their distant signal program budgets. I urge that you increase the 1989 sports award over past levels so that it better accords with the results of the Bortz survey, which are consistent with my experience in negotiating television contracts.

Sports Illustrated
June 3, 1991, p. 74

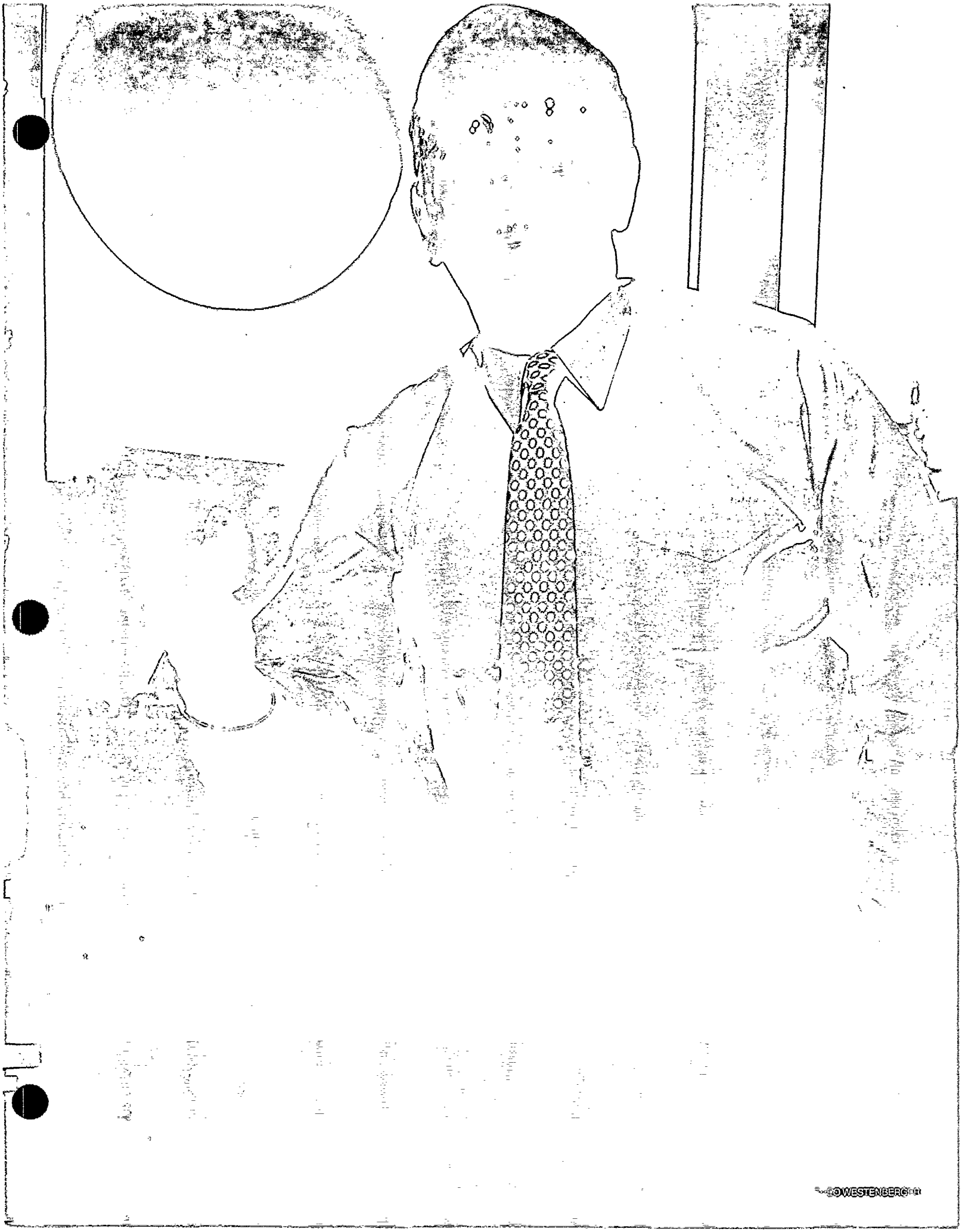
SPORTS
EXHIBIT 5-H

ANDWICHE ROZEN FOOL

NBA commissioner David Stern, the son of a New York deli owner, took a downwardly mobile U.S. basketball league and turned it into a megarich international entertainment and marketing company

by E.M. Swift

Special Reporting by John Steinbreder


©WESTENBERG

...own to get up on the conference
...it just to make a point

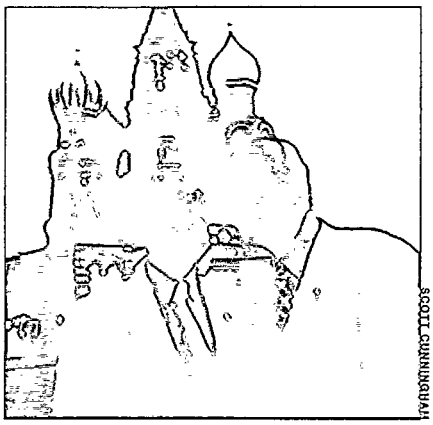
We open with David Stern striding atop a conference table—surrounded by television executives, gesticulating theatrically, debating a point with his nimble, sharp-edged wit—not because this is the modus operandi of the commissioner of the National Basketball Association, but because the image fits. Even if the event never happened (and there are those who doubt that it did), it fits.

"I really don't think he has the agility to do that," says Howard Ganz, a chum of Stern's since their Columbia Law School days in the mid-'60s and a partner at Stern's former law firm, Proskauer Rose Goetz and Mendelsohn.

"No, I never heard of him jumping on a table," says Larry Weinberg, chairman emeritus of the Portland Trail Blazers, whose team was fined a quarter of a million dollars by the NBA in 1984 for contacting Hakeem Olajuwon's agent while Olajuwon was still Akeem and, more important, still in college. "I doubt he could jump that high."

Even Stern can't quite recall the incident, although he stops well short of denying it. "It's totally plausible, but as a rule I don't stand on tables," he says. "I *am* an inveterate pacer."

And thinker and kibitzer and needler



SCOTT CUNNINGHAM

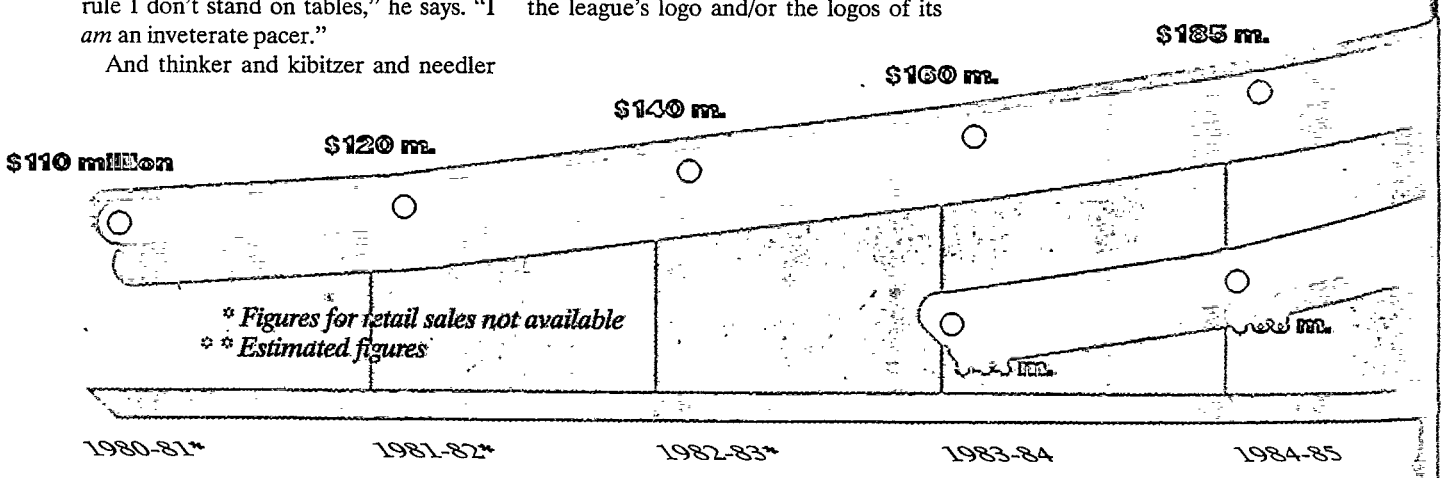
Next, the NBA in the U.S.S.R.? Stern (with Wussler) were a red tie in Red Square in '88.

and innovator. Stern's mind is a barrel of fermenting ideas, and the NBA is a master with an unquenchable thirst. The reason why it is plausible for him to have held court on a conference table—plausible in a way it would never be for baseball commissioner Fay Vincent or National Hockey League president John Ziegler—is the unpredictable and spontaneous nature of the man himself. "When David sees an opening, he takes it," says David Beckerman, the president of Starter International, a sportswear company that last year paid the NBA more than $2 million in royalties on the sale of apparel bearing the league's logo and/or the logos of its teams. "I look at David as a basketball player in that respect. Other people may stick to some grand plan, but David reacts to the defense as he's coming down the court. He has polished instincts."

Stern prods, he charms, he teases and, when necessary, he tears apart to get his way. One of the great myths surrounding this 48-year-old, 5′ 9″, basketball-shaped man is that he is the cuddly commish, quick with a joke, invariably gentle and the picture of equanimity. "His temper is part of his personality," says David Green, senior vice-president of marketing for McDonald's, which is one of the NBA's principal sponsors. "He can yell and rant and rave with the best of them. But he never does it in a threatening way. He is never overbearing. You have to have a feel for theatrics, and he does."

"*Temper*'s not quite right," says Russell Granik, Stern's deputy commissioner, who has worked with Stern at the NBA for the last 13 years. "That describes someone who loses his cool. When David gives you a hard time, it's calculated."

Stern became infamous around CBS—the network that televised NBA games from 1973 to '90—for calling on Monday mornings to critique the weekend's telecast. "He used to tell me he could run CBS Sports better than I," recalls Peter Lund, a past president of that entity. CBS



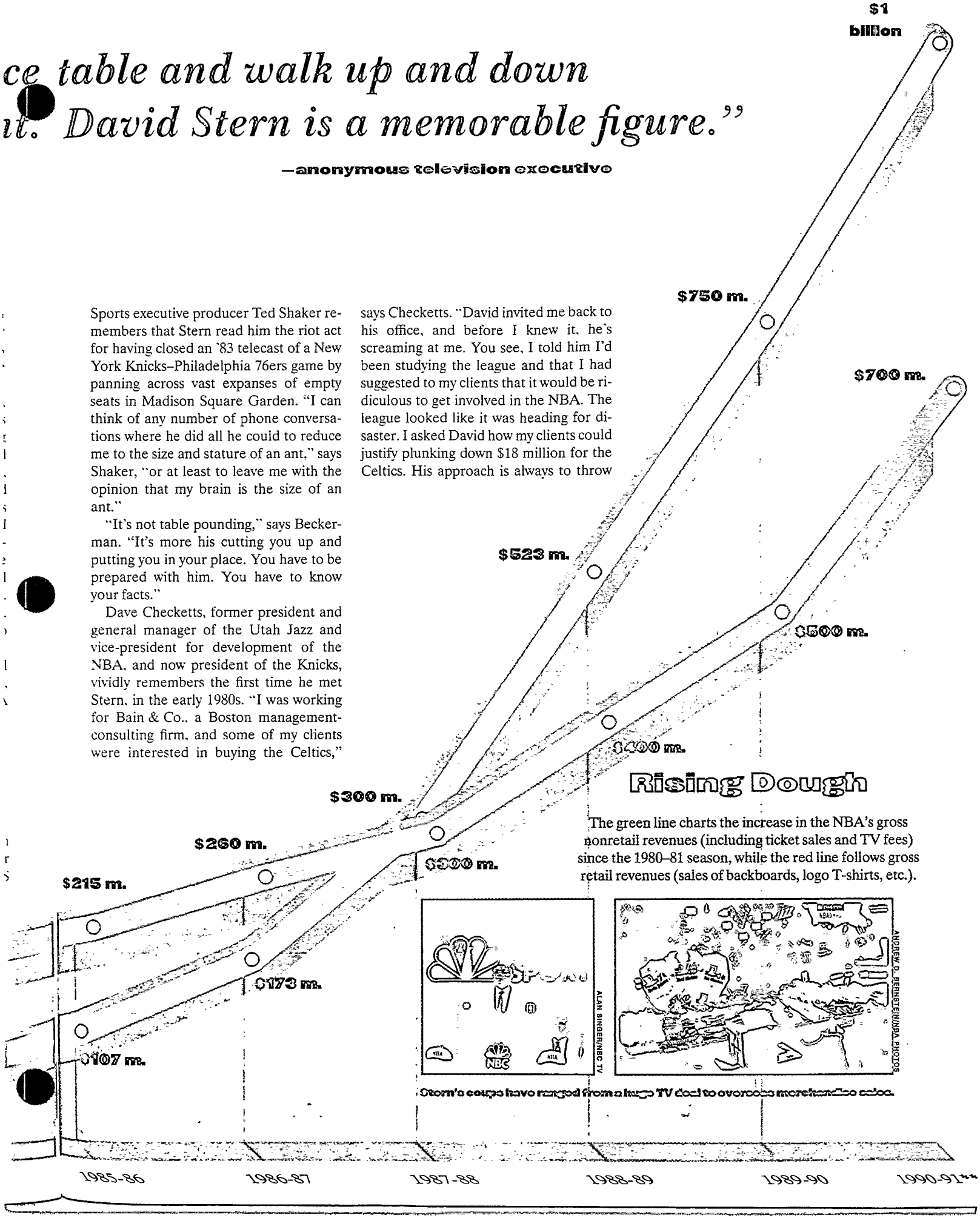
ce table and walk up and down it. David Stern is a memorable figure."

—anonymous television executive

Sports executive producer Ted Shaker remembers that Stern read him the riot act for having closed an '83 telecast of a New York Knicks–Philadelphia 76ers game by panning across vast expanses of empty seats in Madison Square Garden. "I can think of any number of phone conversations where he did all he could to reduce me to the size and stature of an ant," says Shaker, "or at least to leave me with the opinion that my brain is the size of an ant."

"It's not table pounding," says Beckerman. "It's more his cutting you up and putting you in your place. You have to be prepared with him. You have to know your facts."

Dave Checketts, former president and general manager of the Utah Jazz and vice-president for development of the NBA, and now president of the Knicks, vividly remembers the first time he met Stern, in the early 1980s. "I was working for Bain & Co., a Boston management-consulting firm, and some of my clients were interested in buying the Celtics," says Checketts. "David invited me back to his office, and before I knew it, he's screaming at me. You see, I told him I'd been studying the league and that I had suggested to my clients that it would be ridiculous to get involved in the NBA. The league looked like it was heading for disaster. I asked David how my clients could justify plunking down $18 million for the Celtics. His approach is always to throw



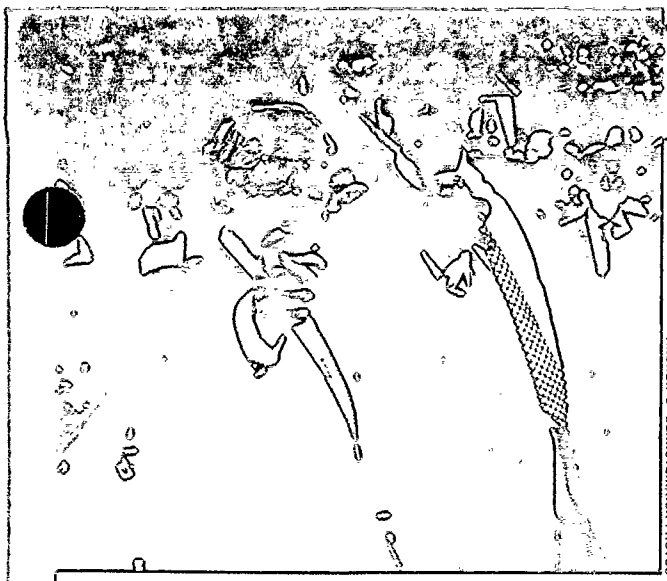
Rising Dough

The green line charts the increase in the NBA's gross nonretail revenues (including ticket sales and TV fees) since the 1980–81 season, while the red line follows gross retail revenues (sales of backboards, logo T-shirts, etc.).

ALAN SINGER/NBC TV

ANDREW D. BERNSTEIN/NBA PHOTOS

Stern's coups have ranged from a huge TV deal to overcome merchandise sales.



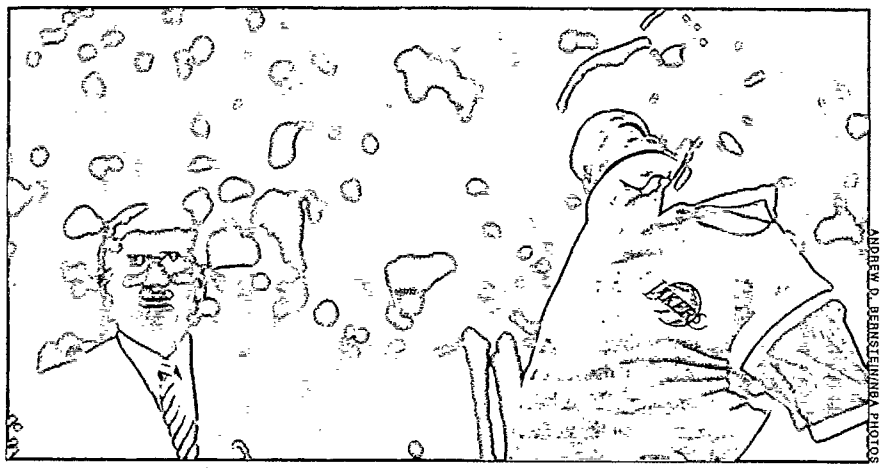
ANDREW D. BERNSTEIN/NBA PHOTOS

you off guard, and he looked at me and said, 'I thought Bain & Co. was a good firm.' Then he asked if I had considered this and that, and went on to explain how $18 million was actually a bargain. We battled back and forth for 2½ hours. You can't be loose with your facts or imprecise with him, or you'll pay with a pound of flesh."

As it turned out, of course, $18 million for the Celtics in the early 1980s would have been a bargain, since they are now valued at between $100 million and $125 million. "David's what we call a shaker and a mover," says the Los Angeles Lakers' Magic Johnson. "He gets it done."

He has gotten it done so effectively since taking over the NBA on Feb. 1, 1984, that no one disputes that Stern is now the best commissioner in sports, the best in the history of basketball and every bit the equal of the best sports commissioners of all time, such as the National Football League's Pete Rozelle and baseball's Kenesaw Mountain Landis. Certainly Stern is the best remunerated: NBA owners, upon hearing in 1989 that he had been approached by the NFL during its search for an heir to Rozelle, rewarded Stern with a five-year, $27.5 million contract that included a $10 million signing bonus. "You have franchise players. He's a franchise commissioner," says Pat Williams, general manager of the Orlando Magic.

In his seven years as commissioner and, to a certain extent, in the years immediately before he took the job, Stern has reshaped a floundering, financially strapped league into an entity that is the envy of professional sports—an innovative, multifaceted, billion-dollar global marketing and entertainment company whose future literally knows no bounds.



ANDREW D. BERNSTEIN/NBA PHOTOS

In the NBA, Stern is as big as Julius Erving (top), Magic and Willis Reed (below).

"We see ourselves moving into areas that ordinary fans don't associate with us," says Stern. "I've been telling our owners for years that we're becoming a mature industry. What else is there? Publishing, events, licensing, home entertainment—all on a global basis. It's how you conceptualize your corporate goals."

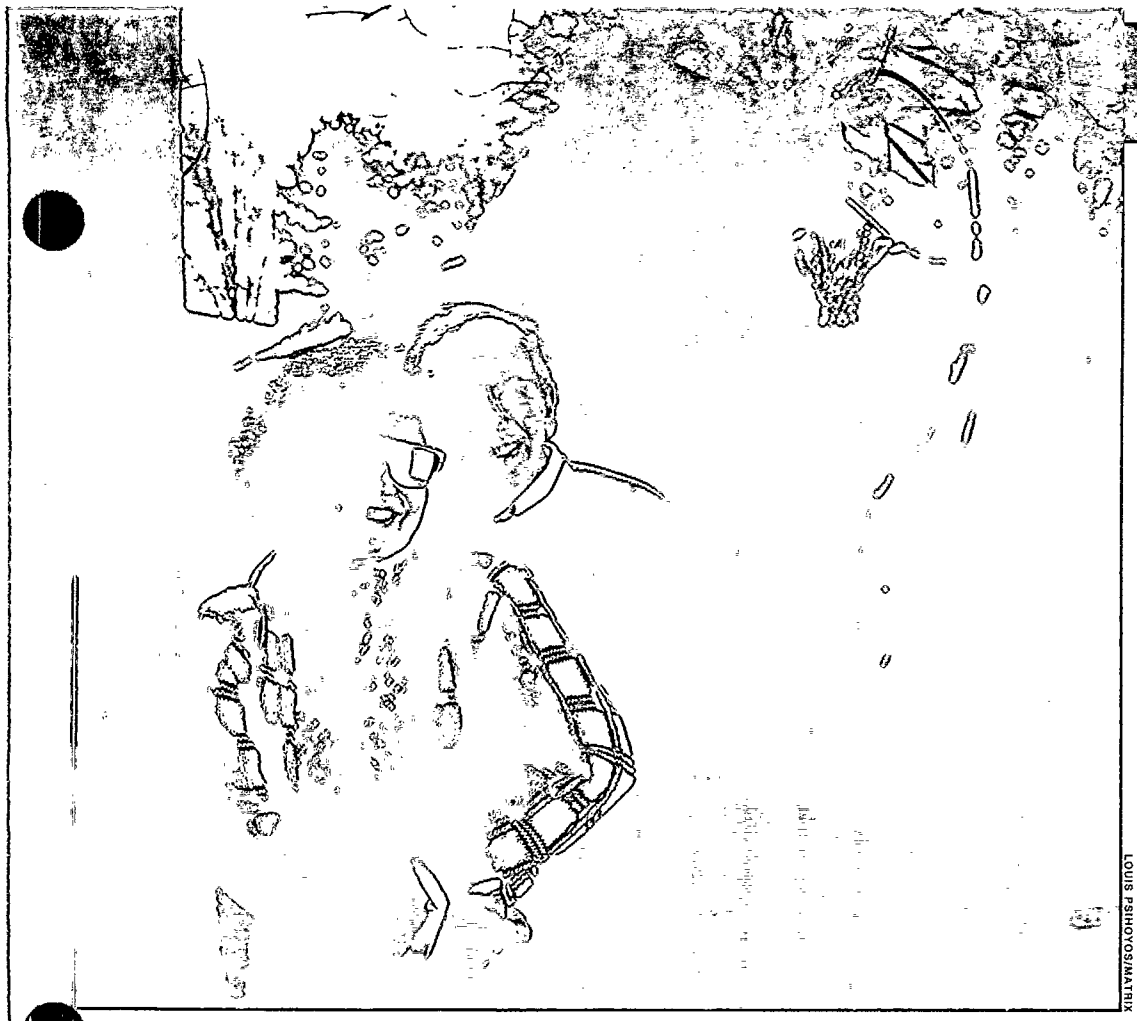
But the real miracle of Stern's tenure is that, while redefining the NBA, he has not only apparently made no enemies, but he has also created the most harmonious league in sports. NBA players are happy; the owners are rolling in dough; the sponsors are thrilled to be filling the NBA coffers with cash; the fans are bedazzled; the league's new television network, NBC, is making money on its NBA programming; international basketball is booming; and the poor slobs behind the scenes, those 275-plus employees in the NBA offices, seem to think they're working in the Garden of Eden. In Stern's mind they're all members of the NBA Family, and if the image of Stern as the cuddly commish is something of a myth, the image of Stern as the NBA patriarch is not. He cares. "He makes time for people, whether it's over a corned beef sandwich in his office or in a phone call late at night," says Robert Wussler, CEO of Comsat Video Enterprises, which is part owner of the Denver Nuggets. "He is warm, intelligent, street-smart, and has a terrific relationship with every member of the league. A best-friend relationship."

"The atmosphere here is different from that in other leagues' offices," says Steve Mills, 31, vice-president in charge of NBA special events. "We're younger, and maybe you have to be to put up with all the craziness. But we all believe we're on the cutting edge of something. You feel as if, in 10 or 15 years, people will look back on this period at the NBA as the beginning of something completely new."

e's gotten it done so effectively that no one disputes that Stern is now the best commissioner in sports.

To fully appreciate where the NBA is and where it is headed, we must first look back to where the league was just a decade ago. In the 1980–81 season, 16 of the NBA's 23 teams lost money. Total attendance was down almost a million from the year before, and teams were playing to an average of only 10,021 fans per game, about 58% of the capacity of their arenas. The worst-run franchise in the league, the Cleveland Cavaliers, lost more than $4 million while selling only 28% of its seats in '80–81.

LOU CAPOZZOLA/NBA PHOTOS



LOUIS PISHOY/SMATRIX

At home in Scarsdale, N.Y., Dianne can pull David, if not Eric and Andrew, away from hoops.

In the league's New York offices, where commissioner Larry O'Brien had just promoted a young lawyer named David Stern to the post of executive vice-president, there were about 40 employees, including just one person in public relations and three in marketing and broadcasting. There was no entertainment division, no production facilities. The NBA was shunned by Madison Avenue because it was perceived as a league that was drug-infested, too black, and too regional. "If you had 30 minutes with a prospective sponsor," recalls Mills, who spent the 1984–85 season banging in futility on the doors of corporate America, "your first 20 minutes were spent trying to convince him that the players weren't all on drugs."

As the low point of the pre-Stern era, many in the NBA cite the 1980 championship series between the Lakers and the 76ers, during which CBS refused to broadcast the sixth and, as it turned out, final game live. It was shown, tape-delayed, at 11:30 p.m. Eastern time. Others say the league's darkest hour was an '82 article in the *Los Angeles Times* reporting that 75% of NBA players were on drugs.

"We were in deep yogurt," recalls Richard Bloch, one of the limited partners of the Phoenix Suns. "But David changed the direction of the league. We, the owners, were accustomed to doing business the old-fashioned way. David had a much more progressive outlook. He was just plain smarter."

Business the old-fashioned way was, pretty much, every franchise for itself. "There was more unanimity in the streets of Paris during the French Revolution than there was in an NBA owners' meeting," says one league executive. Free agency had sent salaries spiraling upward, and the question became not whether the league would have to shrink, but how many teams would have to be canned. "In 1982, after dozens of meetings, we came to the conclusion that we were about to lose a half-dozen teams," recalls Granik, who at the time was the NBA's general counsel. "We actually set up a committee to study how we were going to do that."

> *ern was likable. He remembered people's names. He was, one hears over and over again, a regular guy.*

Out of this abyss stepped Stern. The son of a Manhattan delicatessen owner, Stern was a rare amalgam: a brilliant young lawyer who was blessed with business instincts, marketing sense and a disarming sense of humor. Strangest of all, he was likable. He remembered people's names. He took an interest in their families. He was, one hears over and over again, a regular guy. A little sarcastic, perhaps, but without a mean bone in him. "David Stern dismisses the adage that nice guys finish last," says Michael Goldberg, a former general counsel of the American Basketball Association, who now runs a sports and entertainment marketing firm called the National Media Group. "David's father ran a successful deli in New York. To be successful in that business, you have to have great rapport with your customers. You have to get them to come back, even if the corned beef is a little dry and the apple pie a little stale. You have to give the customer a smile, a pleasant greeting, a sense that he is being taken care of. David Stern understands that, and I don't think it would be farfetched to say that he has applied that to the NBA."

Stern, who grew up a Knick fan, represented the NBA in various court cases as far back as 1967. He worked on the landmark Oscar Robertson antitrust settlement in '76, which paved the way for free agency, and then hammered out the details of the ABA-NBA merger, also in '76. In '78 O'Brien persuaded Stern to leave Proskauer Rose and become the league's first general counsel. Two years later Stern was promoted to the newly created position of executive VP. "I was told, 'You're in charge of recruiting new people for broadcasting, public relations and marketing,' " says Stern. "That was my stated charge."

Essentially, Stern was being given the opportunity to revamp the ravaged image of the league. But he took his stated charge a step further. By focusing the

owners' attention on the proper ways to market their product, he actually revamped the way the league did business. "I was shocked, when I went to my first league meeting, at how competitive and uncommunicative the teams were," says Paula Hanson, who is now head of the NBA's Team Services, the division Stern created to disseminate information among the clubs. "There was a real us-against-them attitude."

Today, if the Lakers, for example, discover a hot new tune that the fans in the Forum love to hear during intermissions—foot-stomping, hand-clapping music—Team Services wants to know about it. If the Celtics land a new radio sponsor for their local broadcasts, Team Services spreads the word to the other clubs in case that sponsor wants to sign on in other cities too. If the Chicago Bulls sign a better concessions deal than the Knicks, Team Services gets it on file.

Before Stern there was no coordination. Says former Team Services head Bob King, "All the teams were islands unto themselves. What Stern did was take the islands and turn them into a continent."

"He runs a tight ship and a tight meeting," says Abe Pollin, owner of the Washington Bullets. "If the owners are having a meeting, 27 guys in one room, and over in the corner two or three of them are talking about something else, David will interrupt them and get them into the discussion the entire group is having."

Says Checketts: "This is the way he is with owners. When I was in Salt Lake, Frank Layden, who then coached the Jazz, used to talk a lot about how bad he thought the refs were, and that got David hot. David kept trying to get Frank to voice his complaints through proper channels. But Frank kept berating the refs publicly. I was in [former Jazz owner] Sam Battistone's office one day when David called, enraged about something Frank had said about the refs. He just ripped into Sam, saying something to the effect of, 'If you can't control your players and coaches to get them to understand how we do business in this league, I'm going to fine you more money than you make selling tickets.' Battistone, whom [at least technically] David works for, hung up the phone and said, 'We've got to do something about Frank.' Then he called Frank right in."

What kind of people did Stern look for when he began hiring? "They had to be

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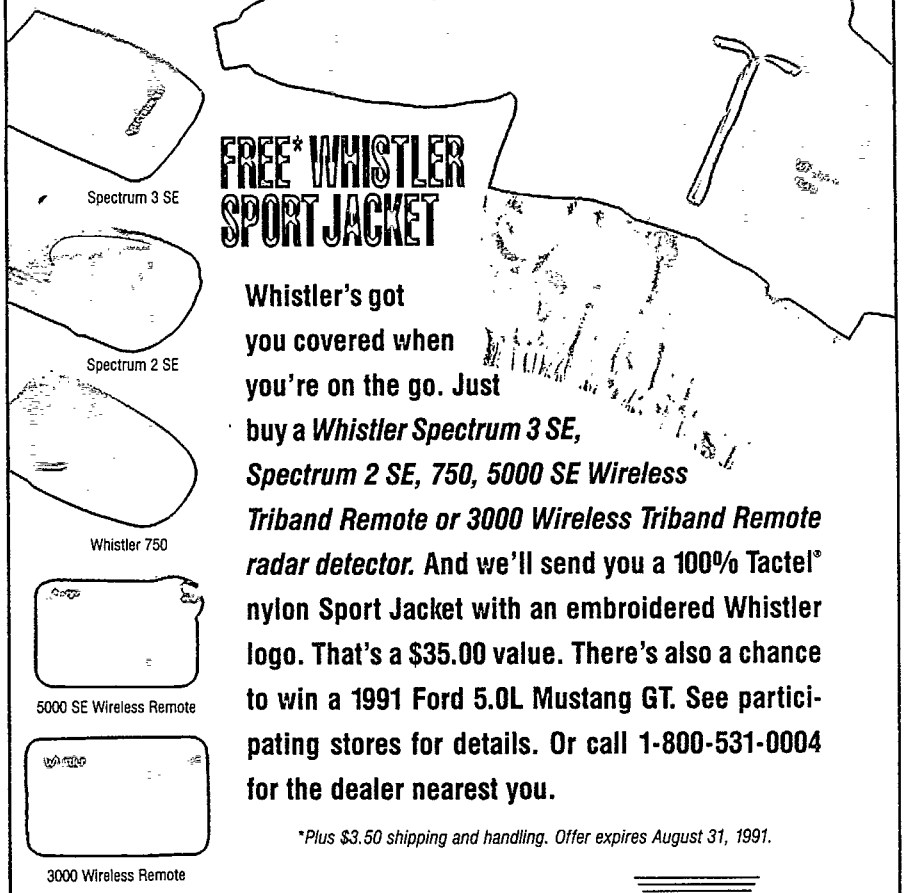

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the kind of people you enjoyed spending very, very long workdays with," says Stern, whose work ethic soon became legendary. "They had to understand the enormous opportunities that lay ahead of us. And they had to be young, because we had a budget. I'm 48, and I don't think there are four people older than me of all the employees of the NBA. I'm beginning to resent being called Uncle David."

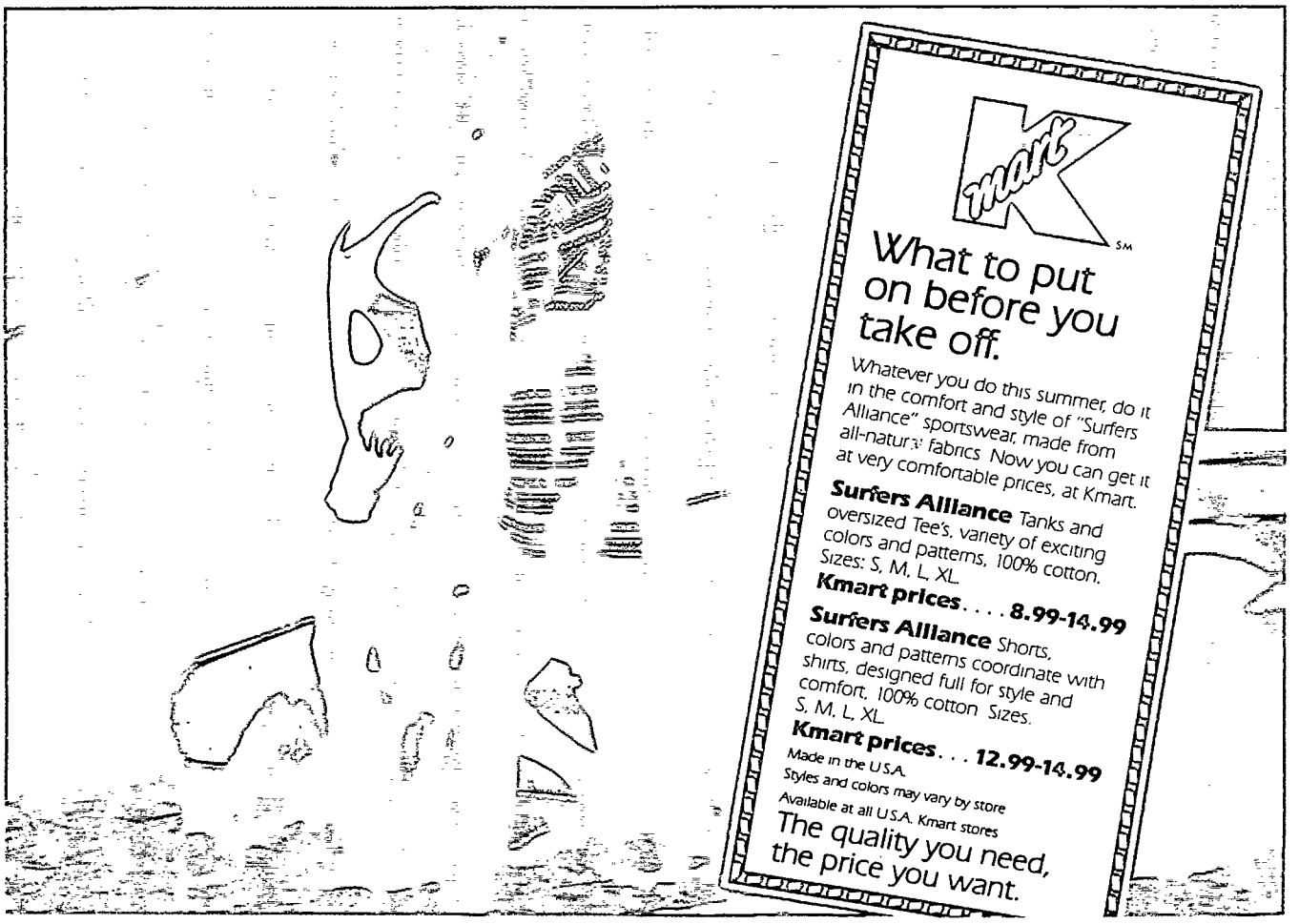
Don't believe it. "One of David's great strengths is that he placed a corps of individuals around him in the league office who are very smart, very loyal and very dedicated to the game," says Goldberg. "No hours are too long, no amount of travel is too much. Several of them are lawyers, and they have that lawyer's mentality: The trial's next week, so we will work around the clock to get it done. What you had at the NBA in the early '80s was a bunch of young guys eating tuna fish sandwiches at their desks, drinking coffee out of paper cups and getting the job done."

That tradition is very much in place today. The best time to get hold of Stern—or any of his staff—is lunchtime, because as likely as not they'll be eating in. Meetings are still frequently held in the hallways. "The atmosphere is a bit chaotic but very dynamic," says 38-year-old Rick Welts, head of NBA Properties, who was one of only five people in that department when he was hired by Stern in 1982. NBA Properties, which handles all licensing of NBA merchandise—everything from "official" T-shirts to backboards—is expected to generate $1 billion in gross retail sales this year and has more than 100 employees. "Sixty-hour workweeks are the norm," says Welts, "but the feeling we all share is that we inherited an abused property, and in the next 10 years basketball is going to be the Number One sport in the world."

"When we stop growing, not just in numbers but in opportunities, then we'll have people leaving," says Stern. "There's a lot of autonomy around here. Room for initiative. We challenge each other. This is a business that is constantly redefining itself. The NBA has gone from the arena business to the radio and television business to the concessions business to licensing to real estate to home video. My mandate from the owners is, It's great, Stern, as long as it's successful."

The single most important event in the NBA's turnaround came in April 1983, when the NBA Players Association, headed by the late Larry Fleisher, agreed to a proposal put forward by Stern and O'Brien for a salary cap. Fleisher recognized the financial plight of the NBA owners; he saw that if something drastic wasn't done, the league would almost certainly be cut back from 23 teams to 16, costing his association 70 or 80 jobs. The landmark agreement called for the players to get 53% of the gross revenues (gate receipts and local, network and cable television fees) and the owners, the remaining 47%. "That's been the cornerstone of our financial success," says Granik, "although none of us knew it at the time."

The original idea of a salary cap came, ironically, from the head of the NFL Players Association, Ed Garvey, who proposed it in 1982 only to see it turned down by NFL owners. "What made it happen in



basketball was that the players and management were in the gutter together," says Charles Grantham, head of the NBA Players Association. "Everyone saw how necessary it was for both sides to work together to survive."

The agreement ended a decade of acrimonious relations between NBA players and owners, and, more important, it made the two parties partners. If the league prospered, the players would prosper. Since the salary cap was instituted, NBA fans have not had to read about the tiresome labor squabbles, strike threats, arbitration hearings and scab games that have tarnished other professional sports. Says Welts, "It's only in the last few years that the players, as opposed to the lawsuits and the drug problems, have become the focus of the NBA."

The NBA's drug difficulties were effectively addressed when, shortly before Stern became commissioner, the league and the Players Association unveiled the most progressive drug policy in sports. If a player who used drugs came forward voluntarily, the NBA would quietly help him find treatment, without recrimination. The league, however, had the right to administer drug tests to players if it felt there was reasonable cause to do so, and anyone failing a test would be thrown out of the NBA and not allowed to apply for reinstatement for two years. In 1988 the league expanded its policy to include random drug tests for rookies.

The NBA also has a rookie orientation program. The newcomers are counseled on how to deal with the press, how to handle money and, generally, how to adjust to life in the grown-up world of the NBA.

"A good marketing guy knows that he has to get the product right before marketing it," says Scott Creelman, head of international sales for Spalding Sports Worldwide. "That's what Stern did with basketball. He cleaned up the product first. Only then did he start marketing."

Stern scoffs at the notion that he had anything resembling a grand strategy for marketing the NBA. "I'd love to reach into the bottom drawer and pull out a master plan to show you," he says. "It's not there."

The master plan may not be there, but the legacy is. Stern wasted no time putting his marketing savvy to work. Before he became commissioner, the league had decided to take the moribund NBA All-Star Game, which was a dud with fans and players alike, and transform it in 1984 into the All-Star Weekend. The event's slam-dunk competition, and the three-point contest that was added in 1986, were borrowed from the ABA. The Legends game was borrowed from the old-timers' games in baseball. And the huge parties for the NBA's corporate sponsors were modeled after those given at the Super Bowl. "We're very eclectic," says Stern. "We like to look at successful things and ask, How does that apply to us?"

Under Stern's watchful eye the NBA All-Star Weekend has become the league's showcase event. This year it took place in Charlotte, N.C., and the league needed 9,000 tickets and 3,500 hotel rooms to accommodate its guests. Just how watchful is Stern's eye? When the All-Star Game was held in Seattle in 1987, he noticed that the line at a buffet

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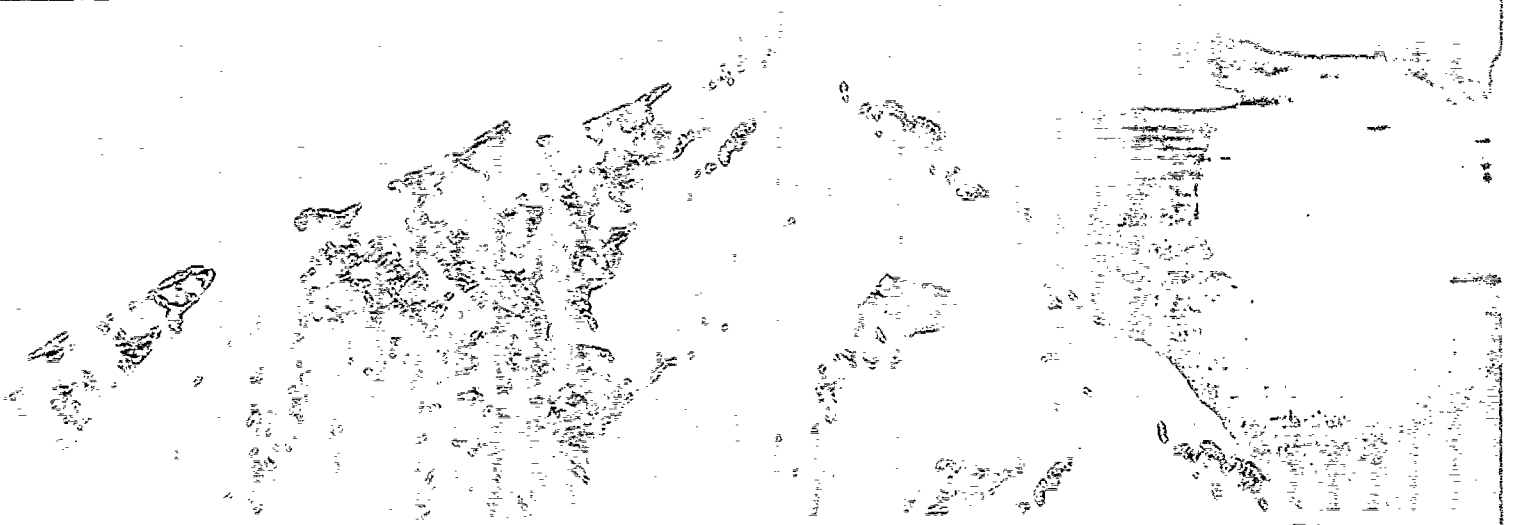

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At the NBA's annual meetings in '89, Stern traded his green eyeshade for a white one.

table was too long. Stern called a staff member over and gave him some suggestions on how to get the line to move faster. Can you imagine Bowie Kuhn doing that? "David is not a manager who simply assembles his troops and says, 'Do it,' " says his old law firm colleague Ganz. "He joined in the fray. There was no function he considered beneath him."

In 1985, just in time for Patrick Ewing's graduation from Georgetown, Stern instituted the NBA lottery to determine which of the league's seven bottom teams got to draft first. Before that, the team that finished with the worst record always picked first. Not only did the lottery create a TV event that could be sold to a sponsor, but it marked the first time a sports league had done anything significant to discourage bad teams from playing to lose at the end of the season in order to improve their draft positions. In '87 Stern began sowing seeds overseas with the first McDonald's Open, an international preseason tournament featuring one team from the NBA and three teams from Europe that has raised international interest in the NBA.

"Nobody, including me, envisioned that this young, bright attorney would have such marketing genius," says Pollin, who was on the committee that recommended Stern to succeed O'Brien. "We used to think it was a big deal if we broke even with NBA Properties. David thought that attitude was ridiculous, and he told us so. Then he showed us how to start making money at it."

Stern has squeezed golden eggs out of the NBA goose every time he has reached into the nest. Under his leadership the league broke its attendance record for seven straight years, beginning in '83–84. That string ended this season, because the Minnesota Timberwolves moved from the Metrodome into the smaller Target Center. Nevertheless, the NBA averaged 15,245 fans per game, 89% of capacity, for '90–91. During Stern's tenure NBA gross annual revenue, which includes gate receipts and TV money but no income from the sale of licensed merchandise, has soared 437%, from $160 million to $700 million. Salaries have shot up by 177%, from an average of $325,000 to $900,000. Network television fees have gone from $22 million per year to $150 million, and cable TV fees from $5.5 million to $68.75 million. The average worth of an NBA franchise, meanwhile, has more than tripled, from $20 million in the early '80s to $65 million today, and the premier franchises—the Bulls, Celtics, Knicks, Lakers and Detroit Pistons—are worth more than $100 million apiece. While the television ratings of all other major sports have fallen in the last decade, the NBA's numbers are up by 21%.

> *ern has squeezed golden eggs out of the NBA goose every time he has reached into the nest.*

Why basketball? Why now? "Every sport has a different niche," says Stern. "Baseball is loaded with tradition and has all those wonderful statistics. Green grass. Fresh air. Family. Football has that niche of gathering on Sunday afternoons, very passionate followings, few games. Basketball, I think, is very contemporary. Our players have become almost like entertainers. That's a niche that somehow evolved."

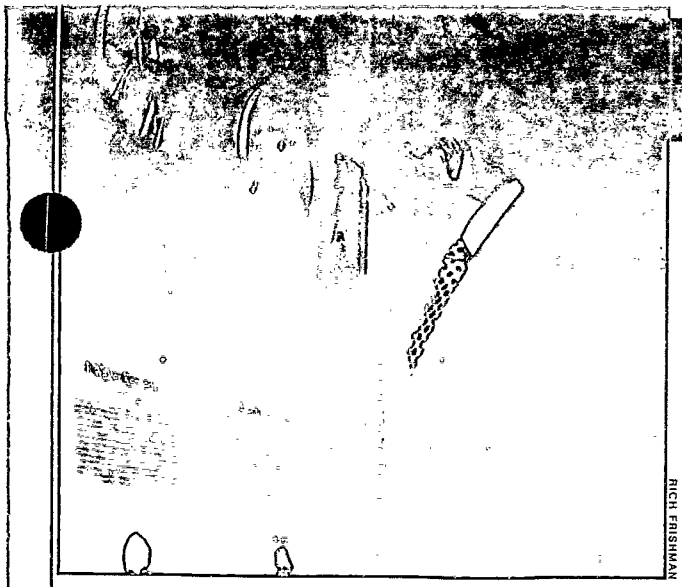
"David came in and looked at the NBA and saw it as something more than just sports," says Piston guard Isiah Thomas, the president of the Players Association. "It's really just entertainment. It's a Michael Jackson tour, a Rolling Stones tour. He saw it as an NBA tour."

One of the models that Stern dangled before NBA owners was Disney. "They have theme parks," says Stern, "and we have theme parks. Only we call them arenas. They have characters: Mickey Mouse, Goofy. Our characters are named Magic and Michael [Jordan]. Disney sells apparel; we sell apparel. They make home videos; we make home videos."

An NBA game is no longer marketed as, say, New York against Chicago. It's Patrick and the Knicks against Michael and the Bulls! The annual slam-dunk and three-point contests give the league a chance to promote up-and-coming players—who outside of Boston had heard of Dee Brown before this year's All-Star Game?—which helps to ensure that the supply of promotable stars is constantly replenished.

The NBA is also planning for the future by wooing an entire generation of preteenagers. "Kids 11 and 12 years old are more interested in basketball than ever before," says Stern, "and we're going to try to convert them into lifelong fans."

Very quietly, basketball has become the sport of choice for the Teenage Mutant Ninja Turtles set. A SPORTS ILLUSTRATED FOR KIDS survey answered by 4,478 subscribers (ages 9 to 12) revealed that both boys and girls preferred reading about pro basketball to reading about either pro football or baseball. That isn't an accident. Under Stern's direction the NBA's public-service announcements have all been about issues that affect young people—child abuse, school attendance, drugs. When the league decided to launch its Stay in School program before the 1990 All-Star Game in Miami, it promised that any middle school kid in that city's system who had perfect attendance during the month of January would be admitted to a special pregame "jam session." Interest was so high that 26,000 kids qualified, more than three times the number school officials had predicted.



RICH FRISHMAN

When Stern negotiated the league's four-year, $600 million television deal with NBC, which went into effect this season, he got the network to guarantee the NBA a free half hour of airtime sometime between 11 a.m. and 1 p.m. on Saturdays—right after the morning lineup of cartoons. To fill the slot, NBA Entertainment produces *Inside Stuff*, a fast-paced, highlight-filled show that has a budget of $100,000 a week and is clearly geared to an audience considerably younger than the male 18–49 set to which the NBA has traditionally appealed.

When NBC successfully lured the league away from CBS, most industry observers assumed that popular as basketball had become, the network would lose money on the deal. Six hundred million (not counting the free half hour for *Inside Stuff*) was, after all, a 340% increase over the cost of the previous CBS package. It now appears that NBC will make a small profit for the '90–91 season and the current playoffs, which is what Stern had anticipated all along. "We want to stay in business with whomever we're in business with," he says.

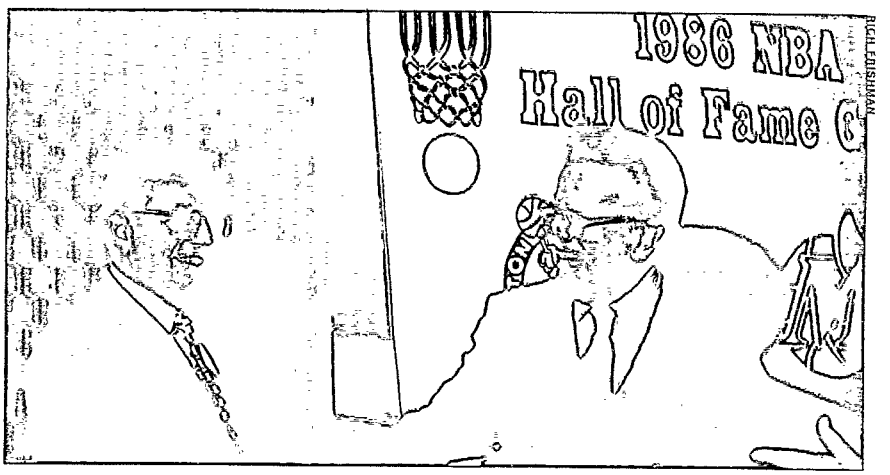
> ***ow appears that NBC will make a small profit, which is what Stern had anticipated all along.***

From Stern's point of view, the NBA has a vested interest in assuring the deal's profitability. If NBC makes money this time around, Stern can pretty much guarantee the owners that in four years their television revenues will increase. That message has been passed along to the NBA's 15 corporate sponsors—Madison Avenue has done a 180-degree turn and is banging on the league's doors these days. "The NBA is clearly ahead of all the other leagues in terms of the warm and fuzzy feeling that fans and advertisers get as a result of their association with the sport," says one TV executive.

Schick, for example, which does little other television advertising, has made a series of commercials that feature NBA players. "It's a very high priority of ours that our sponsors think the NBA on NBC is a place they ought to be," says the commissioner. "If we were approached by two potential advertisers who made similar products, one of which would support the NBA on NBC and the second of which wouldn't, we'd go with the first one—even if the second company were to put more money directly into our pockets. That's the advantage we have in representing ourselves in negotiations."

Says Dick Ebersol, president of NBC Sports, "Stern is the only sports executive I know who, I honestly believe, would always weigh taking money against the long-range effect on the product. He's also the only league executive who, I feel, knows my business as well as I do. I have never, ever had a meeting with him where the room wasn't just full of possibilities."

Stern's knowledge of the television business goes back to his early days with the league, when he was attending cable TV seminars given by investment companies before cable was commercially available. He has studied the various means by which the NBA might implement pay-per-view, and can discourse about transponders, video compression and Direct Broadcast Satellite systems as readily as Pat Riley can explain an illegal defense. Stern had this year's All-Star Game taped for high-definition TV so that the game could later be shown on that medium in Japan, where high-definition TV is commercially available. He felt this might expedite the NBA's entry into the Japanese market. "His motto is 'Knowledge is power,' " says Sandy Brown, head of international television sales for the NBA.

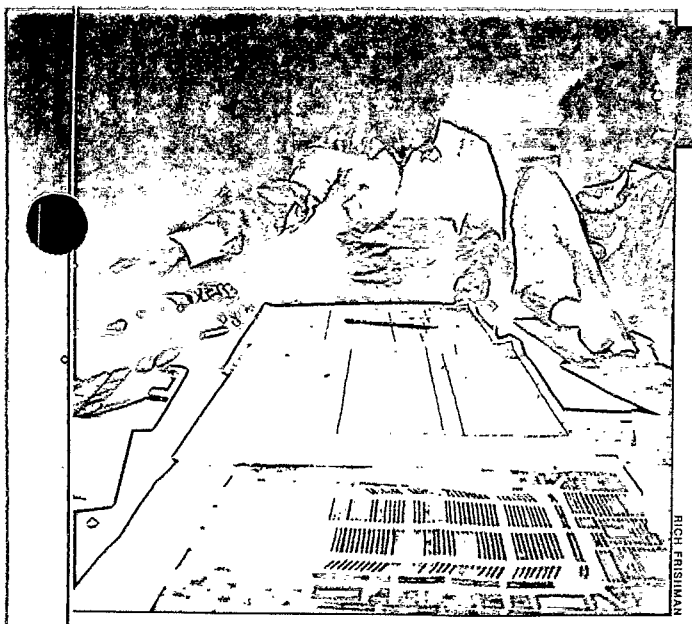


RICH FRISHMAN

Since succeeding O'Brien (right), Stern has secured a place for himself in NBA history.

Stern has plans for Stateside pay-per-view, but they do not include the words *unrealized bonanza*. He says, "When you play some 1,100 games during the course of a season, no one of them is going to have the impact of a Tyson-Holyfield fight." What Stern does envision is bouncing a scrambled signal of local telecasts of NBA games off a satellite and making pay-per-package deals of those telecasts available to sports bars and private homes that are equipped with satellite dishes. Perhaps as early as next year, a Celtics fan living in Detroit, say, will be able, for a small fee, to watch his beloved Green play 82 games a year. Since there are approximately three million satellite dishes in the U.S., Stern conservatively figures that pay-per-package will eventually bring the NBA a tidy $5 million a month.

But greater opportunities lie in creating and selling programming. The league is currently building a 45,000-square-foot production facility in Secaucus, N.J., in which NBA Entertainment will produce



RICH FRISIMAN

A hands-on guy, here Stern reviews plans for a Dr. J tribute in '87 with two aides.

not only *Inside Stuff* but also halftime features, vignettes for sponsors, in-house ads and promos, home videos similar to the hot-selling *Dazzling Dunks and Basketball Bloopers*, and the 60-minute, 90-minute and uncut versions of the NBA Game of the Week that are now being sent to 77 countries. "There are 30 million viewers of regional sports channels in this country," says Stern, "and a lot of programming needs. So we haven't tapped out domestically by any means. But there are enormous possibilities for exploitation of our normal product overseas. Eighty-five percent of the world's television viewers do not reside in the U.S. Our international TV revenues are minuscule right now, but someday they might become important."

That's an understatement. To be precise, the NBA annually receives about $10 million from European and Japanese television, which accounts for less than 2% of the league's total revenues. But by the year 2000, foreign TV fees will have grown exponentially because, unlike football and baseball, basketball is already being played all over the world—in South America, the Middle East, Australia, the Far East, the Soviet Union. Some people think basketball may already have surpassed soccer as the world's No. 1 sport. "Basketball is a game for the younger generation," says Borislav Stankovic, head of the International Basketball Federation (FIBA), the sport's international governing body. "It is a very telegenic game that corresponds to the dynamics of modern society. It is sometimes said that people use horses to get to soccer games and jet planes to get to basketball games."

And virtually everywhere basketball is played—176 countries are members of FIBA—the NBA is recognized by name and trademark. Says Stern, "If you haven't seen it, you can't appreciate how much a part of the European culture the NBA is."

Isiah, Magic and Michael are as well known on a first-name basis in Rome and Barcelona as they are in Detroit, L.A. and Chicago. As many as 50 foreign journalists covered last year's NBA Finals, and NBA highlight shows are increasingly featured on the proliferating cable channels of Europe. In one example of how the NBA takes the long view over the quick payout, Stern recently recommended that the league accept a $200,000 offer from a cable channel in France rather than a $1 million offer from a smaller French pay-TV channel called Canal Plus. "Ultimately, what's going to help the league most is greater exposure," says Stern. "We've got the luxury of doing some long-term foundation building."

Spalding, one of seven companies selling league-licensed products abroad, expects to do $30 million in overseas sales of NBA basketballs and clothing in 1991. One small example of the cachet of the name NBA overseas: During the Christmas holidays some $5 million worth of NBA Cologne was sold in Europe. Each bottle of this dreadful (trust us) fragrance came with an entry form for a contest, the winner of which was given two tickets to the All-Star Weekend in Charlotte. Sixty thousand Europeans entered, providing the NBA with—presto!—an instant mailing list for future marketing campaigns.

To help tap into the enormous Far East market, the NBA staged another first by opening its 1990–91 season in Tokyo with two games between the Jazz and the Suns. The games counted in the regular-season standings because, according to NBA general counsel Gary Bettman, "the Japanese don't like make-believe things. They wanted to be sure that the games really counted. It was our way of showing respect and doing something historic."

The league took to Japan its own floor, 24-second clocks, baskets, backboards, stanchions, scorers' table, pom-pom girls, The Chicken, you name it. The 10,000 seats at Tokyo's Metropolitan Gymnasium (top price: $170) were sold out both nights, and the NBA merchandise the league had taken over was gone by halftime of the first game. "Basketball's not a big sport in Japan," says Bettman, "but people so marvel at our athletes that they can't help but get interested in it. They want us back next year. We think Japan will be our jumping-off point for that part of the world."

The country that the NBA—and two of its major sponsors, Coca-Cola and McDonald's—really wants to jump off toward is China, where basketball is already huge. It was with an eye toward that market that the NBA chose as its Japanese partner the conglomerate C. Itoh & Co., which does the largest volume of trade with China of any company in the world. "We're already televising 10 games a year in China," says Stern, who points out that the games get great ratings. "Over there they say that Michael Jordan plays for a team called the Red Oxen."

What's to come of all this? Is the NBA destined to become an intercontinental league? Not in the foreseeable future, according to Stern. "We don't have any plans for European-based NBA teams," he says. "Our job is to help everyone in the basketball business make the sport grow, and out of that will come tremendous opportunities. The McDonald's Open, the World Championships and the Olympics are the three areas we're looking at right now."

The McDonald's Open, as Stern envisions it, will become a world club championship beginning as early as 1994. It will be held in the early fall, on the eve of the NBA regular season, and will pit the NBA champions against champions from every other major league in the world. The World Championships, which will be modeled after soccer's World Cup, will be held every fourth year, two years after the Summer Olympics. The Olympics, in which NBA players are now eligible to play, will complete the rotation.

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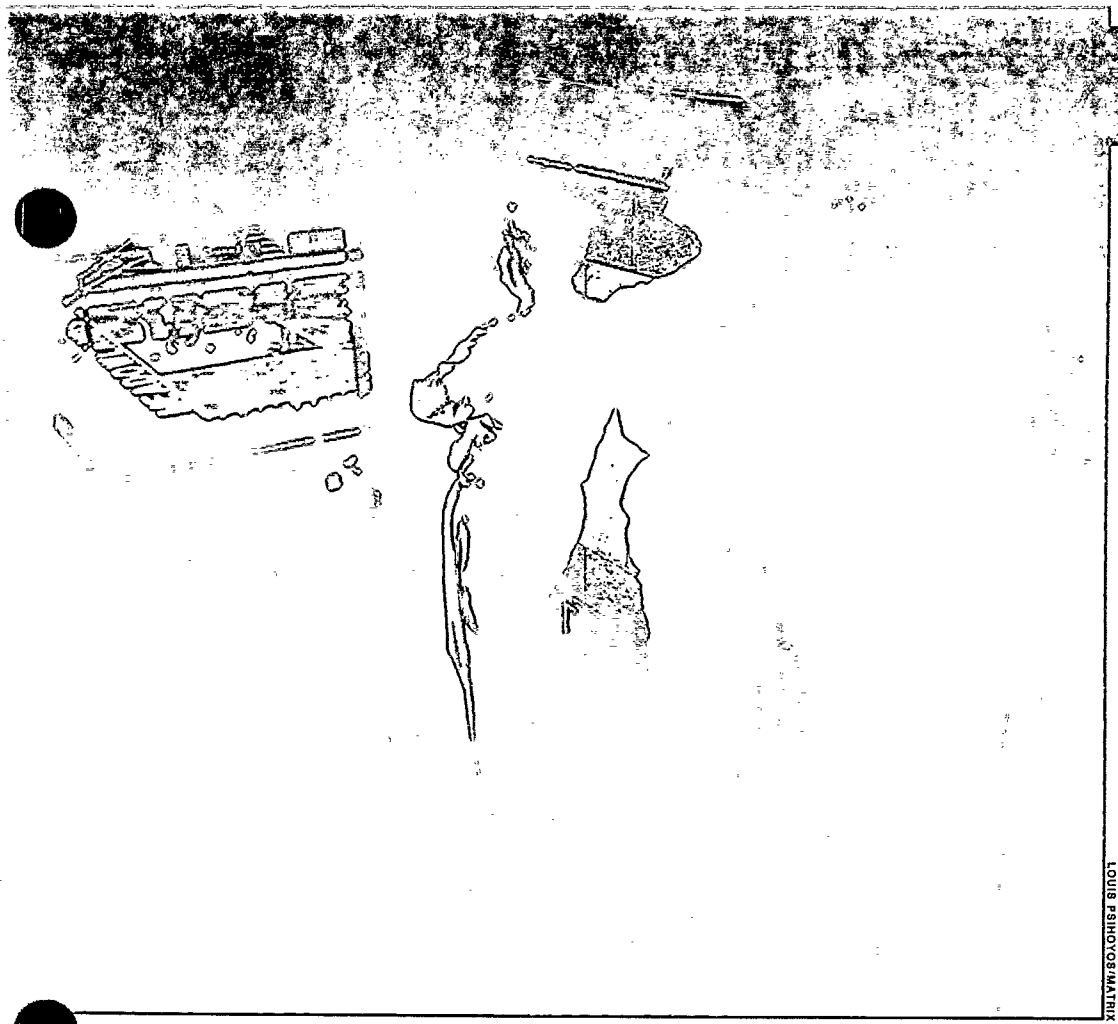

LOUIS PSIHOYOS/MATRIX

Even at a New Jersey Nets practice at the Meadowlands Arena, Stern casts a big shadow.

Because of the increasingly international character of NBA teams, in all likelihood NBA players will be featured extensively during the 1992 Olympics in Barcelona; perhaps there will be NBA representatives on all three medal-winning teams. That would provide the league and its sponsors with fabulous marketing opportunities, since, according to Stern, there is a reasonable chance that the Olympic basketball tournament will be the most widely viewed sports event in the history of television. It is important to remember, when people talk of an intercontinental NBA, that in its own view the NBA has bigger fish to fry than running a mere sports league. What the NBA really wants to do is market the entire sport of pro basketball, run all the big events, sell all the licenses and international sponsorships. The revenues from those kinds of deals could, before the end of the century, dwarf what the NBA makes from its core business. "By marketing the sport of basketball, we have the opportunity to be in just about any business we choose," says Welts. "We're also interested in farming out that expertise."

The NBA's first client? USA Basketball, the organization that will oversee not just the U.S. men's and women's Olympic teams but also the teams that will represent the U.S. in the Goodwill and Pan Am games. The league is also talking to FIBA, which wants to share in the NBA's marketing expertise. "Frankly, [the potential is] unlimited," says Granik. "And this is not a big stretch for us. The organization is already in place."

With the international challenges that lie ahead, Stern has no timetable for leaving his job. "I'm really having a good time," he says. "It's a fun job. I enjoy working with the players, the owners, even the media."

Public as he is in many ways, Stern is adamant about not discussing his personal life. Nor does he allow his children to give interviews. He lives in Scarsdale, N.Y., with his wife of 27 years, Dianne Bock Stern. "One of David's great strengths is his wife," says Lund, who has gone on skiing trips with the Sterns and mutual friends. "She's very bright, attractive—an interesting and interested person." But there are signs that his dedication to the NBA has taken a personal toll.

Stern's two sons—Eric, who works at CNN, and Andrew, who recently graduated from NYU Law School—may have borne the brunt of their father's devotion to his third child, a foundling called the NBA. "I think David has a fair amount of regret over his personal life," says one source who is close to Stern. "I understand that he is the same kind of father that he is a commissioner, and I don't think the kids have responded well to that. He can be so demanding, so much the perfectionist. It's also been really hard on David. He spends every waking hour thinking of the league. He expresses regret at times for who he is. He'll say, 'I terrorize, I demand so much from everyone. I can't back off. I can't pull down.' David only knows one way to go, and that's full speed ahead."

It certainly has been full speed ahead at the NBA. But how much of the league's success under Stern can be attributed to circumstance, a fortuitous crossing of stars under which Magic, Larry Bird and Michael, a grass-roots international basketball movement, and satellite distribution services arrived on the scene at the same moment? "I don't buy that argument about his being in the right place at the right time," says Alan Cohen, who is part owner and vice-chairman of the Celtics. From his desk Cohen picks up a plaque that is etched with a poem written by Mao Zedong, and he reads, " 'So many deeds cry out to be done, and always urgently. The world rolls on, time presses. Ten thousand years are too long. Seize the day, seize the hour.' David Stern has seized the day. He has seized the hour. Timing is important, but with the same sequence of events, with the wrong guy in the pilot's seat, none of this happens." ■

ern has no timetable for leaving. But there are signs that his dedication has taken a personal toll.

TESTIMONY OF
PAUL I. BORTZ

PRESIDENT OF BORTZ & COMPANY, INC.

I am Paul I. Bortz, president of Bortz & Company, Inc. I have attached my resume to this testimony.

Bortz & Company was retained by the Joint Sports Claimants to determine the comparative value cable operators placed on the various types of distant signal non-network programming during 1989, focusing on how cable operators would likely have allocated their program rights payments among the various program types. We designed and conducted a statistically valid survey of cable operators, the methodology and results of which are contained in Sports Exhibit 1.

The survey results show, among other things, that cable operators valued the live sports programming they carried in 1989 more highly than any other category of distant signal non-network programming. As reflected in our report, Form 3 cable operators would have allocated a 1989 distant signal non-network programming budget in the following manner:

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

I will also sponsor Sports Exhibit 4, which is a collection of promotional material for superstations taken from cable trade publications; Sports Exhibit 7, which contains superstation advertising material provided by United Video and Eastern Microwave to cable operators; and Sports Exhibit 8, which is a summary of a report prepared by Bortz & Company, Inc. in 1990 for the National Association of Broadcasters entitled "Sports on Television."

SPORTS
EXHIBIT 1

CABLE OPERATOR VALUATION OF DISTANT SIGNAL NON-NETWORK PROGRAMMING, 1989

Bortz & Company

CABLE OPERATOR VALUATION OF DISTANT SIGNAL NON-NETWORK PROGRAMMING, 1989

— Prepared by —

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August 1991

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SECTION I. SUMMARY

Bortz & Company, Inc. was retained by the Joint Sports Claimants to determine the comparative value cable operators placed on the various types of distant signal non-network programming during 1989, focusing on how cable operators would likely have allocated their program rights payments among the various program types. The following program categories were measured: "movies," "live professional and college sports," "syndicated shows and series," "news and public affairs," "PBS, educational and other public television," "devotional/ religious," and "Canadian."

A. Research Methodology

Bortz & Company's initial task was to review the record and underlying research of prior Copyright Royalty Tribunal (CRT) proceedings. In particular, Bortz & Company took account of the comments of the CRT and others regarding a study which Browne, Bortz & Coddington, Inc. (BBC) conducted for the Joint Sports Claimants in the 1983 CRT proceeding. Bortz & Company also reviewed a cable operator survey conducted by the ELRA Group for NAB in the 1983 proceeding, as well as cable operator surveys performed for the 1979 and 1980 proceedings by the Batten, Barton, Durstine & Osborn, Inc. (BBDO) Research Department on behalf of the Joint Sports Claimants.

The approach used for the 1989 survey is conceptually similar to that used in BBC's 1983 study. A constant sum technique was employed for determining cable operator valuation of the various types of distant signal non-network programming. This research method required the respondent to allocate a percentage of a finite pool to each of the program categories. Respondents were asked to evaluate non-network programming only on the distant signal stations actually carried by their systems during 1989. A random sample of cable operators was selected and interviewed so that the respondents' valuations would be statistically projectable to the universe of all Form III cable systems in the United States.

Bortz & Company made certain refinements in the 1989 survey to address specific issues raised by the Tribunal in the 1983 proceeding. In particular, we had the 1989 survey conducted near the end of 1989 (between December 4, 1989 and March 8, 1990) to address issues raised regarding respondent recall; the 1983 study was conducted in 1985. Also, the key valuation question was modified so that the respondent allocated a fixed program budget among the various alternative programming types -- the same task which the CRT seeks to achieve in its royalty distribution proceedings. This allocation is conceptually similar to tasks the respondents frequently perform in developing actual programming budgets and in evaluating price/value relationships among competing cable services about which carriage decisions must be made. In the 1983 BBC survey, respondents were asked to allocate 100 percent of the "value" of their distant signals. We also added to the constant sum question two program categories (Canadian and religious) that were not included in the 1983 BBC survey.

The survey instrument was developed in conjunction with Dr. Michael Wirth (Professor and Chairperson of the Department of Mass Communications at the University of Denver) and Dr. Len Reid (Professor and Head of the Department of

Advertising at the University of Georgia). A pilot test was conducted, utilizing Bortz & Company personnel, to assure clarity of wording and understanding by respondents. Sample design represents the work of Dr. George Bardwell (Professor of Mathematics and Statistics at the University of Denver).

Telephone surveying (after the pilot test) was completed by Burke Marketing Research, one of the largest market research firms in the United States. Principals of Bortz & Company trained the interviewers and oversaw the interviewing process. This included listening to interviews over the initial phase of the study to ensure that the interviewers understood the subject matter, were communicating properly with survey respondents and were accurately recording the information provided by respondents. Interviewers were not told the name of the client or given any information, other than that on the survey form, regarding the purpose of the study. Only interviewers specializing in surveying professional and managerial personnel were utilized.

Interviews were completed with 198 respondents from among the 237 cable systems in the sample. The key constant sum question was answered by 187 respondents. The resultant 79 percent response rate to the constant sum question provided program valuation estimates with a high degree of statistical validity.

B. Survey Results

1. Budget allocation. Cable operators valued the sports programming they carried more highly than any other category of distant signal non-network programming. Survey results indicate that all Form III 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.

2. Advertising and subscriber popularity. Responses to two other survey questions confirm 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 non-network programming by 73 percent of Form III 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, respec-

tively. More than 60 percent of operators considered sports the most important programming type from a marketing perspective; "movies" again ranked second following sports.

3. Comparison with similar studies. The 1989 survey results are supported by their consistency with the results of four other constant sum surveys submitted in past CRT proceedings. In the 1983 BBC study, respondents allocated 36 percent of the total value of distant signal non-network programming to "live professional and college sports," 30 percent to "movies" and 19 percent to "syndicated shows and series." In ELRA's 1983 survey, cable operators valued sports programs at $36 out of $100 (versus $25 for movies and $16 for syndicated series). The BBDO survey conducted for 1980 resulted in allocations of 38 percent for movies, 33 percent for sports and 12 percent for syndicated shows. In the 1979 BBDO survey, respondents accorded sports 35 percent (MSO executives) and 34 percent (system managers) allocations, second only to movies in both instances.

The 1989 survey results also are consistent with the results of constant sum surveys involving the years 1986 and 1990. A survey conducted by Bortz & Company for 1986 resulted in a 39 percent allocation to sports, followed by 25 percent to movies and 18 percent to syndicated shows. Respondents to a Burke Marketing Research survey for 1990 provided allocations of 37 percent to sports, 30 percent for movies and 15 percent for syndicated programming.

C. Discussion of Results

1. Explanation. The survey results are consistent with our experience in the cable, broadcast and sports industries. Our meetings and negotiations with cable executives and research on the cable and sports television marketplace fully support the survey's findings that sports programming is the most highly valued non-network programming on distant signal stations.

Cable operators value most highly that programming which they believe will attract and retain the greatest number of 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.

Over the decade during which research studies on the value of distant signal non-network programming have been conducted for the CRT proceedings, the dramatic escalation in the amounts paid by both the cable and broadcast television industries for rights to sports programming illustrates the value these industries place on sports. Consistent with our research, these industries have shown a consistent willingness to bid aggressively for this very valuable 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. In a television environment

characterized by an ever increasing number of viewing alternatives, such programming and the viewer loyalty it engenders become even more valuable.

Distant signal carriage of a particular team has much broader appeal than to fans of that team alone; it opens a window to a whole league. Whether it is 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.

2. Relation to CRT awards. We understand that in the 1978-83 proceedings, the copyright owners of movies and syndicated shows received cable royalty awards that were more than four times greater than the awards made for live sports. We also understand that there were several factors which the CRT took into account in making these allocations.

However, to the extent that the Tribunal's awards are intended to reflect what likely would happen in a free marketplace absent compulsory licensing, we do not believe that such a four to one disparity in the 1989 syndicated and sports awards could be justified. We believe that our survey results (which are consistent with our experience) provide the best indication of how cable operators themselves would value the different types of distant signal non-network programming. The study shows that cable operators would likely have allocated about the same share of their distant signal programming payments to sports and to movies; the allocation to sports would be nearly twice that made for syndicated programs.

We also understand that the Tribunal, in allocating cable royalties, has placed principal reliance on the amount of distant signal "viewing" generated by the different program categories. Our experience has been that cable operators and cable programmers, when making decisions related to the carriage and pricing of programming, do look at audience data (at least where there are opportunities for advertising revenue). However, they also rely heavily upon surveys of cable operators' and subscribers' perceived value of the programming -- data comparable to that provided in our 1989 survey. In our opinion, the relative amounts that copyright owners would receive directly from the cable industry are more closely reflected in our survey results than in audience data.

SECTION II. DISTANT SIGNAL PROGRAMMING VALUATION: ALLOCATION OF PROGRAMMING BUDGET

The value of any programming to cable operators, including distant signal programming, lies primarily in its ability to attract and retain subscribers. As such, the key survey question was designed to measure the relative value to cable operators, in terms of attracting and retaining subscribers, of the different categories of non-network distant signal programming carried by their systems during 1989. Consistent with the task faced by the Copyright Royalty Tribunal, operators were asked to express this relative value allocation in terms of a percentage of a programming budget which would have been spent on each type of programming.

This section sets forth the key survey question results and provides a comparison with results of a similar BBC study covering 1983 distant signal programming, as well as ELRA Group and BBDO studies for 1983, 1980 and 1979.(1)

A. Question Design

Bortz & Company utilized a constant sum approach for estimating cable operators' valuation of the various types of distant signal non-network programming actually carried by them in 1989. This approach required 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 could only be made at the expense of another. The constant sum approach is the most appropriate survey research technique when (as here) a comparative, rather than absolute, value measure is being sought.

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 during 1989. The categories were "movies," "live professional and college sports," "syndicated shows and series," "news and public affairs," "PBS, educational and other public television programming," "devotional/religious programming" and "Canadian programming." If no PBS or Canadian stations were carried, the operator was not asked to value these program types.

In order to avoid confusion as to the actual stations and programming under consideration in the survey, respondents were read a list of the specific distant signal stations actually carried by their system. Individual stations were identified for each respondent based on the Statements of Account for the second half of 1988 filed with the Copyright Office. Respondents then were asked whether any distant signal station had been dropped or added during 1989, and were instructed to consider only those stations carried during 1989. 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 Q. 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).

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.

> *4a. Finally, I would like you to estimate the relative 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.])*
>
> *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 be 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.)*(2)

This question was the last of a series of questions relating to the relative value of distant signal programming. The preliminary questions were intended to ensure that the respondents would be well prepared to perform the requested programming budget allocation.

B. Response to Issues Raised by the Tribunal

The approach used for the current survey is conceptually similar to the methodology used in BBC's study of 1983 distant signal programming submitted by the Joint Sports Claimants to the Copyright Royalty Tribunal. However, certain refinements were made by Bortz & Company to address specific issues raised by the Tribunal in the 1983 proceeding. Moreover, both the 1989 and 1983 studies incorporate modifications addressing issues raised by the Tribunal regarding the earlier BBDO studies.

1. Respondent recall. With respect to the 1983 BBC survey, the Tribunal expressed concern regarding respondents' recall in valuing programming. The 1983 study was conducted in March of 1985, some 15 months after the end of 1983. In order to address this issue, the survey for 1989 was conducted from December 4, 1989 to March 8, 1990. Approximately 60 percent of the survey responses were obtained during December 1989. There was no statistically significant difference in responses provided by operators contacted in 1990 versus those contacted in 1989.

2. Allocation versus valuation. Both the earlier and current studies address the relative value of distant signal program types in attracting and retaining subscribers. However, the current study requires the respondent to allocate relative

value in terms of the percentage of a fixed dollar amount (in other words, a programming budget) which would have been spent on each of the various distant signal non-network programming types carried in 1989. The 1983 study, on the other hand, asked cable operators to allocate 100 percent of the value of the programming carried. The 1989 approach serves to accomplish two key objectives:

(1) Respondents provided their assessment of the appropriate distribution of a fixed dollar amount among various alternative programming types--the same task which the CRT seeks to achieve in its royalty distribution proceedings.

(2) Respondents are performing an exercise (i.e., allocating a fixed amount which comprises a programming budget) conceptually similar to a task which they frequently perform both explicitly (in developing actual programming budgets) and implicitly (in evaluating price/value relationships for competing cable services about which carriage decisions must be made).

Bortz & Company believes this adjustment enhances the direct applicability of study results to the issue of allocating copyright royalties among competing interests, addressing an issue raised by the Tribunal in the 1983 proceeding.

3. Programming categories. The Tribunal expressed concern in the 1983 proceeding that the BBC survey did not address all claimants. In order to include all program claimants party to the 1989 CRT proceeding, categories were added for "devotional/ religious programming" and "Canadian programming."

4. PBS/educational and Canadian programming. In instances where a cable system did not carry a public television or Canadian station, questions regarding such stations were deleted, and respondents were not asked to allocate a portion of their programming budget to these program categories. In Bortz & Company's view, this is the correct approach since no portion of a programming budget would have been spent on programming that a system did not carry.

5. Other considerations. Both the 1983 and 1989 surveys incorporate statistically valid sampling and detailed station listings (to insure respondent's understanding of the signals they were to consider), based on concerns expressed by the Tribunal regarding the earlier BBDO surveys. Bortz & Company did not provide respondents with definitions of the seven programming categories. We believe this was unnecessary due to the sophistication of the respondents and their familiarity with the descriptive phrases for each category. We are aware of no instances in which any respondent expressed confusion regarding the programming categories.

C. Survey Results

Operator valuation of distant signal programming was analyzed for the overall sample, as well as by copyright payments.

1. Overall sample. During 1989, Form III cable operators would have allocated the largest percentage of a budget for distant signal non-network programming to "live professional and college sports." This category received a 34.2 percent allocation:

	Percent Allocation (n = 187)(3)
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.
Note: Appendix A contains statistical tests for this and subsequent tables.

The above results are depicted graphically on Figure II-1.

"PBS, educational and other public television programming" received a higher allocation (9.9 percent) when only those systems which actually imported a public television station were considered. Of the 187 systems that responded to the key question, 27, or 14.4 percent, carried one or more PBS/educational stations on a distant signal basis.

Canadian stations were carried on a distant signal basis by seven (or 3.7 percent) of the 187 responding systems. On these seven systems, Canadian programming received an average 6.4 percent allocation.

2. Results by stratum. Results were also calculated by royalty stratum. Very little variation is evident, with "live professional and college sports" rated highest in all four royalty payment classifications:

Royalty Payment Classification (Second Period 1988)	N	Sports	Movies	Syndicated	News & Public Affairs	Devotional/ Religious	Educational	Canadian
$0-31,699	48	33.8%	30.2%	14.2%	14.2%	6.4%	1.3%	0.0%
$31,700-109,999	53	32.3	32.3	19.0	11.2	3.8	1.3	0.1
$110,000-299,999	64	37.5	31.4	15.1	10.6	2.9	1.9	0.6
$300,000 or more	22	34.7	29.8	20.5	11.3	3.3	0.5	0.0
Total	187	34.2	31.2	16.9	11.8	4.3	1.3	0.2

3. Unweighted results. As noted in the discussion of research methodology in Appendix A, the results outlined above are based on a stratified sampling approach and thus weight more heavily the allocations reported by systems with larger royalty payments. For comparative purposes, Bortz & Company also calculated the simple arithmetic average of the 187 responses to the key survey question. As shown below and on Figure II-2, results based on this unweighted calculation are essentially the same:

FIGURE II-1. CABLE OPERATOR ALLOCATION OF VALUE BY DISTANT SIGNAL PROGRAM TYPE, 1989

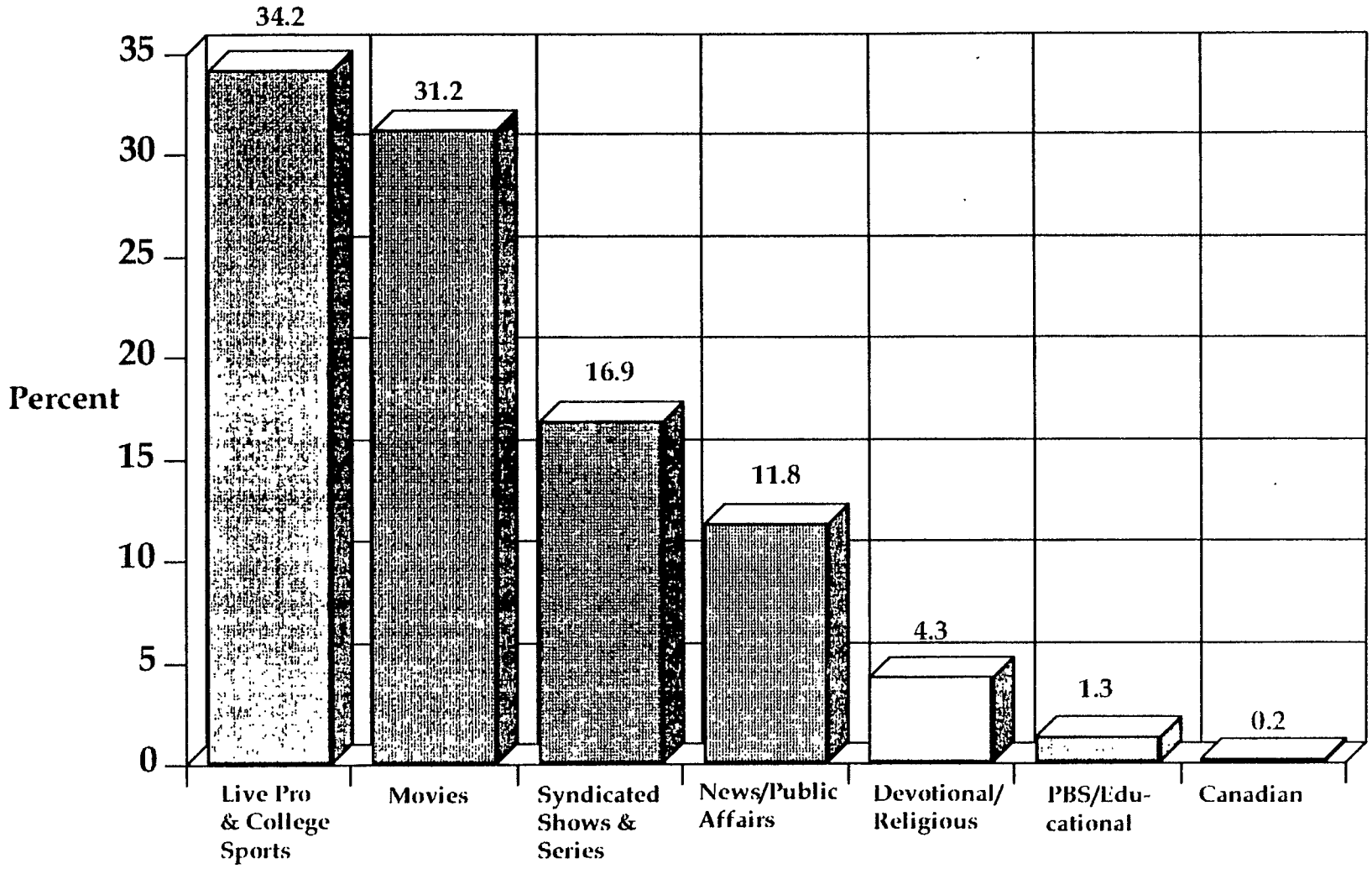
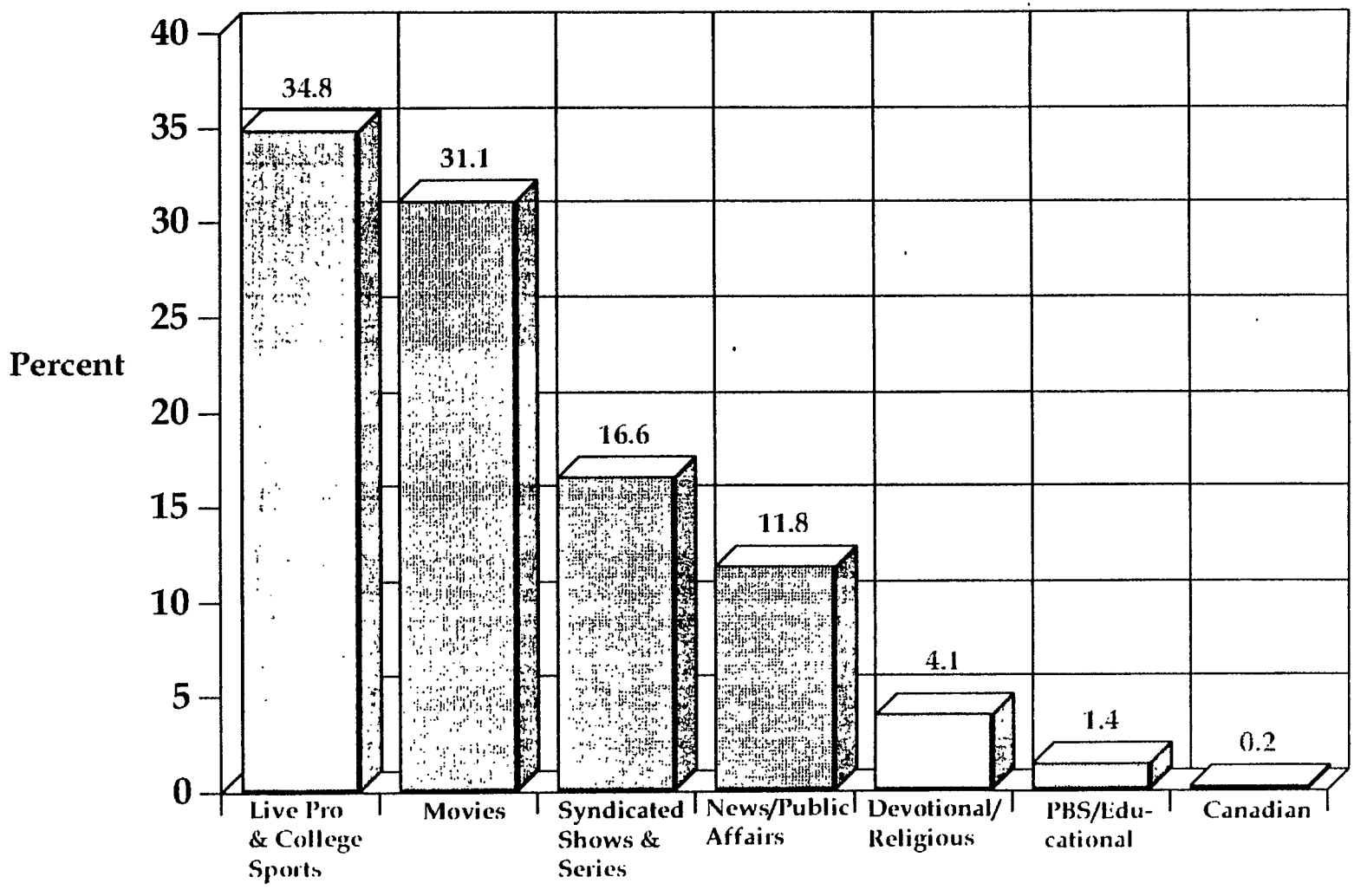


FIGURE II-2. CABLE OPERATOR ALLOCATION OF VALUE BY DISTANT SIGNAL PROGRAM TYPE, 1989
(UNWEIGHTED AVERAGE)



	Percent Allocation (n = 187)
Live professional and college sports	34.8%
Movies	31.1
Syndicated shows and series	16.6
News and public affairs	11.8
Devotional/religious programming	4.1
PBS, educational and other public television	1.4
Canadian programming	0.2
Total	100.0%

D. Comparison with Similar Studies

As noted above, BBC completed a similar study regarding the relative value of distant signal programming carried by cable systems for 1983. Other studies were also completed by the ELRA Group (1983) and BBDO (1979 and 1980). Certain methodological differences exist between these independently completed studies. Nevertheless, it is instructive to compare their results.

Such comparison indicates strikingly consistent results. For example, the percentage allocation for "live professional and college sports" ranged between 33 and 36 percent in each of the studies. Further, in all six studies, sports and movies were the most highly ranked programming categories, with sports receiving the highest ranking in the three most recent surveys:

Comparison of Distant Signal Programming Valuation Studies, 1979 to 1989

	BBDO					
	MSO Executives, 1979	System Managers, 1979	MSO Executives 1980	ELRA, 1983*	BBC, 1983	Bortz & Company, 1989
Live professional and college sports	35.0%	34.0%	33.0%	35.7%	36.1%	34.2%
Movies	38.0	43.0	37.8	25.0	30.2	31.2
Syndicated shows and series	10.6	10.6	11.8	15.8	18.6	16.9
News and public affairs	9.4	6.2	12.6	13.3	12.1	11.8
PBS, educational and other public television	7.0	6.2	4.9	2.5	3.1	1.3
Devotional/religious programming	NA	NA	NA	7.2	NA	4.3
Canadian programming	NA	NA	NA	0.4	NA	0.2
Total	100.0%	100.0%	100.1%	99.9%	100.1%	99.9%

*Percentages calculated by Bortz & Company from actual mean dollar value allocations.

In addition to the studies reviewed above, all of which were presented to the Tribunal, surveys were completed for 1986 (by Bortz & Company) and for 1990 (by Burke Marketing Research) utilizing essentially the same questionnaire design as in Bortz & Company's 1989 survey. Respondents in these surveys also accorded sports the largest percentage of a distant signal programming budget:

	Comparison of Distant Signal Programming Valuation Studies, 1986 and 1990	
	Bortz & Company, 1986	Burke Marketing Research, 1990
Live professional and college sports	38.5%	37.2%
Movies	25.1	30.1
Syndicated shows and series	17.5	14.5
News and public affairs	11.3	11.9
PBS, educational and other public television	4.1	2.8
Devotional/religious programming	3.5	3.5
Canadian programming	0.1	--
Total	100.1%	100.0%

The Bortz & Company survey conducted for 1986 utilized a simple random sample (rather than a stratified sampling design); therefore, its results reflected an unweighted average of all survey responses. The Burke survey for 1990 utilized the same sample drawn for Bortz & Company's 1989 survey as well as an identical survey instrument.

The results of separate studies over time suggest a clearly delineated perception of the relative value of programming types on the part of operators and other respondents familiar with cable distant signal programming. The Tribunal acknowledged the importance of such consistency, even where methodological differences are present, with respect to the Nielsen study for the 1983 proceeding: "Its stability of results over the years, and even after proposed corrections by other claimants, tends to give the Tribunal confidence that its results are reliable."(4)

SECTION II. NOTES

(1) Browne, Bortz & Coddington, Inc., Cable Operator Valuation of Distant Signal Non-network Programming, 1983, May 13, 1985; The ELRA Group, The Value of Distant Station Programming to Cable Operators, April 30, 1985; and BBDO Research Department, Cable System Operators' Attitudes Toward 1980 Distant Signal Programming as Reflected by Interviews with Multiple System Operator Executives, September 1982, and Cable System Operators' Attitudes Toward 1979 Distant Signal Programming as Reflected by Interviews with Multiple System Operator Executives and with Cable System Managers, May 1981.

(2) The wording of this and other survey questions was modified slightly for 1990 respondents. The survey instrument used in 1989 and the modified instrument used in 1990 are both included in Appendix B.

(3) Telephone interviews were completed with representatives of 198 cable systems. Eight of these system representatives did not provide responses to the programming valuation question. Additionally, three questionnaires were excluded from the final tabulation due to incorrect administration of the survey.

(4) "1983 Copyright Royalty Distribution Proceeding," Federal Register, Vol. 51, No. 72, p. 12808, April 15, 1986.

SECTION III. DISTANT SIGNAL PROGRAMMING VALUATION: SUBSCRIBER PERSPECTIVES

Survey respondents also were asked to evaluate distant signal program categories in terms of their popularity with subscribers. Results are presented below.

A. Question Design

After identifying the distant signals carried by the respondent's cable system in 1989, the interviewer asked each respondent:

2e. *What types of programming on the stations mentioned previously, other than any national network programming from ABC, CBS and NBC, do you think are most popular with your subscribers? (DO NOT READ LIST)*(1)

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 _____ *(excluding National Hockey League and Major League Baseball games and U.S. produced programs)*	*7*
Other (SPECIFY)	*8*

_____
_____
_____

Multiple responses were permitted to this question. Results from each system were accorded a statistically equal weight (see Appendix A).

B. Survey Results

Nearly three-fourths of responding cable system operators mentioned sports programming as being most popular with subscribers during 1989. The second most popular programming category, "movies," was mentioned by 45 percent of respondents, while approximately one-third identified "syndicated shows and series":

Response	Percent of Responding Systems
Live professional and college sports	73.1%
Movies	44.6
Syndicated shows and series	30.1
News and public affairs	6.4
PBS, educational and other public television	1.1
Devotional/religious programming	1.0
Canadian programming	0.2
Other (2)	5.6
Total*	162.1%

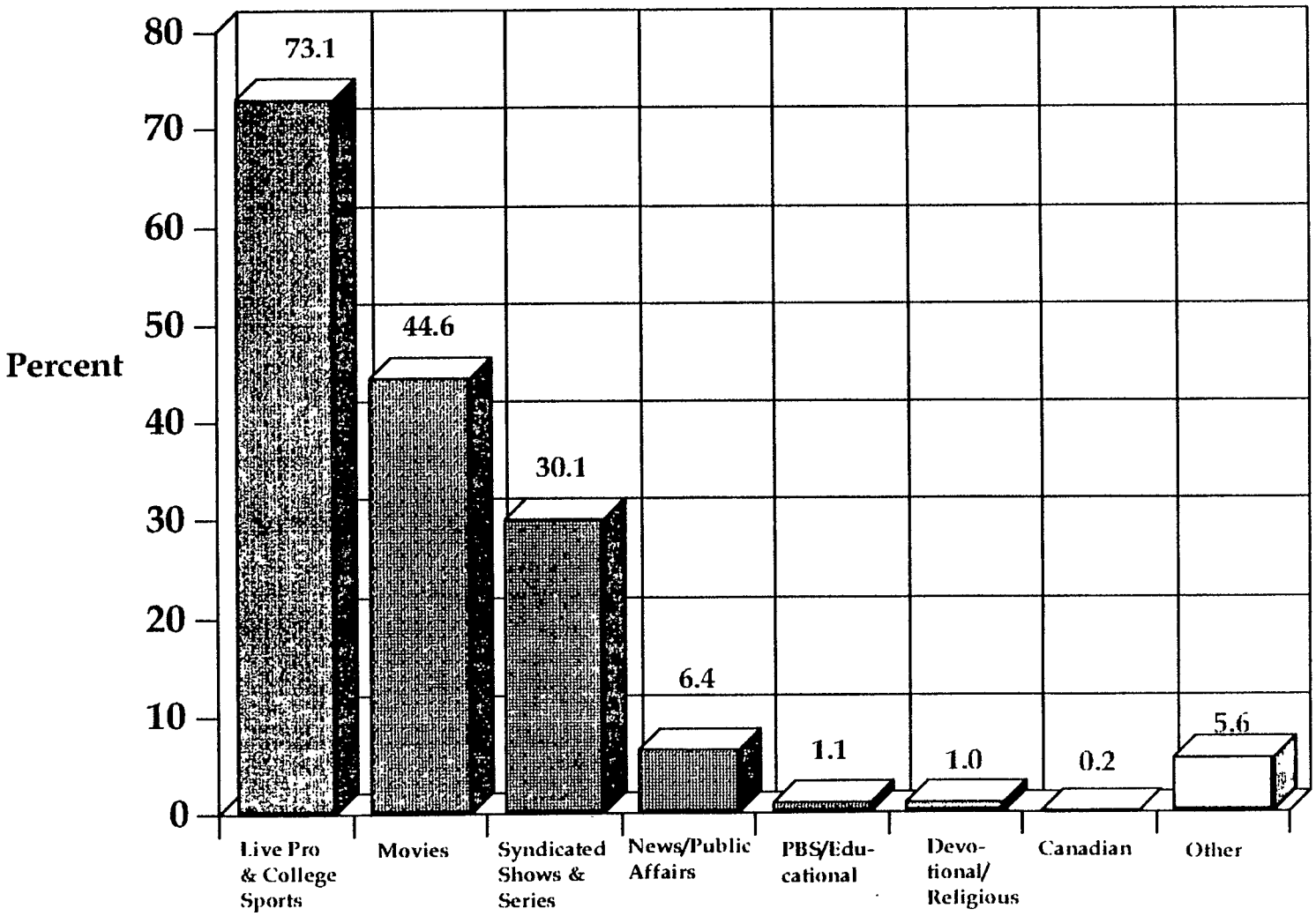
*Total exceeds 100.0 percent due to multiple responses.

Results are shown graphically on Figure III-1.

C. Comparison with Prior Studies

Similar results were obtained when this question was asked in the earlier BBC study regarding 1983 distant signal programming. In the 1983 study, 64 percent of respondents mentioned sports programming as most popular among subscribers, followed by 42 percent citing "movies" and 19 percent identifying "syndicated shows and series."

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



SECTION III. NOTES

(1) The wording of this and other survey questions was modified slightly for 1990 respondents. The survey instrument used in 1989 and the modified instrument used in 1990 are both included in Appendix B.

(2) The "other" category as recorded by the interviewers included 22 responses on 20 separate questionnaires. Eleven responses were recategorized as follows: "classic films" (1) to "movies"; "children's programming" (3), "game shows" (2), "family sitcoms" (1), "Arsenio Hall" (1), and "prime time show (e.g., Arsenio, Cheers)" (1) to "syndicated shows and series"; "ethnic on WTGI" (1) to "PBS/educational/public television"; and "French" (1) to "Canadian programming."

SECTION IV. DISTANT SIGNAL PROGRAMMING VALUATION: ADVERTISING PERSPECTIVES

Respondents were also queried regarding the use of non-network programming from distant signal stations in 1989 advertising and promotional efforts.

A. Question Design

Respondents were first asked if they utilized any distant signal programming in 1989 advertising and promotional efforts to attract or retain subscribers. The question referred directly to the distant signal stations identified in the prior question (Q. 2):(1)

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

Respondents indicating use of distant signal programming in their 1989 marketing efforts were then asked a series of follow-up questions addressing the specific types of programming utilized:

> *3b. What types of programming on these stations do you feature in your advertising? (DO NOT READ LIST)*
>
> *(FOR EACH TYPE OF PROGRAMMING NOT MENTIONED in Q. 3b, ASK:)*
>
> *3c. Do you also feature (INSERT EACH PROGRAMMING TYPE NOT MENTIONED) from these stations in your advertising and promotion to attract or retain subscribers or not?*

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.

Finally, respondents were asked which of the program types used in advertising and promotion (including those identified on either an aided or unaided basis) was most important to their marketing efforts:

> *3d. You said you use (READ ALL PROGRAMMING TYPES CHECKED IN Q. 3b OR 3c) from the stations I mentioned in 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 next most important? Which is the least important?*

B. Survey Results

1. Overall marketing use of distant signal non-network programming. Thirty-five percent of cable systems featured non-network programming from distant signal stations in their 1989 advertising and promotional efforts.

2. Types of distant signal programming utilized. Marketing utilization of distant signal programming by program type is summarized on the table below. Among systems using distant signal programming in their 1989 advertising and promotional efforts, 90 percent featured sports programming (74 percent unaided response plus 16 percent aided). "Movies" ranked second in terms of marketing usage at 73 percent (35 percent unaided; 38 percent aided), followed by "syndicated shows and series" (24 percent unaided; 21 percent aided):

	Percent of Systems Using Programming Category*		
Programming Type	Unaided	Aided	Combined
Live professional and college sports	74.4%	15.9%	90.3%
Movies	34.9	38.1	73.0
Syndicated shows and series	23.9	21.3	45.2
News and public affairs	12.6	5.1	17.6
Devotional/religious programming	0.0	4.0	4.0
PBS, educational and other public television programming	0.5	0.2	0.7
Canadian programming	0.0	0.0	0.0
Other(3)	19.5	0.0	19.5
Total**	165.8%	84.6%	250.3%

*All percentages based only on respondents using distant signal programming for advertising and promotion.
**Totals exceed 100.0 percent due to multiple responses.

3. Relative importance for marketing purposes. Finally, respondents were asked to rank the relative importance for marketing purposes of the distant signal program types used in advertising and promotional efforts (including those mentioned on both an aided and unaided basis).(2) Again, "live professional and college sports" was predominant, ranking as the most important programming type for 64 percent of systems which used distant signal programming in their subscriber advertising and promotional efforts:

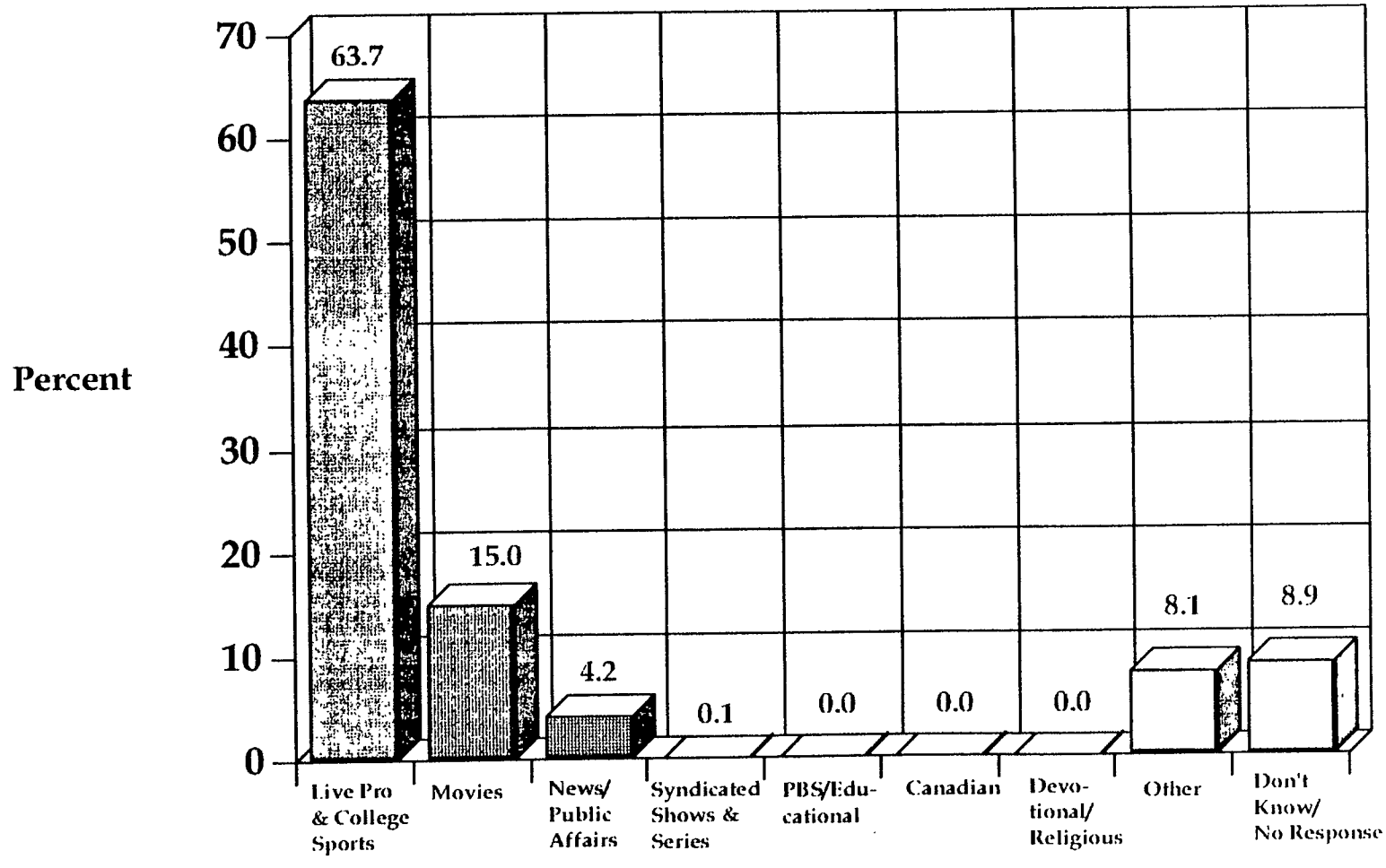
Category	Percent "Most Important"
Live professional and college sports	63.7%
Movies	15.0
News and public affairs	4.2
Syndicated shows and series	0.1
PBS, educational and other public television programming carried by ____	0.0
Devotional/religious programming	0.0
Canadian programming carried by ____	0.0
Other	8.1
Don't know/no response	8.9
Total	100.0%

The "movies" category was considered most important for marketing purposes by 15 percent of cable operators. Figure IV-1 illustrates these results.

C. Comparison with Prior Studies

BBC's 1983 study also determined that sports programming was most important from a marketing perspective among cable operators using distant signal programming in their advertising and promotional efforts. For 1983, 91 percent of operators (aided plus unaided) featured sports programming, compared with 61 percent for movies and 44 percent for syndicated shows and series. Moreover, "live professional and college sports" was again considered most important to feature in 1983 distant signal non-network marketing efforts by a strong majority of operators (63 percent), while 22 percent of respondents ranked movies as most important.

FIGURE IV-1. USE OF DISTANT SIGNAL PROGRAMMING IN CABLE ADVERTISING AND PROMOTION, MOST IMPORTANT PROGRAM TYPE, 1989



SECTION IV. NOTES

(1) The wording of this and other survey questions was modified slightly for 1990 respondents. The survey instrument used in 1989 and the modified instrument used in 1990 are both included in Appendix B.

(2) Respondents were actually asked to list the "most important," "second most important" and "least important" program types. However, many respondents used only one or two distant signal program types for marketing. As such, results for the second and least important categories cannot be meaningfully reported.

(3) The "other" category as recorded by the interviewers included 26 responses on 21 separate questionnaires. Six responses were recategorized as follows: "childrens programming" (2), "game shows" (2), and "Cousteau" (1) to "syndicated shows and series"; and "educational" (1) to "PBS/educational/public television."

APPENDIX A. METHODOLOGY

Appendix A describes the methodology used in questionnaire design, sampling and interviewing for the cable operator survey, as well as providing statistical evaluation of survey results. The survey instrument is set forth as Appendix B.

A. Questionnaire Design

The survey instrument was drafted by Bortz & Company, giving consideration to the 1983 BBC survey instrument and responding to issues raised by the Tribunal for 1983 and prior proceedings (see Section II). Drs. Wirth and Reid provided input into the questionnaire design. Data as to carriage of distant signal broadcast stations by cable operators were compiled by Bortz & Company from 1988-2 Statements of Account which were filed with the Copyright Office between January 1, 1989 and September 14, 1989.

A pilot test of the survey instrument was conducted by Bortz & Company professional staff from November 8 to December 1, 1989. A total of 23 systems were in the pilot sample frame; interviews were completed with 19.(1)

B. 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.

A stratified random sampling approach was utilized, with the stratification based on copyright royalty payments during the second half of 1988. Only Form III 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 for the second half of 1988 in $500 increments. This rule gives reasonable assurance that 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 are:

Royalty Stratum	Number of Systems	Mean Royalty	Percent of Total Royalties	Royalty Standard Deviation	Sample Size
$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	17.8	163,945	35
Total/Average	1,977	46,992	100.0%		244(2)

Upon completion of the pilot study, sample systems were randomly selected from each stratum in accordance with the sample size requirements given in the foregoing table. Systems selected for the pilot study were returned to the sample frame for inclusion in the final sample draw. As such, five pilot test questionnaires were ultimately included among the 198 final study questionnaires. Only slight differences, all designed to simplify the form from the interviewer's perspective, exist between the two survey instruments.

Random selections of systems were made by Dr. Bardwell using A Million Random Digits and 100,000 Normal Deviates, Rand Corporation, following standard procedures for use of this table. Duplicate selections were discarded.

C. Survey

Telephone surveying (after the pilot test) was completed by Burke Marketing Research, one of the largest market research firms in the United States, from their WATS facility in Cincinnati, Ohio. James M. Trautman, Vice President of Bortz & Company went to Cincinnati to personally select and train interviewers and oversee the interviewing process. Paul I. Bortz, President, participated in the training and selection process via conference telephone. Only interviewers specializing in surveying professional and managerial personnel were utilized. Mr. Trautman listened to interviews over the initial phase 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.

Surveys completed during 1990 were slightly modified to insure that respondents were thinking in terms of programming value during 1989.

Interviewing took place from December 4, 1989 to March 8, 1990. 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 each system.

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.

D. Survey Completion

Interviews were completed with 199 respondents from among the 237 cable systems included in the sample frame.(3) One questionnaire was excluded from the final tabulation due to incorrect administration of the survey. In the remaining 38 cases, the respondent either refused to be interviewed or an interview could not be completed within the survey period. The 198 interviews included in the final tabulation represent a response rate of 84 percent.

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

E. 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 set forth below.

Statistical estimation procedures for question 4:

Let h = stratum index,

p_{ih} = proportionate value of program type x estimated by sample system i in stratum h from questionnaire,

t_{ih} = total royalty of sample system i in stratum h.

T_h = total royalty of all (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 sample systems responding in stratum h,

N_h = total number of systems in stratum h,

$$T_x = \sum_{h=1}^{4} \frac{\sum_{i=1}^{n_h} x_{ih}}{\sum_{i=1}^{n_h} t_{ih}} T_h$$

= estimated total value of program type x,

$$s^2_{xh} = \sum_{1}^{n_h} x^2_{ih} - \frac{(\sum_{1}^{n_h} x_{ih})^2}{n_h} / n_h$$

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

$$s^2_{th} = \sum_{1}^{n_h} t^2_{ih} - \frac{(\sum_{1}^{n_h} t_{ih})^2}{n_h} / n_h$$

= sample variance of royalty in stratum h,

$$R_h = \frac{\sum_{1}^{n_h} x_{ih}}{\sum_{1}^{n_h} t_{ih}}$$

= ratio estimate of proportionate value of program type x for stratum h,

$$r_h = \frac{n_h \sum_1^{n_h} x_{ih} t_{ih} - \sum_1^{n_h} x_{ih} \sum_1^{n_h} t_{ih}}{n_h^2 s_{xh} s_{th}}$$ = Pearson's correlation coefficient between x_h and t_h in stratum h,

$$V(T_x) = \sum_1^4 \frac{N_h}{n_h - 1} (N_h - n_h)(s_{xh}^2 + s_{th}^2 R_h^2 - 2R_h r_h s_{xh} s_{th})$$ = variance of estimate of total value of program x.

<u>Statistical estimation for procedures for Questions 2 and 3.</u>

Let h = stratum index,

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

N_h = <u>total</u> number of systems in stratum h,

N = <u>total</u> systems in sample <u>frame</u>,

t_{xh} = total <u>number of positive answers</u> for given cell for question x in stratum h,

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

then $P_x = \sum_{h=1}^4 p_{xh} N_h / N$ = estimated proportion positive answers for given cell for question x,

$$V(P_x) = \frac{1}{N^2} \sum_{h=1}^4 \frac{N_h}{n_h - 1} (N_h - n_h) p_{xh} (1 - p_{xh})$$ = variance of estimated proportion P_x.

F. Evaluation of Survey Estimates

The 95 percent confidence intervals for the estimates included in this report are set forth below:

Question 4. Operator Programming Allocation

Category	Percent Allocation	Absolute Confidence Interval*
Live professional and college sports	34.2%	± 2.5
Movies	31.2	2.0
Syndicated shows and series	16.9	1.5
News and public affairs	11.8	1.3
Devotional/religious	4.3	0.9
PBS, educational and other public television	1.3	0.6
Canadian	0.2	0.2
Total	99.9%	

*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	73.1%	± 8.3
Movies	44.6	9.5
Syndicated shows and series	30.1	8.6
News and public affairs	6.4	4.1
PBS, educational and other public television	1.1	1.3
Devotional/religious	1.0	1.3
Canadian	0.2	0.3
Other	5.6	4.5

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

Category	Percent Allocation	Absolute Confidence Interval
Yes	34.9%	±8.9
No	65.1	
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	90.3%	± 9.4
Movies	73.0	15.3
Syndicated shows and series	45.2	17.5
News and public affairs	17.6	14.1
Devotional/religious	4.0	7.9
PBS, educational and other public television	0.7	0.6
Canadian	--	--
Other	19.5	14.5

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

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college sports	63.7%	±15.5
Movies	15.0	10.1
News and public affairs	4.2	7.9
Syndicated shows and series	0.1	0.1
PBS, educational and other public television	--	--
Devotional/religious	--	--
Canadian	--	--
Other	8.1	10.8
Don't know/no response	8.9	NA
Total	100.0%	

APPENDIX A. NOTES

(1) For the pilot test, 24 sample systems were initially drawn (six from each of the four strata). However, one system was discarded as it was determined to be a distant signal common carrier.

(2) The 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 by the Copyright Office, one which was determined to be an MMDS operation, and one which was determined to be a home satellite dish programming distributor.

(3) Ibid.

APPENDIX B. SURVEY INSTRUMENTS

SYSTEM OPERATOR PROGRAMMING QUESTIONNAIRE (1989 RESPONDENTS)

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 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 or not?

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

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

Call Letters	City	Affil

INSERT DISTANT SIGNAL CALL LETTERS, CITY AND AFFILIATE

2b. Have you discontinued carriage of these _____ broadcast stations during 1989? _____ (ASK ONLY IF YES) Which of these stations have you discontinued? (LIST CALL LETTERS BELOW)

_____
_____
_____

2c. Have you added any broadcast stations from other cities such as those mentioned above during 1989? _____ (ASK ONLY IF YES) Which stations have you added? (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 current line-up, you have indicated that you are currently carrying (READ ALL CALL LETTERS OF STATIONS IN Q.2a. -- REMOVING ANY DISCONTINUED STATIONS -- Q.2b. -- AND ADDING ANY NEW STATIONS -- Q.2c.).

2e. What types of programming on the stations mentioned above, other than any national network programming from ABC, CBS and NBC, do you think are 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 _____ (excluding National Hockey League and Major League Baseball games and U.S.-produced programs)	7
Other (SPECIFY)	8

_____
_____
_____

3a. Do you feature any programming available on the stations I mentioned, again, other than any national network programming from ABC, CBS and NBC, in your 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. Do you also feature (INSERT EACH PROGRAMMING TYPE NOT MENTIONED) from these stations in your advertising and promotion to attract or retain subscribers or not? (RECORD BELOW UNDER Q.3c, "AIDED")

3d. You said you use (READ ALL PROGRAMMING TYPES CHECKED IN Q.3b or 3c) from the stations I mentioned in 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 next most important? Which is least important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

	Q.3b. Unaided	Q.3c. Aided	Q.3d. Important Most	2nd	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.S.-produced 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 relative 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.])

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 be spent on (READ FIRST PROGRAM TYPE)? And what percentage, if any, would be spent on (READ NEXT PROGRAM TYPE)? (COMPLETE LIST IN THIS MANNER.)

Random Sequence		Percentage
( )	Movies	_____
( )	Live professional and college sports	_____
( )	Syndicated shows and series	_____
( )	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.

SYSTEM OPERATOR PROGRAMMING QUESTIONNAIRE (1990 RESPONDENTS)

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 1989 AND ARRANGE CALL BACK. IF NOT, ASK TO SPEAK WITH THE PERSON MOST FAMILIAR WITH THE PROGRAMMING CARRIED BY THE SYSTEM DURING 1989.)

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 DURING 1989. REPEAT INTRODUCTION AND Q.1.
.....		

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

Call Letters	City	Affil

INSERT DISTANT SIGNAL CALL LETTERS, CITY AND AFFILIATE

2b. Did you discontinue 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 WERE 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 _____ (excluding National Hockey League and Major League Baseball games and U.S.-produced programs)	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 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 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 was the most important to feature in subscription and retention advertising and promotion? Which was the next most important? Which was least important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

	Q.3b. Unaided	Q.3c. Aided	Q.3d. Important Most	2nd	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.S.-produced 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 relative 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, REMOVING ANY DISCONTINUED STATIONS [Q.2b.] AND ADDING ANY NEW STATIONS [Q.2c.])

Again thinking back to 1989, assume you had 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 Sequence		Percentage
( )	Movies	_____
( )	Live professional and college sports	_____
( )	Syndicated shows and series	_____
( )	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. RESUMES

PAUL I. BORTZ

EXPERIENCE:

August 1988 to present . . . 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, United Artists and the National Hockey League.

Assignments have included:

- Business plans for new cable and broadcast program services, including detailed analyses of programming economics and of cable operator demand for specific types of programming.
- Valuation and negotiation of sports cable and broadcast television contracts.
- Financial evaluation of cable, broadcast television and radio properties.
- Market research addressing consumer demand for cable television and the relative importance of various factors including pricing, programming and packaging of services.
- Analysis of international broadcast, cable and programming opportunities.

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

- Capital Cities/ABC, Inc.
- Citibank, N.A.
- Continental Cablevision
- Daniels & Associates
- ESPN, Inc.
- JCPenney Company, Inc.
- Lifetime
- National Association of Broadcasters
- National Cable Television Association
- Public Broadcasting Service (PBS)
- United Artists Cable

Sports rights valuations (radio, television, cable) and assistance in developing sports television policies have been provided for clients including:

- *Nationally:*

- National Basketball Association (NBA)
- National Hockey League (NHL)
- Major League Baseball (MLB)

❑ *Major League Baseball* franchises and a franchise applicant:

- Milwaukee Brewers
- Miami applicant (Huizenga Holdings)
- New York Yankees
- St. Louis Cardinals
- Texas Rangers

❑ *Most NBA* franchises including:

- Boston Celtics
- Chicago Bulls
- Dallas Mavericks
- Golden State Warriors
- Los Angeles Clippers
- Milwaukee Bucks
- Milwaukee Brewers
- Minnesota Timberwolves
- San Antonio Spurs

1979 to July 1988 . . . 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.

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

1969 to 1978 . . . 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.

1961 to 1969 . . . 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 Forbes, Broadcasting, CableVision, and Denver Business 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.

RESUME OF EDUCATION AND EXPERIENCE
GEORGE E. BARDWELL

Education

- B.S., Electrical Engineering, University of Colorado, 1944
- Certificate, Officer Training, Naval Electronics, Bowdoin College, Maine, 1945
- Certificate, Officer Training, Naval Radar, Massachusetts Institute of Technology, Boston, 1945
- M.S., Business Management, University of Colorado, 1949
- PhD, Mathematics, University of Colorado, 1961
- Postdoctoral Fellow, Alfred Sloan Foundation, Bowdoin College, 1966

Employment and Service

- U.S. Navy, 1943-1947 (Ensign)
- Electronic Research Engineer, Philadelphia Navy Yard, 1946-1947
- Instructor, University of Colorado, 1948
- Research Associate, Bureau of Business & Social Research, 1949-1960
- Mathematical Statistician, U.S. Bureau of Census, Preparation as I.C.A. Sampling Advisor to Government of Pakistan, 1957 (on leave)
- Associate Professor, Department of Statistics and Research, University of Denver, 1961; Chairman, 1962-1963
- Joint Associate Professor, Department of Statistics and Research and Department of Mathematics, 1963; also Assistant Director, Computing Laboratories, Denver Research Institute, 1963
- Vice President, Medical Data Corporation, 1968-1970
- Professor, Mathematics and Statistics, University of Denver, 1971 to date
- Labor Arbitrator, 1962 to date

Research Activity (Complete list available on request)

Studies of health, housing, demographic characteristics of populations, school enrollment, land utilization, marketing; program evaluation, development of computerized record systems, mathematical analysis of management and engineering problems, probability sample design.

Consulting Activity (List available on request)

Consultant to various governmental agencies and commissions, private industries, legal and accounting firms including extensive experience in litigation.

Publications (List available on request)

Since 1972, over 250 labor arbitration decisions have been written including awards published in Labor Arbitration Awards, Commerce Clearing House, cf: 76-1, ARB ¶ 8167, 1975; 80-2 ARB ¶ 5080, 1979; 80-2 ARB ¶ 8338, 1980.

Over this same period, written reports and testimony have been prepared for and presented in over 100 appearances before U.S. Postal Commission, Interstate Commerce Commission, legislative bodies and district courts in a number of states, cf: ICC Finance Dockets 22688, et al.; 25103 et al.; 28799 et al.; 30000 et al.; 37374 et al.; 37865 et al.; 30400 et al.; Certain Statistical Aspects of UCRS, R.L. Hines & Associates, 1983; Indianapolis Airport Authority v. APCOA, 1977-79; Missouri Pacific & UP Railroads v. Department of Local Affairs, State of Colorado, 82-C-1445, 1983-84; statistical monitoring of consent decree in G.L. v. Zumwalt, 564 F. Supp. 1930, 1983.

Honors and Memberships

- Omicron Delta Kappa, Eta Kappa Nu, Tau Beta Pi, Sigma Xi
- American Men of Science
- American Statistical Association (District 9 Representative, 1965-1966); Editorial Collaborator, Journal American Statistical Association, 1965, 1966, 1969.
- Federal Mediation and Conciliation Service Arbitration Panel, 1966 to date
- American Arbitration Association panel, 1967 to date
- Man of Year Award, Park Hill Action Community and Temple Buell College, 1969
- Distinguished Teaching Award, University of Denver, 1970
- Special Recognition Award, American Civil Liberties Union, 1971
- National Academy of Arbitrators, 1975 to date; Regional President, 1983

RESUME OF EDUCATION AND EXPERIENCE
MICHAEL O. WIRTH

Education

- B.S., Agricultural Honors/Agricultural Journalism, University of Nebraska, Lincoln, 1973, with High Distinction
- M.A., Television and Radio, Michigan State University, East Lansing, 1974
- PhD, Mass Media, Michigan State University, East Lansing, 1977. Dissertation: The Effects of Crossmedia Ownership on Television and Newspaper Prices.

Employment

- Professor/Chairperson, University of Denver, Department of Mass Communications; and Adjunct Professor of Law, University of Denver College of Law, 1987-present
- Associate Professor/Chairperson, University of Denver, Department of Mass Communications; and Adjunct Professor of Law, University of Denver College of Law, 1985-1987
- Associate Professor, University of Denver, Department of Mass Communications; and Adjunct Professor of Law, University of Denver College of Law, 1983-1985
- Assistant Professor, University of Denver, Department of Mass Communications; and Adjunct Professor of Law, University of Denver College of Law, 1977-1983
- Research Assistant/NSF/MSU/Rockford Cable Project, Michigan State University, Department of Telecommunications, 1976-77; and Teaching Assistant, 1973-76
- Technical Writing Assistant, Michigan State University, Department of Information Services, Summer 1974
- Undergraduate Student Assistant, University of Nebraska-Lincoln, Department of Agricultural Communications, 1969-73

Research, Publications, and Consulting Activity

A nationally known expert in the areas of applied telecommunications economics, business, policy and management, Dr. Wirth has conducted research under grants from a number of organizations, including the National Science Foundation.

Dr. Wirth has published numerous scholarly articles and essays which have applied in such periodicals as Journal of Economics and Business, Telecommunications Policy, Quarterly Review of Economics and Business, Information Economics and Policy, The Denver Law Journal, Journal of Broadcasting and Electronic Media, Journal of Media Economics and in scholarly books. Dr. Wirth is a member of the Editorial Boards of the Journal of Broadcasting and Electronic Media and of the Journal of Media Economics.

Dr. Wirth has also done extensive consulting work for such organizations as Capital Cities/ABC; American Television and Communications Corporation; Bortz & Company, Inc.; Arts & Entertainment Network; Knight-Ridder Broadcasting, Inc.; Landmark Communications, Inc.; the National Association of Broadcasters; and the National Basketball Association.

Memberships

- Broadcast Education Association
- Association for Education in Journalism
- Law and Society Association
- Southern Economic Association
- International Communication Association

Robert J. Wussler
President and Chief
Executive Officer

COMSAT

COMSAT
Video Enterprises

Communications
Satellite Corporation
22300 Comsat Drive
Clarksburg, MD 20871
Telephone 301-428-7373
Fax 301-353-0274

Testimony of Robert J. Wussler
President and Chief Executive Officer
COMSAT Video Enterprises, Inc.

1. Qualifications

Since September 1989 I have been President and Chief Executive Officer of COMSAT Video Enterprises, Inc. (CVE), a wholly-owned subsidiary of the Communications Satellite Corporation (COMSAT). CVE is the largest provider of satellite-delivered entertainment services to the U.S. lodging industry, and is engaged in sports and entertainment program acquisition, broadcast services, High Definition Television and Direct Broadcast Satellite development.

Prior to joining CVE, I served as Executive Vice President of Turner Broadcasting System, Inc. (Turner Broadcasting) from 1980 to 1987 and Senior Executive Vice President from 1987 to 1989. I also was a member of the Turner Broadcasting Board of Directors and executive committee, and held the position of President of Superstation WTBS.

Turner Broadcasting is a diversified entertainment company which owns and operates four programming services delivered to cable systems, home satellite dish owners and SMATV systems via satellite: (1) the Superstation WTBS, which is and has been for several years the most widely-carried distant signal; (2) the Cable News Network (CNN); (3) Headline News; and (4) Turner Network Television (TNT). Turner Broadcasting also is engaged in the business of syndicating feature films and television programming. Included within its library are more than 3,700 feature-length motion pictures (obtained as a result of Turner Broadcasting's acquisition of MGM/UA Entertainment Company in 1986), as well as a number of cartoon episodes, short subjects, television series and made-for-television movies. In addition, Turner Broadcasting owns the Atlanta Braves major league baseball club, and holds a limited partnership interest in the Atlanta Hawks professional basketball team.

During my tenure with Turner Broadcasting, I was involved in virtually every aspect of WTBS' daily operation, including the development and acquisition of programming for WTBS and the marketing of the superstation to cable operators. My responsibilities also required me to be generally familiar with the operations of other program services with which WTBS competed (such as other cable networks and superstations), as well as the cable television, broadcast, sports and syndication industries.

I spent 21 years with CBS, starting in the mail room and eventually becoming President of CBS Television Network and CBS Sports. I also have been active in several industry organizations. For example, I have served as Chairman of the Board of the National Academy of Television Arts and Sciences; Secretary to the Board of Governors of the National Cable Television Association (NCTA); Chairman of the NCTA National Satellite Network Committee; and Chairman of the NCTA Programming Conference. In addition, I have been a member of the Board of Governors of the National Academy of Cable Programming; the Board of Advisors of the Cable Television Public Affairs Association; and the Executive Committee of the Cable Television Advertising Bureau.

I received the NCTA President's Award in 1983 and Associate's Award in 1986. I also have received five Emmy Awards, four Awards for Cable Excellence and two international sports awards.

2. Opinion Concerning Distant Signal Program Values

The Joint Sports Claimants (Major League Baseball, National Basketball Association, National Hockey League and National Collegiate Athletic Association) have asked that I offer the Tribunal my opinion concerning the relative value of the non-network sports and syndicated programming on WTBS and other distant signals carried by cable in 1989.

I am aware that in the cable royalty distribution proceedings for 1978 through 1983, the copyright owners of syndicated movies, series and shows received from the Tribunal approximately 70 percent of the cable royalty funds. I also am aware that the copyright owners of live professional and college sports programming received less than one-quarter of the syndicators' award, or approximately 15-17 percent. I am advised that these awards were tied largely to the amount of distant cable "viewing" generated by each program category (that is, the number of hours that each program aired multiplied by the average number of cable households watching that program).

It is my opinion that the Tribunal's awards in the 1978-83 proceedings do not reflect the relative values that the cable industry placed upon distant signal non-network sports programming, movies, series and shows during those years. In my opinion, the Tribunal's past awards undercompensated the owners of live sports programs and overcompensated the suppliers of syndicated programs, based upon the comparative worth of these programs to the cable industry. I believe that, for the year 1989, the sports interest are entitled to a share of cable royalties which more closely approximates the share allocated to syndicators -- again, based on the comparative worth of these programs to the cable industry.

3. Discussion

There are several factors which help explain the importance that the cable industry has attached to live sports programming -- its uniqueness and originality; the fact that it is truly first-run; its relatively limited availability; its topical nature; its promotability; the loyalty of its followers. Because of these

factors, live sports programs are critically important to the cable industry's principal objective -- convincing consumers to subscribe to, and to continue paying $15 to $30 per month for, cable service. They are more important than syndicated movies and programs which typically do not appear on distant signals until after having had multiple runs in other media.

It is, of course, difficult to quantify these factors and to accord relative dollar values to the different types of non-network programs on distant signals. However, based on my experience in programming WTBS and marketing the superstation to cable operators, I believe that sports programming has a relative value significantly greater than that reflected in "viewing" data or past Tribunal awards.

The marketplace value of a program package can be seen in the amounts paid to acquire that programming from independent sources. The level of licensing fees may be quite different than the amount of "viewing" which the program generates.

For example, in December 1989 Turner Broadcasting agreed to pay Columbia Pictures Television approximately $10 million for the rights to televise 1,000 feature films during the years 1990-98 on WTBS and TNT. This was the largest movie package ever licensed from a single Hollywood studio in the history of basic cable. The package, which included many popular titles such as "Kramer vs. Kramer," "The Big Chill," "Tootsie," and "To Sir With Love," will give Turner some 14,000 thousand hours of programming over a nine-year period (assuming 7 runs per title).

At approximately the same time that it closed the Columbia deal, Turner Broadcasting agreed to pay the NBA a total of $275 million for the rights to televise up to 320 NBA games (about 800 hours) during 1990-94 on TNT. In other words, the amounts that Turner Broadcasting pays to televise the NBA games will be nearly 30 times greater than the amounts paid to televise the Columbia movie package -- even though that movie package will likely generate much greater "viewing" over the run of the contract.

It might be noted that much of the programming on WTBS in 1989 consisted of older off-network shows such as the "Beverly Hillbillies," "Gilligan's Island," "Brady Bunch," "Andy Griffith," "Leave It To Beaver," "Perry Mason," "Sanford & Son" and "Bewitched." Programs such as these, although they were popular and likely generated significant "viewing," were relatively inexpensive to obtain.

Consider also the amounts that WTBS received from the sale of advertising on sports programming. Major sports programming (Braves baseball, NBA basketball and SEC football) generated a significant portion of WTBS' total ad revenues in 1989, even though it accounted for a relatively small amount of broadcast time. Even those revenues did not reflect the full value of sports programming to WTBS.

For example, it does not take into account the significant promotional value of the sports programming. In 1989, a significant amount of WTBS'

advertising expenditures and promotion opportunities (including those on its sister networks of TNT, CNN and Headline News) related to Braves baseball, NBA basketball and SEC college football.

The reason for the emphasis on sports is easy to understand. A principal goal of WTBS is to gain access to as many cable systems as possible. We were, of course, quite successful in doing this; by 1989, WTBS reached some 93 percent of the nation's cable households. The sports programming on WTBS was and remains a key ingredient in convincing cable operators to carry the superstation. Indeed, Ted Turner recognized early on that sports programming would be key to the success of WTBS as a superstation, and thus he purchased the Braves shortly after acquiring WTBS in 1970. (Other superstation interests have recognized the same, e.g., Tribune (WGN/Cubs) and Gaylord (KTVT/Rangers)). Turner's ownership of the Braves assures WTBS of an important block of programming. It also ensures that this programming is available at a cost considerably less than outside licensing.

Testimony of Roger L. Werner, Jr.
President and Chief Executive Officer
Prime Sports Ventures, Inc.

Qualifications

I am President and Chief Executive Officer of Prime Sports Ventures, Inc., which with TCI (the nation's largest cable MSO), and Group W/Westinghouse Broadcasting Co. owns five regional sports networks and Prime Network, a national sports service. Prime Network provides professional, collegiate and amateur sports programming to many regional sports networks (such as Home Team Sports, Prime Ticket and Madison Square Garden Network), which collectively serve more than 22 million cable subscribers throughout the United States.

Before joining Prime Sports Ventures in September of 1990, I was President, Chief Executive Officer and a member of the Board of Directors of ESPN, Inc. a 24-hour sports programming channel delivered via satellite to cable operators and other non-broadcast distribution systems. ESPN now reaches in excess of 56 million cable subscribers, more than any other cable network. My involvement with ESPN began in 1980, when I was a consultant with McKinsey and Company working on the development of ESPN's original business plan. During the years 1981 through 1988, I held various positions with ESPN, including Executive Vice President and Chief Operating Officer. I was appointed President and CEO of ESPN in August 1988 after spending a brief period with ESPN's parent company as Executive Vice President of the ABC Television Network Group. As part of my responsibilities at Prime Sports Ventures, ESPN and ABC, I have had considerable involvement in the acquisition of various types of sports and entertainment programming for delivery to the cable industry, including Major League Baseball, NBA Basketball, NHL Hockey, college basketball and college football. I also have been directly involved in the marketing of that programming to the cable industry. I am thus knowledgeable about the value that cable operators, advertisers and cable networks place on different types of programming. I have made numerous business-related decisions with significant economic consequences based upon that knowledge.

While at Prime Sports and ESPN, I have had a substantial amount of contact with cable operators. I was elected to serve on the Board of Governors of the National Academy of Cable Programming effective January 1988. In May 1989, I was elected to serve on the National Cable Television Association Board of Directors. In 1987, I was presented the Cable Advertising Bureau President's Award for Outstanding Service to the Cable Industry.

Purpose of Testimony

I understand that the purpose of this proceeding is to divide the 1989 cable television compulsory licensing royalties among the copyright owners of programming carried on superstations and other distant signals. I have been advised that, in past proceedings, the Tribunal used "viewing" data as the principal basis for determining the relative values of this programming, and thus the amounts to be allocated each of the copyright owner groups. It has been explained to me that, for purposes of these proceedings, "viewing " refers to 1) the average number of cable households that watch a distant signal program during a quarter hour multiplied by 2) the total number of quarter hours that program was broadcast.

I have been asked by the Joint Sports Claimants (Major League Baseball, the NBA, the NHL and NCAA) to present my opinion concerning the relationship between "viewing" and the value that the cable industry attaches to programming.

Program "Viewing" vs. Program Value

I will consider the issue first from the standpoint of a cable network, such as ESPN which seeks to maximize the total revenues it generates from cable system subscriber fees and advertising revenues. ESPN's revenues are nearly equally split between subscription fees and advertising sales. Because audience-related data are important to advertisers such data also are important to ESPN in determining the value of particular programming. However, the amounts that ESPN pays for its programming are not reflected in "viewing" data. For example, based on information supplied to me by the Office of the Commissioner of Baseball, I understand that Baseball's telecasts on ESPN represented a less than a 15 percent share of the total "viewing" generated by ESPN programming in 1990. The payments made by ESPN for those telecasts (rights fees plus production costs) amount to more than 30 percent of ESPN's total 1990 program budget (i.e., the expense incurred by ESPN for the telecast of all its 1990 programming).

The reason "viewing" does not equate with value is that "viewing" considers only size of audience and number of hours broadcast. Thus, it fails to account for several factors that determine the value of a program to ESPN, its advertisers and, most importantly, its cable system carriers such as: 1. audience demographics (age, sex, income) and their impact on a cable operator's local ad-sales effort; 2. The importance of uniqueness or exclusivity to a program's perceived value (live sports events, unlike feature films or off-network TV shows, are not simultaneously available on competing networks, on video cassettes or in theaters); 3. The blue-chip brand image's of established sports which help promote cable generally, and help attract new subscribers to the medium.

In my opinion, "viewing" is even less useful in measuring the value to cable operators of programming on superstations and other distant signals. Cable operators do not sell advertising time on distant signals and thus they have little concern about the size of the audience generated by distant signal programming nationally or locally. Their sole concern is with attracting and retaining paying subscribers. Programs that generate large "viewing" numbers are not necessarily the same ones that attract and retain subscription purchase decision makers.

For example, in 1989 USA Network (which consisted primarily of movies and syndicated programs) delivered audiences that, on average, were some 20 to 25 percent larger than those delivered by ESPN (7 A.M. to 1 A. M.). Nevertheless, according to a 1989 survey of cable operators conducted by Myers Marketing & Research, the cable industry ranked ESPN as the most important basic cable network in terms of its ability to attract and to retain subscribers. Furthermore, cable operators paid almost twice as much to carry ESPN as they paid to carry USA Network. ESPN charged cable systems a carriage fee of some 32 cents per subscriber per month in 1989. (The ESPN fee was up from only 4 cents in 1979.) USA Network's fee, on the other hand, was 18 cents per subscriber per month. Although ESPN has the highest affiliate fee of any basic cable network, more cable systems (with more subscribers) are affiliated with ESPN than with any other basic cable network.

ESPN's significant growth and acceptance by the cable industry during the 1980's mirrors the growth in popularity of the major televised sports in that period -- a fact which is also reflected in the escalation of sports rights fees (witness, for example the $400 million deal between Baseball as ESPN concluded in 1989). In summary, sports programming is generally most important to those persons who are principally responsible for deciding whether to subscribe or to continue subscribing to cable. The intensity and economic importance of this loyalty is not apparent in "viewing" numbers which are primarily a function of the large volume of available entertainment programming hours.

TESTIMONY OF ROBERT W. CRANDALL, Ph.D.
SENIOR FELLOW, THE BROOKINGS INSTITUTION

August 1991

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I. QUALIFICATIONS

Since 1978, I have been a Senior Fellow in Economic Studies at the Brookings Institution. My participation in this proceeding, however, is as a private consultant to the Joint Sports Claimants, not as an employee of the Brookings Institution. My views should not be taken to reflect those of the Brookings Institution, its staff, or its trustees.

From 1966 through 1974, I was on the faculty of the Massachusetts Institute of Technology, serving as Assistant Professor and Associate Professor of Economics. For the next year, I served on the staff of Commissioner Glen Robinson of the Federal Communications Commission. From late 1975 through January 1978, I was with the Council on Wage and Price Stability in the Executive Office of the President, where I served as Assistant Director, Deputy Director, and Acting Director.

I have served as a consultant to several government agencies and participated in a variety of government advisory panels. In 1967-68, I was a consultant to the Justice Department on a variety of network television and motion picture issues. In 1978-79, I served as a consultant to the Federal Communications Commission on

the deregulation of signal carriage rules for cable television. I have also served as a consultant to several clients on matters relating to copyright and product licensing issues -- including the National Cable Television Association, the three major television broadcast networks, and other cable and broadcast industry clients.

My research has focused on a number of regulatory issues affecting a variety of industries. I have published books and articles on the steel industry, the telephone industry, the automobile industry, health-safety-environmental regulation, broadcast regulation, and cable television regulation. In 1971 and 1972 I published articles on the financial-interest/syndication rules in The Journal of Law and Economics and the Bell Journal of Economics. In 1974, I coauthored an article on cable television profitability that also was published in the Bell Journal of Economics, and I published another article on cable television profitability in The Journal of Business. In 1974, I also published an article on the economics of network television in Public Policy. In 1978, I published an article on the economic effect of television broadcast regulation in Regulation. In 1981, Stanley Besen and I coauthored a paper on cable television regulation that was published in Law and Contemporary Problems. In 1990, I conducted a number of empirical studies of the cable television industry that were submitted in various FCC proceedings on behalf of TCI and are being incorporated into a chapter in Bruce Owen and Steven Wildman, Video Economics to be published by Harvard University Press in 1992.

A copy of my curriculum vitae is attached.

II. INTRODUCTION

I have been retained by the Joint Sports Claimants to express my views on the criticisms of the 1983 Browne, Bortz & Coddington (BBC) study raised by Dr. Stanley Besen on behalf of MPAA during the Tribunal's 1983 proceeding. I have also been asked to evaluate, in light of those criticisms, the 1989 study by Bortz and the study of distant-signal viewing presented by the MPAA in the 1983 proceeding.

A. The BBC and Bortz Studies. In the 1983 proceeding, the Joint Sports Claimants submitted a constant sum study by BBC that reflected the results of a survey of cable operators. This survey was designed to elicit directly from cable operators their comparative valuation of various programming types on the distant broadcast signals imported for retransmission on their systems in 1983. The BBC study showed that cable operators allocated 36.1 percent of the value of the programming they received on these signals to live professional and collegiate sports, 30.2 percent to movies, 18.6 percent to syndicated series, 12.1 percent to news and public affairs programming, and 3.1 percent to public-television programming. Similar results were obtained in the 1989 survey and reported in the Bortz study.

B. The MPAA Viewing Study. The results of the BBC survey contrasted with the results of a study of cable viewing submitted by the MPAA in the 1983 proceeding. This study used A.C. Nielsen data on the size of the audience generated by various program types on distant signals imported by cable systems throughout the country. Viewing was defined as the number of distant cable households watching each program type multiplied by the number of hours of that programming type. The study tabulated in this manner the total number of household hours of viewing of each program category on 117 imported distant signals during each of four Nielsen sweep periods. This MPAA Viewing study concluded that approximately 80 percent of the hours of distant-signal viewing by cable households was represented by the viewing of movies and syndicated series, 10.75 percent by viewing of sports, and under 10 percent by viewing of all other program types.

C. Criticisms of the BBC Study. Dr. Stanley Besen testified in the 1983 proceeding that the BBC study did not provide an adequate framework for estimating the "marketplace value" of the various program types. Besen criticized the BBC study for two reasons. First, the cable operator survey responses reflected allocations of total program values, but he contended that the appropriate measure of market value is the marginal contribution of each program to the value of the cable system's offering. Second, the BBC cable operators' study did not account for market

supply effects, particularly those related to the fractionalization of audiences caused by distant-signal importation.

In its 1983 decision, the Tribunal agreed with Besen's criticism. The Notice of Final Determination stated at FR 12809:

> " We agree with Dr. Besen's criticism of attitudinal surveys that asking cable operators and/or subscribers to [evaluate] programs does not take supply into account, so that all we are measuring is the benefit side of the equation, not marketplace value. We also agree with Dr. Besen's belief that the respondents were probably basing their responses on the total value of these programs to them, and not the marginal value of the programs to them on distant broadcast signals."

In the same Final Determination at FR 12811, the Tribunal recognized that the supply effects are more likely to impact the Joint Sports Claimants than other programming interests:

> " We note, however, that Dr. Besen's view about the critical role supply plays in the marketplace equation probably affects sports more than most claimant groups. The attitudinal surveys do not ask operators or subscribers to take into account the limit on the supply of major league and college

> games, so that we believe the respondents, free from that consideration, express a desire for more sports programming than available. The Nielsen data, which is made up of the actual supply of sports programs, and the actual viewing behavior, continues to provide a ballast for what might be a higher consideration for sports."

Partly because of Besen's criticisms, the Tribunal gave greater weight in its 1983 Final Determination to the MPAA viewing study than to the BBC cable-operator valuation study.

III. SUMMARY OF CONCLUSIONS

The Bortz survey provides information that an economist would consider useful in assessing the relative value of distant-signal programming categories. It measures the relative "total value" of each type of programming. Total value is related to marginal value by the price sensitivity or "elasticity" of cable operator demand for each program type. If the price sensitivity of cable operators' demand for distant-signal programming is the same for all programming types, the relative total values will be equal to the relative marginal values of these programming categories. I am unaware of any evidence suggesting that the price sensitivity of cable operator demand for programming varies across program types. Therefore, I believe that the Bortz study provides the best

available measure of relative marketplace values of the distant signal program categories.

Furthermore, and regardless of the relative elasticities of cable operator demand for programming, the Bortz study's estimates of total value are a valid measure of marketplace value if the cable operator is faced with an all-or-nothing choice for each program type. In other words, if each "Phase I" group of program suppliers were allowed to bargain collectively with cable operators, the maximum license fees each could obtain from the cable industry would be equal to the total value of each program type (as reflected in the Bortz study).

In contrast, the MPAA viewing study conveys no information that is relevant to the estimation of either total or marginal value of program types. It simply looks at audiences and the quantity of programs broadcast. Such viewing data are not a measure of marketplace value.

I agree with Besen that the effects of supply on marketplace value were not measured in the BBC operator survey. However, the MPAA viewing study also ignores supply effects. Moreover, Besen presented no evidence that the supply effects are more important for movies or syndicated programming than for sports. In fact, I believe that these supply effects are likely to be more important for sports than for movies and syndicated series because the loss of exclusivity in the initial exhibition of a sports event cannot be recaptured in frequent reruns of the event. I therefore believe that any consideration of supply effects would not reduce the value

of sports vis-a-vis movies and syndicated programs (as reflected in the Bortz study).

In sum, I do not believe that there is any proper basis on which an economist would accord greater weight to the MPAA viewing study than to the Bortz study as a measure of marketplace value. The MPAA viewing study is in fact vulnerable to the very criticisms raised by Besen in the 1983 proceeding. Moreover, the Bortz study (unlike the MPAA viewing study) does provide useful information about relative values of the various program types.

IV. DISCUSSION OF CONCLUSIONS.

The compulsory copyright license for imported distant signals was imposed by Congress as a substitute for direct bargaining between cable systems and individual copyright owners over a very large number of programs that could be retransmitted by cable systems. I agree with Besen that the allocation of the royalties collected from cable systems should reflect the Tribunal's judgment of how a market would distribute the royalties in the absence of a compulsory license. Under traditional economic theory, this requires an analysis of the demand by cable sytems for, and the supply by copyright owners of, various program types to cable systems.

A. Demand

1. The Concepts of Marginal Value and Total Value. A cable system obtains its revenues from basic cable subscriber fees, premium service subscriber fees, pay-per-view fees, and advertising. Imported distant broadcast signals may be offered on either a basic tier or an enhanced basic tier of service, but they are not generally offered as premium (pay) services nor in pay-per-view format. Moreover, cable systems do not offer their own advertising spots on imported distant broadcast signals.

The value of an imported distant program to a cable operator, therefore, must be measured in terms of the additional or "marginal" subscriber revenues it generates less any costs of importing that program. In a free market, absent compulsory licensing, each cable operator would be willing to pay each program's copyright owner an amount not exceeding this marginal contribution to net subscriber revenues. The sum of these marginal values across all imported programs would then equal the total amount that a cable operator would be willing to pay for all distant signals.

It should be noted that these marginal program values are related to the total value of all such programs. In his testimony in the 1983 proceeding, Besen used a numerical example to demonstrate that the total value of all "entertainment" or "informational" programs scheduled by a cable operator is not simply the marginal value of each type multiplied by the number of

programs carried because the marginal value of an hour of any program type to the cable operator declines as he increases the number such programs that he carries. However, as Besen noted, the total value of such programming is equal to the sum of the marginal values of all such programming. A simple graphical exposition of Besen's point will assist in understanding its relevance.

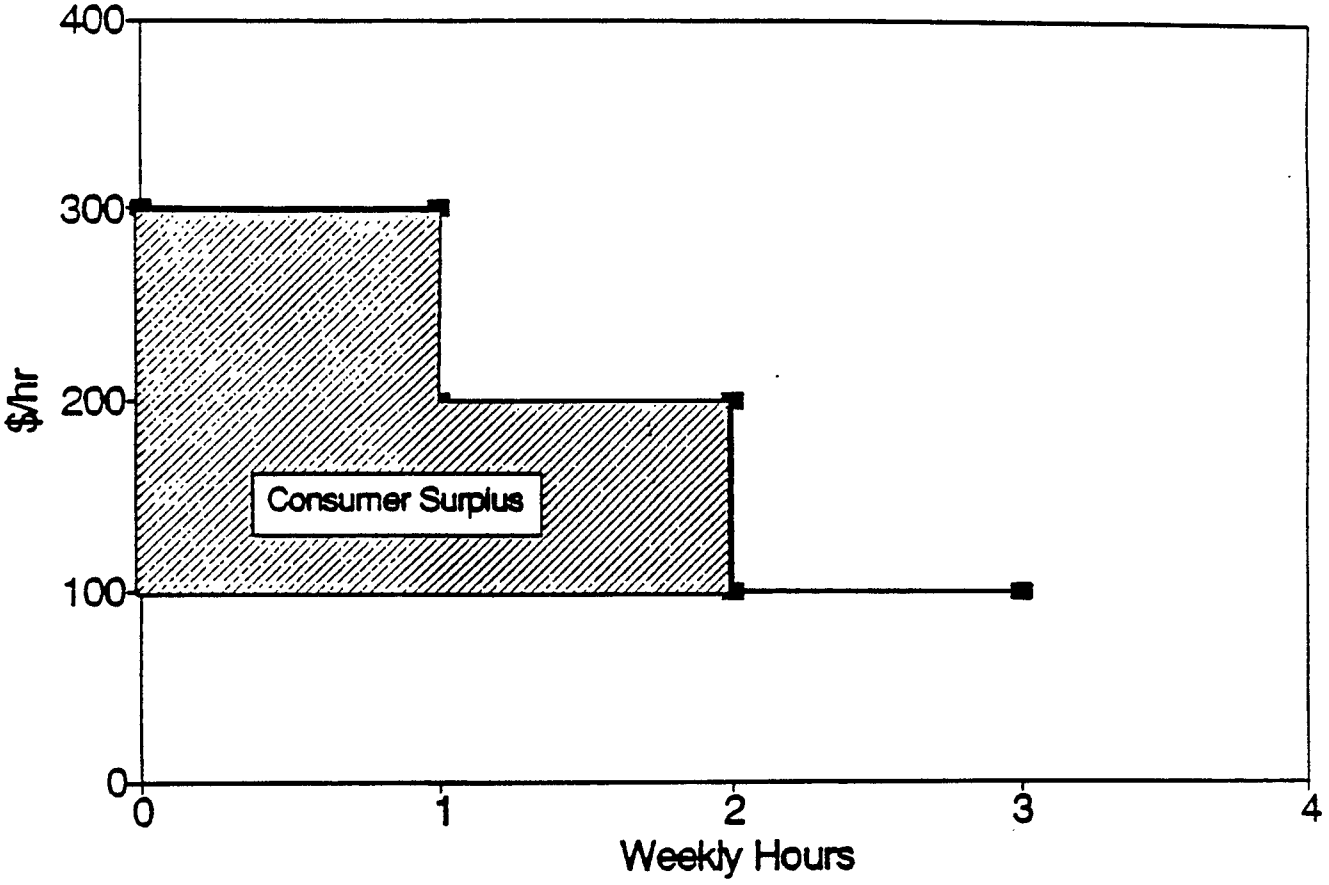
In the attached Figure 1, the downward-sloping line reflects a hypothetical example of the relationship between the marginal value of weekly "sports" program hours to a cable operator and the number of hours of sports carried by the cable system per week. This "demand curve", in the economist's parlance, provides a representation of how much sports the operator will schedule at various market prices for an hour of sports programming. In Figure 1, the demand curve is shown as a stair-stepped line because in this hypothetical case I assume that sports programs can only be bought in one-hour segments. It is downward sloping because I have invoked the usual assumption that the marginal value of additional hours of sports (or any other program type) declines as more and more of it is exhibited.

For instance, Figure 1 shows that at a price of $300 per hour, the cable operator will accept only one hour per week. If the price falls to $200 per hour, he takes two hours of sports per week and pays the copyright owners $400 ; if it falls to $100, he takes three hours per week and pays $300 to the copyright owners.

The marginal value of the third hour of sports in Figure 1 is $100, and if the price is $100 per hour, the cable operator pays

Figure 1

Cable Operator's Demand
for Sports Programs

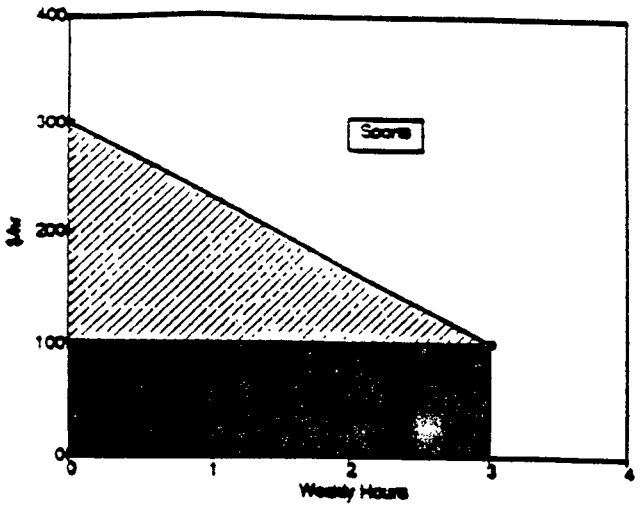


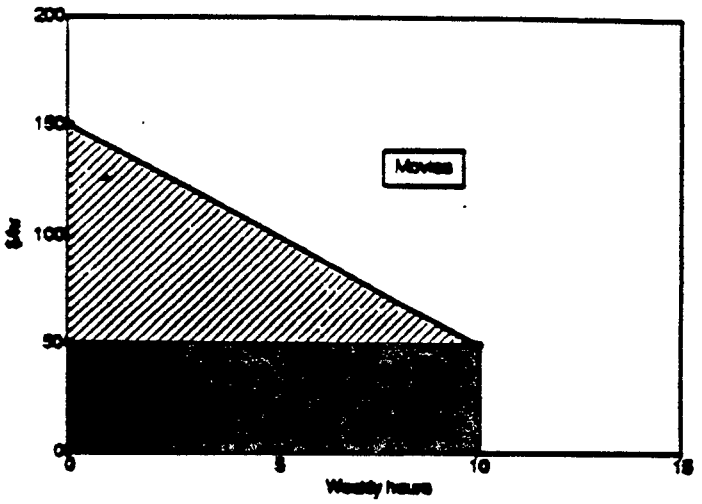
$300 for three hours of sports per week. However, the total value of sports to the operator is equal to $300 for the first hour plus $200 for the second hour plus $100 for the third hour, or $600 in total for three hours per week. If a single copyright owner controlled all sports available to the cable operator, he could demand and get $600 from the cable operator for the three hours per week. Thus, marginal value and total value are quite directly related. The $300 by which total value exceeds the total copyright payments for three hours at $100 per hour is referred to as "consumers' surplus" and is shown in Figure 1 by the area under the demand curve above the $100 price. Consumers' surplus is the amount that consumers (in this case, the cable operators) would be willing to pay over and above the marketplace value if they were confronted with an all-or-nothing choice for the programs.

It is a simple matter to repeat this analysis for the cable operator's decision across three program types -- sports, movies, and syndicated series -- as in Figure 2. In this example, I assume that programs can be bought in any length desired; hence, the demand curves are smooth lines.

In the hypothetical case shown in Figure 2, sports programs are priced in the market at $100 per hour; movies at $50 per hour; and syndicated series (reruns) at $10 per hour. The cable operator chooses three hours of sports, ten hours of movies, and twenty hours of syndicated series. His total program payments equal $1000 per month, of which 30 percent ($300) represents the relative marketplace value of sports, 50 percent ($500) represents the

FIGURE 2:
Total Value and Marginal Value of Different Program Types Imported by Cable Operators





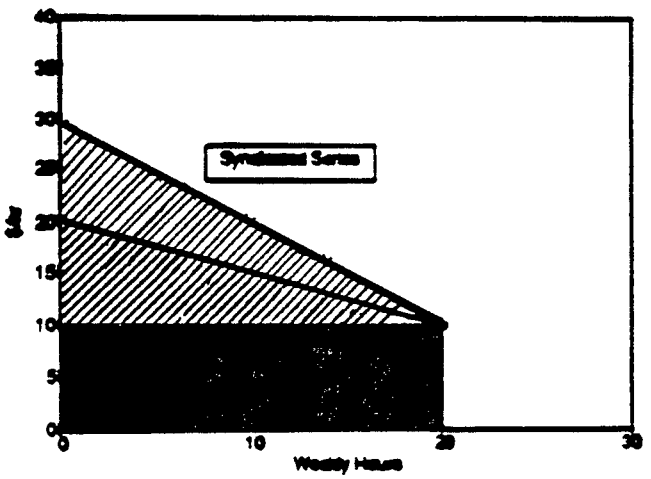
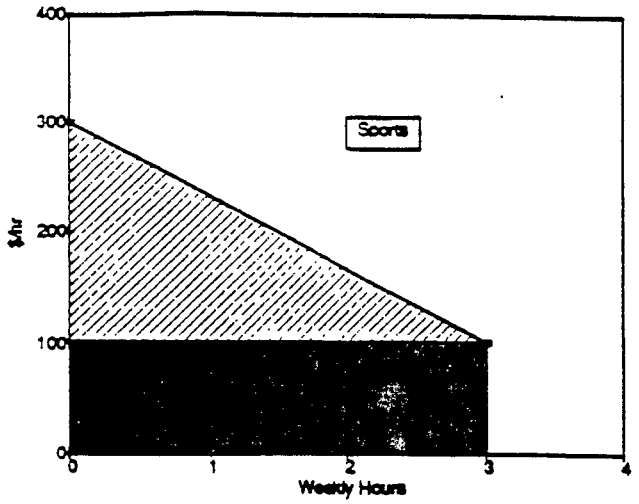
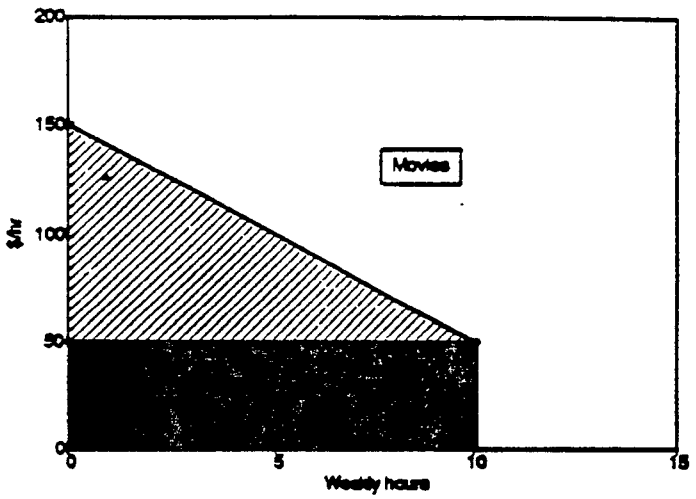
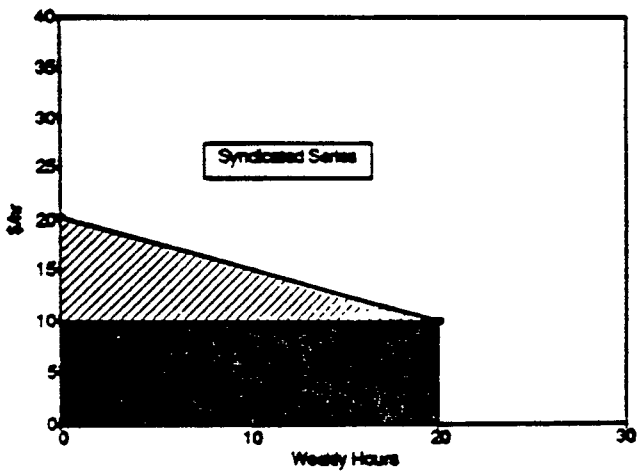


FIGURE 2:
Total Value and Marginal Value of Different Program Types Imported by Cable Operators







relative marketplace value of movies, and 20 percent ($200) represents the relative marketplace value of syndicated series.

If each program type is offered by numerous sellers independently, the market prices of sports, movies, and syndicated series in Figure 2 are equal to $100, $50, and $10 per hour, respectively. If, however, the cable operator is asked how much he would pay for each on an all-or-nothing basis, he would offer $600, $1000, and $400 for three hours of sports, ten hours of movies, and twenty hours of syndicated series, respectively. These amounts are equal to the areas under the respective demand curves for the three hours of sports, ten hours of movies, and twenty hours of syndicated series. They may be calculated by summing the marginal values of each additional hour over all hours of each program type.

It is this latter measure of value -- the total value as represented by the area under the demand curves -- that is captured by the Bortz survey.

2. The Relationship Between the Bortz Study and Marketplace Value. The estimates of relative total value in the Bortz survey are related to the measure of marginal value that Besen sought in determining marketplace value. The missing link in such a relationship is a measure of the elasticity of the various demand curves -- i.e., the rate at which the quantity demanded increases with a given rate of decline in price. If these elasticities are the same for each program type, the relative total values will be equal to the relative marginal values. Note that, as drawn in

Figure 2, the relative total values are equal to the relative marginal values -- 30 percent, 50 percent, and 20 percent for sports, movies, and syndicated series, respectively. This result obtains because I have drawn the three demand curves under the assumption that they are linear and have identical price elasticities at the equilibrium market prices.

The relationship between the total and marginal values for each program category can be demonstrated graphically in Figure 2. The marginal value is given by the price of each program; marketplace value is equal to the price multiplied by the quantity of programs carried -- or the rectangular shaded area under the demand curve. Total value is equal to the sum of this shaded rectangular area and the cross-hatched area under the demand curve. Thus, the ratio of total value to marketplace value is equal to the sum of the two areas divided by the shaded area alone. This ratio will be the same for all program types if their price elasticities of demand are identical.

The Bortz estimate of relative total value will be greater than the marketplace value of a given program type only if cable operators' demand for this type of programming is less price elastic (i.e., less price sensitive) than the demand for other program types. Therefore, any conclusion that the Joint Sports' share should be less than the estimate of relative total value from the Bortz survey must rest upon the implicit belief that cable operators' demand for sports programming is less price sensitive than the demand for other programming. Put another way, such a

judgment must reflect the view that the market's offering additional sports programs would drive the price of these programs down more rapidly than would similar proportional increases in movies, syndicated series, informational programs, or devotional programs.

I am unaware of any evidence that suggests that cable operators' demand for sports is less price sensitive than their demand for other programming. Nor am I aware of any evidence that would indirectly support such a proposition -- for instance, that subscribers' willingness to pay for additional sports programming declines much more rapidly than their willingness to pay for an expansion in other programming types. In light of the foregoing, I believe that the Bortz study estimates of relative total value are a good measure of relative marketplace value of the various program types.

Furthermore, the same conclusion may be reached even if there were significant differences in the elasticity of demand for sports and other programming. Total value is the amount that the cable operator would pay for a program type if offered an all-or-nothing choice. It is therefore relevant to the calculation of a copyright royalty in a situation in which the suppliers of each program type bargain collectively with cable operators. If each "Phase-I" program supplier group were allowed to bargain collectively with cable operators, the marginal values of the different program types would equal their total values (as measured in the Bortz study).

3. The MPAA Viewing Study and Marketplace Value. The MPAA viewing study offers evidence on the audiences attracted by various types of programs imported by cable operators on distant signals as well as the amount of time those program types are broadcast. But the cable operator does not sell audiences in these programs because his revenues do not derive from advertising sales on imported distant signals. The marginal value of these programs to cable operators derives from the additional subscriber revenues they generate. These additional revenues are not necessarily related to the audiences they attract. A simple example demonstrates this lack of correspondence.

Assume that a cable operator were able to attract a 10 percent increase in subscribers by offering a sports channel that provided nothing but one hour per month of championship boxing matches that, in turn, were only watched by 25 percent of the cable system's subscribers during this single hour per month. Furthermore, assume that this additional 10 percent subscribed to cable solely because of the boxing channel.

Now, suppose that the operator could also import a distant network-affiliated broadcast signal that offered only a few hours a week of old syndicated programs in addition to the network fare already available on the local station carried by the cable system. The imported network broadcast station might actually attract fairly large audiences averaging, say, 2 percent of the cable system's subscribers over a monthly broadcasting schedule of about 500 hours. Few if any additional subscribers would likely be

attracted to the cable system by this duplicate network signal, but its total viewing per month, as measured by the MPAA viewing study, would be forty times (2 percent times 500 hours compared to 25 percent times 1 hour) as great as that of the boxing channel despite the fact that its value to the cable operator is very close to zero. On the other hand, the low-audience boxing channel could have a marginal value of as much as 9 percent (10 percent additional subscribers divided by 110 percent) of the cable system's total monthly subscriber revenues, depending on the cost of attaching new subscribers to the system. The above example was constructed to demonstrate a point: the marginal value of a program to a cable operator is not necessarily related to the audience of the program. A program is valuable because it attracts new subscribers or raises the rate that the operator may charge existing subscribers.

Because average program audiences do not reflect the marginal value of programs to cable operators, the MPAA viewing study fails to provide a reliable estimate of marketplace value. This study falls prey to Besen's own critique.

B. Supply

Dr. Besen's second criticism of the BBC cable operator study was that it failed to account for the effects of "supply." Besen points out quite correctly that a copyright owner would not offer his program to a cable operator unless the royalty offsets his

potential loss of income in that cable market from other media. In essence, this means that a cable operator would have to compensate the copyright owner for an amount at least equal to the reduction in the value of the program on other media caused by the cable importation. To the extent that one type of programming is impacted more heavily than the others by such importation, he argues that its royalty share should be adjusted to reflect it.

For at least two reasons, however, Besen's argument provided no basis for reducing the relative value assigned to sports vis-a-vis movies and syndicated programs as measured in the Bortz study.

First, Besen felt that the supply impacts were likely to be of the same importance for sports, movies, and syndicated series. Thus, he could find no basis for adjusting the comparative valuations of these three program types because of such supply effects.

Second, Besen's conclusion on the equivalent impact of supply effects on movies or syndicated series and sports does not account for the ephemeral value of a live sporting event. Most sports programs do not have a large number of reruns. As a result, any dilution of audience during the first or second exhibition is likely to have a more damaging impact than the dilution of audience of, say, the fourth television exhibition of a motion picture. Since the film may be exhibited another four or five times on cable, network television, or local television, the effect of

audience dilution through imported distant signals is likely to be less damaging for movies than for sports programs.

Finally, Besen's supply criticism is also applicable to the MPAA study, which similarly fails to account for supply effects. The MPAA study does provide some measure of the quantity of programming broadcast by distant signals and "consumed" by cable subscribers. However, it does not measure the effect that importation of the various program types would have on the price that copyright owners would demand.

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After the Breakup: The U.S. Telecommunications Industry in a More Competitive Era. Washington, DC: The Brookings Institution, 1991.

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TESTIMONY OF DR. LEONARD N. REID
BEFORE THE COPYRIGHT ROYALTY TRIBUNAL
August 1991

I am Professor and Department Head of the Department of Advertising and Public Relations at the Grady College of Journalism and Mass Communication at The University of Georgia, Athens, Georgia. A copy of my resume is attached to this testimony.

I have been asked by the Joint Sports Claimants (JSC) to comment on the concerns that the Copyright Royalty Tribunal expressed in the 1983 copyright royalty distribution proceeding regarding the constant sum technique employed in JSC's survey of cable operators. I have also been asked to evaluate the viewing study submitted by the Motion Picture Association of America in the 1983 proceeding in light of the same concerns.

My views on these matters are set forth in the report entitled "Use of the Constant Sum Measure and Nielsen Audience Data in Cable Royalty Distribution Proceedings" (August 1991), which is being submitted to the CRT as Sports Exhibit 2.

June 1991

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Arizona State University

1975 - 1976 Visiting Instructor of Advertising

Department of Advertising
College of Communication
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SCHOLARLY EDITORIAL ACTIVITIES

1991 - 1992 Editor, Proceedings of the American Academy of Advertising

1991 - present Editorial Board, Journal of Advertising

1987 - 1991 Editor, Journal of Advertising

1980 - present Editorial Board, Current Issues and Research in Advertising

1977 - present Ad Hoc Reviewer for the Journal of Advertising, Journal of Marketing Research, Journal of Business Research, Journal of Broadcasting and Electronic Media, and manuscript submissions to the annual meetings of the American Academy of Advertising, American Marketing Association, Southern Marketing Association, Atlantic Marketing Association, Association for Education in Journalism and Mass Communication, and Association for Consumer Research.

PROFESSIONAL SERVICE ACTIVITIES

Vice President, American Academy of Advertising, 1991-1992.

Member of the Research Committee, American Academy of Advertising, 1978-1985. Committee administers the grant program of the organization.

Member of the Publication Committee, American Academy of Advertising, 1984-1987. Committee manages the Journal of Advertising and other organization publications.

External Promotion/Tenure Evaluator for Arizona State University (1983-84, 1984-85), University of South Carolina (1983-84), University of Texas at Austin (1985-86, 1989-90, 1990-91), York University (1988-89), Rutgers University (1989-90), University of Oklahoma (1988-89), University of Colorado (1986-87, 1987-88), University of Illinois (1987-88), University of Massachusetts-Amherst (1990-91), Southern Methodist University (1990-91), Virginia Tech University (1990-91), Auburn University (1990-91), University of Kentucky (1990-91), and University of Houston (1991-92).

BOOKS AND BOOK CHAPTERS

Advertising: Its Role in Modern Marketing, 7th ed., The Dryden Press, 1990 (with S. Watson Dunn, Arnold M. Barban, and Dean M. Krugman).

Effects of Product Puffery in Print Advertisements: An Experiment," in Alan D. Fletcher and Donald W. Jugenheimer, eds., Problems and Practices in Advertising Research: Readings and Workbook, Grid, Inc., 1982, pp. 149-157 (with Bruce G. Vanden Bergh).

SCHOLARLY JOURNAL ARTICLES

"Toward an Associative Model of Advertising Creativity," Journal of Advertising, 5:4 (Fall 1976), pp. 24-29 (with Herbert J. Rotfeld).

"Advertiser-Supplied Message Research: Extending the Advertising Substantiation Program," Journal of Consumer Affairs, 11:1 (Summer 1977), pp. 128-134 (with Herbert J. Rotfeld).

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"Factors Affecting Creativity in Generation of Advertising," Journalism Quarterly, 55:4 (Winter 1978), pp. 781-785.

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"Children's Interaction With Commercials," Symbolic Interaction, 2:2 (Fall 1979), pp. 79-96 (with Charles F. Frazer).

"A Shopping List Experiment of the Impact of Advertising on Brand Image," Journal of Advertising, 8:2 (Spring 1979), pp. 25-28 (with Lauranne Buchanan).

"The Impact of Family Group Interaction on Children's Understanding of Television Advertising," Journal of Advertising, 8:3 (Summer 1979), pp. 13-19.

"Key Visuals as Correlates of Interest in TV Ads," Journalism Quarterly, 56:4 (Winter 1979), pp. 863-866 (with David H. Hahn).

"Sports Illustrated's Coverage of Women in Sports," Journalism Quarterly, 56:4 (Winter 1979), pp. 859-861 (with Lawrence C. Soley).

"Studying the Child/Television Advertising Relationship: A Symbolic Interactionist Approach," Journal of Advertising, 8:4 (Fall 1979), pp. 13-19 (with Charles F. Frazer).

"How Informative Are Ads on Children's TV Shows?," Journalism Quarterly, 58:1 (Spring 1980), pp. 108-111 (with Herbert J. Rotfeld).

"Children's Use of Television Commercials to Initiate Social Interaction in Family Viewing Situations," Journal of Broadcasting, 24:2 (Spring 1980), pp. 149-158 (with Charles F. Frazer).

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"Factor Study of Dimensions of Advertiser Credibility," Journalism Quarterly, 58:4 (Winter 1981), pp. 629-632 (with Bruce G. Vanden Bergh and Lawrence C. Soley).

"Another Look at the 'Decorative' Female Model: The Recognition of Visual and Verbal Ad Components," Current Issues and Research in Advertising, 4 (1981), pp. 123-133 (with Lawrence C. Soley).

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"Willingness of Communication Researchers to Respond to Replication Requests," Journalism Quarterly, 59:2 (Summer 1982), pp. 317-319 (with Roger D. Wimmer).

"Effects of Imagery-Eliciting on Recognition and Recall for Radio Commercials," Journal of Broadcasting, 23:2 (Spring 1982), pp. 567-574 (with Lawrence C. Soley).

"Generalized and Personalized Attitudes Toward Advertising's Social and Economic Effects," Journal of Advertising, 11:3 (1982), pp. 3-7 (with Lawrence C. Soley).

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"The Effectiveness of Advocacy Advertising Relative to News Coverage," Communication Research, 12:4 (October 1985), pp. 546-567 (with Charles T. Salmon, James Pokrywczynski, and Robert Willett).

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"Fear Arousing Anti-Drinking and Driving PSAs: Do Physical Threats Influence Young Adults?," Current Issues and Research in Advertising, 12 (1989), pp. 155-175 (with Karen Whitehill King).

"Changes in the Visual Imagery of Cigarette Ads, 1954-1986," Journal of Public Policy and Marketing, 10:1 (Spring 1991), pp. 63-80 (with Karen Whitehill King, Young Sook Moon, and Debra J. Ringold).

SCHOLARLY PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

"Women Role Portrayals in Advertising Messages as Stimulus Cues: An Exploratory Investigation," Proceedings of the 1977 Annual Meeting of the American Academy of Advertising, 1977, pp. 94-98 (with Lauranne Buchanan).

"Advertising Expenditures and the Profitability of the Firm: A Pilot Study of Relationship," in Proceedings of the 1977 Annual Meeting of the American Academy of Advertising, 1977, pp. 83-88 (with Paul Oritt).

"Predicting the Creatives in Advertising," Proceedings of the 1978 Meeting of the American Academy of Advertising, 1978, pp. 123-127.

"An Experimental Analysis of the Impact of Advertising on Brand Image," in Proceedings of the 1978 Annual Meeting of the American Academy of Advertising, 1978, pp. 185-187 (with Leta C. Strube and Lauranne Buchanan).

"Income and TV Viewing as Mediating Factors of Children's Ability to Evaluate Heavily Advertised Cereals," in Proceedings of the 1979 Annual Meeting of the American Academy of Advertising, 1979, pp. 66-68 (with William O. Bearden and Jesse E. Teel).

"The Role of Newspaper Advertisements in the Confirmation or Disconfirmation of Consumer Expectations in a Product Trial Situation," in Proceedings of the 1980 Annual Meeting of the American Academy of Advertising, 1980, pp. 61-64 (with Bruce G. Vanden Bergh).

"Perceived Risk and Interest in Risk Reducing Information of the Elderly," in Proceedings of the 1980 Meeting of the Southern Marketing Association, 1980, pp. 123-126 (with Jesse E. Teel and Bruce G. Vanden Bergh).

"Statistical Analyses in the Journal of Advertising: 1972-1979," in Proceedings of the 1981 Annual Meeting of the American Academy of Advertising, 1981, pp. 118-122 (with Lawrence C. Soley).

"The Response of White Consumers to Integrated Advertising -- The Socially Consumed Product," in Proceedings of the 1981 Annual Meeting of the American Academy of Advertising, 1981, pp. 86-89 (with Herbert J. Rotfeld and Gary E. Wilcox).

"Replication Requests and the Response of Advertising Researchers," in Proceedings of the 1982 Annual Meeting of the American of Advertising, 1978, pp. 85-88 (with Herbert J. Rotfeld and Roger D. Wimmer).

"What Researchers Think of Advertising Research by Academics," in Proceedings of the 1983 Annual Meeting of the American Academy of Advertising, 1983, pp. 52-57 (with Herbert J. Rotfeld and Spencer F. Tinkham).

"Effects of Decorative Female Models on Ad Recognition Over Time," in Proceedings of the 1983 Annual Meeting of the American Academy of Advertising, 1983, pp. 116-119 (with Lawrence C. Soley).

"Designed to Excite? Sex and Violence in Television Program Ads," 1983 American Marketing Association Educators' Proceedings, 1983, pp. 380-384 (with Lawrence C. Soley).

"A Test of Perceptual Vigilance: Differences in Attention to Ads by Product Involvement," in Proceedings of the 1983 Meeting of the Southern Marketing Association, 1983, pp. 308-311 (with Lawrence C. Soley).

"Decision Systems Analysis in Advertising Organizations," in Proceedings of the 1984 Annual Meeting of the American Academy of Advertising, 1984, pp. 59-61 (with Dean M. Krugman).

"Naming the Manufacturer in Store Brand Advertising," in Proceedings of the 1984 Annual Meeting of the American Academy of Advertising, 1984, pp. 122-126 (with Spencer F. Tinkham).

"The Nature of Sexual Content in Television Advertising: A Cross-Cultural Comparison of Award-Winning Commercials,' in 1984 American Marketing Association Educators' Proceedings, 1984, pp. 21-26 (with Charles T. Salmon and Lawrence C. Soley).

"When Parents Control Children's TV Viewing and Product Choice: Testing the Attitudinal Defenses," in Proceedings of the 1984 Meeting of the Southern Marketing Association, 1984, pp. 10-13 (with Lawrence C. Soley).

"Energy Conservation Brochure Readership: A Study of a Controlled Medium," in Proceedings of the 1985 Annual Meeting of the American Academy of Advertising, 1985, pp. 100-103 (with Carroll J. Glynn).

"Exposure Duration and Recall of Magazine Ads,' in Proceedings of the 1985 Meeting of the Southern Marketing Association, 1985, pp. 13-15 (with Lawrence C. Soley).

"The Characteristics of Anti-Drinking and Driving PSAs: A Preliminary Look," in Proceedings of the 1986 Annual Meeting of the American Academy of Advertising, 1986, pp. 103-106 (with Karen Whitehill King).

"A Test of Variation in Advertising Media Informativeness Within and Between National and Retail Advertising," in 1986 American Marketing Association Educators' Meeting, 1986, pp. 206-210 (with Karen Whitehill King).

"Evaluating Attentiveness to Television Programs and Commercials," in 1987 American Marketing Association Winter Educators' Conference, 1987, pp. 354-357 (with Lawrence C. Soley).

"Sex Appeal in Advertising Revisited: Validation of a Typology," in Proceedings of the 1988 Annual Meeting of the American Academy of Advertising, 1988, pp. RC118-RC123 (with Spencer F. Tinkham).

"Listed Versus Unlisted Nonmetropolitan Telephone Subscribers," in Proceedings of the 1991 Annual Meeting of the American Academy of Advertising, 1991, in press (with Keith F. Johnson and Peggy J. Kreshel).

UNPUBLISHED SCHOLARLY CONFERENCE PAPERS

"Regulating Children's Television Advertising: Reassessing Parental Responsibility," Association of Education in Journalism and Mass Communication, Seattle, WA, August 1978.

"A Sociological Study of Children's Use of Television Commercials to Initiate Social Interaction in Family Viewing Situation," Association for Education in Journalism and Mass Communication, Seattle, WA, August 1978 (with Charles F. Frazer).

"A Symbolic Interactionist Approach to Studying the Child/Television Relationship," International Communication Association, Philadelphia, PA, April 1979.

"A Model for Measuring Puffery Effects," Association for Education in Journalism and Mass Communication, Houston, TX, August 1979.

"Children's Interactional Experience with Television Advertising as an Index of Viewing Sophistication," Association for Education in Journalism and Mass Communication, Houston, TX, August 1979 (with Charles F. Frazer).

"Adolescents' Perceptions of Foreign-Made Products: Implications for Advertising Strategy," Association for Education in Journalism and Mass Communication, Houston, TX, August 1979 (with Bruce G. Vanden Bergh).

"Male Readership Differences in Liquor Ads Employing Nonsensical and Sexual Humor," Association for Education in Journalism and Mass Communication, Boston, MA, August 1980 (with Bruce G. Vanden Bergh).

"Advertising Effects on Alcohol Brand Preference Images," Association for Education in Journalism and Mass Communication, Boston, MA, August 1980 (with Charles K. Atkin and Martin M. Block).

"Agency Researchers' Perception of Uses and Users of Copy Research," Association for Education in Journalism and Mass Communication, Gainesville, FL, August 1984 (with Charles T. Salmon).

"Defining the Core of Advertising Knowledge," American Academy of Advertising, Denver, CO, April 1984 (with Dean M. Krugman).

"The Credibility of Advocacy Advertising: Implications for Advertising and Public Relation Strategies," International Communication Association, Honolulu, Hawaii, May 1985 (with Charles T. Salmon and James Pokrywczynski; a Top Three Conference paper).

"Changes in the Content of Print Cigarette Ads, 1954-1986," American Marketing Association, Washington, DC, August 1990 (with Karen Whitehill King and Young Sook Moon).

RESEARCH AWARDS AND GRANTS

"Creativity in Advertising," Faculty Research Grants Program, Michigan State University, 1977-78, $1,500.

"Analysis of Ad Characteristics Affecting Readership," Faculty Research Grants program, Michigan State University, 1978-79, $4,000.

"Alcoholic Beverage Advertising: Content and Effects," Bureau of Tobacco, Alcohol, and Firearms, U.S. Government, 1978-79, $100,000 (co-investigator).

"Effect of Source Attribution on Response to Advocacy Advertising," Faculty Research Grants Program, Michigan State University, 1979-1980, $1,500.

"Decorative Models in Advertising," College of Journalism and Mass Communication Research Grant, University of Georgia, 1980-81, $1,500.

"Attitudes Toward Advertising's Social and Economic Effects,' College of Journalism and Mass Communication Research Grant, University of Georgia, 1981-82, $1,500.

"Informational Value of Advertising," College of Journalism and Mass Communication Research Grant, 1982-83, $1,500.

"Anti-Drinking and Driving PSAs," Institute for Behavioral Research, The University of Georgia Mentoring Program, $3,000 (with Karen Whitehill King).

RECOGNITION OF SCHOLARLY WORK

Ranked "Most Prolific" author of articles published in the major advertising journals (Journal of Advertising, Journal of Advertising Research, and Current Issues and Research in Advertising), from inaugural issues through 1988. Thomas E. Barry, "Publication Productivity in Three Leading U.S. Advertising Journals: Inaugural Issues Through 1988," Journal of Advertising, 19:1 (1990), pp. 52-60.

Ranked "Top Author" of articles published in the nine major mass communication journals from 1980 through 1985. Bradley S. Greenberg and John C. Schweitzer, "Mass Communication Scholars' Revisited and Revised," Journalism Quarterly, 66:2 (Summer 1989), pp. 473-475.

Ranked second among "Most Profilic" authors in eight leading marketing journals from 1983-1984. Gary L. Clark, "Productivity Ratings of Institutions Based on Publication in Eight Marketing Journals: 1983-1984," Journal of Marketing Education, Fall 1985, pp. 12-23.

Ranked in "Top 75 Authors" in the field of communication from 1915-1985. Nancy F. Burroughs, Dianne M. Christopher, J. Cole Ady, and Elizabeth A. McGreal, "Top Published Authors in Communication Studies, 1915-1985," ACA Bulletin, January 1989, pp. 37-45.

TEACHING AWARDS AND ACTIVITIES

Superior Teaching Award, University of Georgia, 1984.

Teacher-Scholar Award for Excellence in Teaching, Michigan State University, 1978.

Faculty, Institute of Advanced Advertising Studies, American Association of Advertising Agencies, 1983-86.

Taught undergraduate and graduate classes in advertising and society, advertising management, advertising research, mass media economics, and qualitative research methods, 1974 - present.

Developed graduate seminars in mass media economics, advertising management, advertising media planning, qualitative research methods, audience behavior, and advertising research, University of Georgia, 1983-1987. Two of the seminars, advertising management and advertising media planning, are cross-listed with the Department of Marketing.

Ph.D. chair of the following Ph.D. dissertation committees:
Young Sook Moon (graduated 1990)
Subir Sengupta (graduated 1991)
Eric Haley (in progress)
Mary Lynn Hanily (in progress)
Pamela Bourland (in progress)

Member of Ph.D. dissertation committees of numerous communication and marketing students.

ADMINISTRATIVE EXPERIENCE

Head, Department of Advertising and Public Relations, University of Georgia, 1983 - present. Responsibilities include the administration and management of 14 faculty and 2 secretaries.

Committee Member, Ph.D. Administrative Committee, 1983 - present. Responsibilities include applicant selection and curriculum management.

Dean's Executive Committee, College of Journalism and Mass Communication, 1983 - present. Responsibilities include policy and management decisions involving the College.

University Promotion and Tenure Committee, University of Georgia, 1988 - 1990. Responsibilities included chairing an area committee, 1988 - 1989, and serving on university-wide review committee.

President's Advisory Committee, University of Georgia, 1991 - present. Responsibilities involve advising the university president on policy matters.

CONSULTING ACTIVITIES

Served as Research and Expert Consultant for numerous clients, including the Tobacco Institute, Henderson Advertising, Ross Advertising, Caterpillar Tractor Company, BBDO/Atlanta, Standard Telephone Company, The Consumer Marketing Group, Mansours Department Stores, Inc., McMaster Meighen/Canada, Imperial Tobacco Company, RJR/McDonald/Canada, and Major League Baseball.

Served as Editorial Consultant for numerous publishers, including Prentice-Hall, The Dryden Press, W. C. Brown Company, Lexington Books, McGraw-Hill, MacMillan, and Randon House Publishers.

SPORTS
EXHIBIT 2

USE OF THE CONSTANT SUM MEASURE AND NIELSEN AUDIENCE DATA IN CABLE ROYALTY DISTRIBUTION PROCEEDINGS

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August 1991

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I. INTRODUCTION

In previous proceedings before the Copyright Royalty Tribunal (CRT), the Joint Sports Claimants (JSC) presented surveys designed to measure cable operators' perceived value of sports programming in relation to other categories of distant-signal non-network programming. The surveys, conducted first by the advertising agency of Batten, Barten, Durstine, and Osborne (BBDO), and later by the consulting firm of Browne, Bortz & Coddington, Inc. (BBC), used the constant sum technique to establish program-category valuation of randomly selected samples of cable operators. In the same proceedings the Motion Picture Association of America (MPAA) presented studies based on A.C. Nielsen audience data. These studies were offered as evidence of the amount of cable subscriber "viewing" that each distant-signal program category received.

The CRT said that it accorded "far greater weight" to the MPAA viewing study than to the constant sum surveys in allocating the 1983 cable copyright fund (see p. 12808 of 1983 Final Determination). The CRT favored the MPAA viewing data for two primary reasons (see p. 12808-12809).

The first reason involved the relationship between the survey results and actual behavior. The CRT concluded that the

MPAA viewing study was "the only study to measure behavior," and that constant sum studies reported results which are not indicative of actual behavior. In the words of the Tribunal (see p. 12809):

> ...it is recognized by surveyors that how people say they behave and how they do behave are quite different. This difference is exacerbated by the very nature of asking a subscriber or a cable employee over the phone to engage in a twenty minute exercise of allocating program preferences.

Such an exercise, added the Tribunal, "takes into account no 'real world' factors" and "carries no consequences."

The second reason involved recall problems associated with the time of data collection. The Tribunal concluded that the viewing study was more reliable because it was the only one conducted during 1983, the relevant year (see p. 12808). The Tribunal agreed with the MPAA that the 1983 JSC constant sum survey was flawed by "recall" problems because it was conducted in 1985.

In order to address the CRT's concerns, two changes were made in the 1989 constant sum survey conducted by Bortz & Company for the Joint Sports Claimants. First, cable operators were asked to estimate the relative value of the distant-signal non-network programming they carried in 1989 by allocating 100 percent of a "fixed program budget;" in the 1983 survey the respondents allocated 100 percent of the "value" of their distant

signals. Second, the interviews in the 1989 survey were conducted in late 1989 and early 1990.

It should be noted that I was retained by the Joint Sports Claimants prior to their conducting the 1989 survey, and that I recommended the foregoing changes in consultation with Bortz & Company.

II. PURPOSE OF REPORT

I have been requested by the Joint Sports Claimants to comment on the CRT's concern with the constant sum technique -- specifically, the relationship between constant sum survey results and actual behavior. I also have been asked to evaluate the MPAA viewing study in light of the CRT's concerns regarding behavior and recall.

III. SUMMARY OF VIEWS

The constant sum technique, such as that employed in the 1989 JSC survey, is a valid and well-accepted research tool. It is often used in marketing research because:

* it is simple in design and easy to use.
* its measurement properties allow the application of sophisticated statistical procedures.
* it reveals relative comparative judgments of items in an alternative set.
* it eliminates consistent positive, negative, or neutral response patterns.

* it yields substantial information that is predictive of behavioral tendencies.

In marketing and other research, the constant sum is frequently utilized as a means of determining how surveyed respondents are likely to act in a choice situation. In any instance where self-reported measures are used to collect information, one cannot be absolutely certain that such information is predictive of actual behavior. Nevertheless, those engaged in market research have traditionally relied upon constant sum measures as an accurate gauge of behavioral intentions. Furthermore, the studies that exist demonstrate that the constant sum technique provides a reliable and useful indicator of actual behavior.

The concerns over behavior and recall that the Tribunal expressed in the 1983 proceeding over the JSC constant sum survey are similar to the types of concerns that have been expressed by market researchers over Nielsen diary-based audience data. Such data are not direct measures of actual viewing behavior. Rather, they are dependent upon individual reporting of past behavior; they are thus susceptible to faulty recall and other problems affecting accuracy. Considerable sums of money of course have been invested by advertisers and others in relying upon Nielsen diary-based audience data. The same, however, may be said about relience upon data derived from constant sum surveys and similar research.

The above views are discussed more fully in the following pages. By way of summary, I believe that the constant sum technique is an appropriate research tool to determine (among other things) how cable operators would likely have allocated their program rights payments. Also, from the standpoint of the CRT's concerns regarding behavior and recall, I see no valid reason to favor the MPAA's viewing studies over the JSC's constant sum surveys.

IV. DISCUSSION

A. The Constant Sum Measure

1. Character of the Constant Sum Scale

The constant sum scale was introduced to the field of marketing research through the work of J. P. Guilford and W. S. Torgerson. Both Guilford and Torgerson were psychologists who published major books on psychological measurement: Guilford published Psychometric Methods in 1954, and Torgerson published Theory and Methods of Scaling in 1958.

The constant sum scale is a widely accepted and often-used measurement tool in marketing research (see for example, Alreck and Settle, 1985; Axelrod, 1986; Churchill, 1983; Green and Tull, 1978; Hughes, 1971; Parasuraman, 1986; Peterson, 1988; Tull and Hawkins, 1987). The measurement technique is used for concept testing, price sensitivity studies, simulated shopping studies, advertising testing, and segmentation research (Axelrod, 1986).

It has been used to study consumer preferences for branded goods, medical services, travel decisions, and radio stations (e.g., Abernethy, 1989; Conant, Mokwa, and Wood, 1987; Green and Srinivasan, 1978; Monahan, 1987; Mulbacher and Botschen, 1988; Pasumarty, Karney, and Morley, 1987; Sutherland and Brown, 1991; Woodside and Carr, 1988; Woodside and Shinn, 1988; Woodside and Wilson, 1985). Other applications of the constant sum measure can be found in psychology (e.g., Budescu, Zwick, and Rapoport, 1986; Spence, 1990), anthropology (e.g., Roberts, Chaio, and Pandey, 1975; Roberts, Strand, and Burmeister, 1971), and game theory (e.g., James, 1990; Michener, Clazer, and Richardson, 1989; Wolf and Shubik, 1977).

The constant sum is a popular measurement technique because of its simplicity, ease of use, suitability for sophisticated statistical procedures, and ability to yield substantial information (Green and Tull 1978). As noted by a number of authors, including Pamela L. Alreck and Robert B. Settle in The Survey Research Handbook (1985) and Donald Tull and Del Hawkins in Marketing Research (1987), the constant sum technique is particularly well-suited for measuring behavioral intentions, pact actions, and evaluative preferences.

In practice, the constant sum scaling technique is employed to determine how proportions of some resource (e.g., money, time, etc.) or activity (e.g., purchase behavior) are allocated among two or more alternatives (Churchill, 1983; Peterson, 1988; Tull

and Hawkins, 1987). The proportions to be allocated are numerically defined, generally 10 or 100 points (Tull and Hawkins, 1987). The allocation is based on each respondent's perceived judgment of the alternatives being evaluated, and provides diagnostic information on the relative preference for and importance of each alternative in the alternative set (Churchill, 1983; Tull and Hawkins, 1987). According to Robert Peterson (1988), the constant sum scaling technique allows fine discriminations to be made among evaluated alternatives, based on respondents' relative judgment of the alternative set.

As a scaling technique, the constant sum scale falls into the comparative scale category. Unlike the noncomparative rating approach, comparative scales involve judgments with direct reference to the other alternatives being evaluated. That is, subjects are asked to evaluate each alternative relative to the others in an alternative set.

As a comparative scaling technique, the constant sum scale has a natural starting point of zero, which means the sum to be divided is fixed across all respondents (e.g., lowest possible rating is zero; the highest possible is one hundred) (Parasuraman, 1986). Alternatives can be evaluated two items at a time in a paired-comparison procedure or more than two at a time in a quadric procedure. According to Donald S. Tull and Del I. Hawkins (1987), the quadric procedure is most common in

marketing research. It should be noted that the 1989 JSC survey, as well as past JSC surveys, used the quadric procedure.

Because respondents more readily understand numerical differences, the constant sum scale directly addresses one of the basic problems of psychological measurement -- the assessment of psychological distance between alternative items (Hughes, 1971). By virtue of the technique's fixed-scale format, the constant sum scale measures how much more important one alternative is relative to others -- meaning that an allocation of 50 and 25 points between two alternatives confirms that one alternative is perceived as twice as important as the other (Tull and Hawkins, 1987).

As a measurement approach, the constant sum scaling technique tends to eliminate "halo effects," that is, the tendency of respondents to answer in a consistent positive, neutral, or negative pattern with regard to the alternative set (Clancy and Garsen, 1970). As noted by G. David Hughes in Attitude Measurement for Marketing Strategies (1971), the constant sum technique is less susceptible than noncomparative scales to individual response style such as "yea saying" or "nea saying" and to differences in interpretation of scale labels (such as good, very good, etc.). In other words, compared to other evaluative scales the constant sum technique tends to reduce "false reporting" tendencies.

2. Comparative Evaluations

Two studies have specifically addressed the question of the predictiveness of the constant sum measure in relation to other scaling techniques. The first study, conducted by Joel N. Axelrod, then with the Xerox Corporation, appeared following an exchange over the merits of comparative scales within the pages of a 1966 issue of the Journal of Advertising Research (Blankenship, 1966; Haller, 1966). The Axelrod study, entitled "Attitude Measures That Predict Purchase," appeared in a 1968 issue of the Journal of Advertising Research. Eleven years later in 1979, Russell I. Haley, a professor of marketing at the University of New Hampshire, and Peter B. Case, a specialist in advertising and media research with the General Electric Company, published a replication of Axelrod's study entitled "Testing Thirteen Attitude Scales for Agreement and Brand Discrimination" in the Journal of Marketing. Both studies are considered classic works by marketing specialists, and are often cited in marketing research texts (for example; Alreck and Settle, 1985; Churchill, 1983; Green and Tull, 1978; Hughes, 1971; Parasuraman, 1986; Peterson, 1988; Tull and Hawkins, 1987).

a. The Axelrod Study

Axelrod (1968) compared ten different survey research measures with respect to (a) their ability to discriminate among choice alternatives within a category (i.e., the property of sensitivity); (b) their ability to produce the same results over

different samples of respondents (i.e., the property of stability); and (c) their ability to predict subsequent behavior (i.e., the property of predictive power). The ten measures compared were: (1) the Lottery measure, (2) the +5 to -5 Rating Scale, (3) the Predisposition-to-Buy Scale, (4) the Constant Sum Scale, (5) Paired Comparisons, (6) Forced Switching, (7) Advertising Recall, (8) First and Second Choices, (9) Awareness, and (10) Buying Game.

In the constant sum procedure, subjects were asked to allocate "11 cards" among a predetermined set of brands to indicate the likelihood of brand purchase. A person's preference score was simply the number of cards allocated to each brand. Axelrod labeled each measure an intermediate criterion (I.C.), meaning that a psychological response to a stimulus measured in Time 1 is assessed relative to its predictiveness, or correspondence, with a measured response to the same stimulus in Time 2. In Axelrod's (1968, p. 3) words:

> The marketer needs a more immediate measure of the effects of manipulations -- a measure that reflects the immediate effect of a stimulus on a consumer but also predicts his subsequent purchase behavior. Such a measure is called an Intermediate Criterion, or I.C. for short.

In other words, the intermediate criterion (I.C.) is a proxy measure that validly predicts behavior.

To determine the short-term and long-term predictiveness of the measures, interviews were carried out with samples of 2,000

and 2,500 women from different cities. Short-term predictiveness was measured at three- and five-week intervals, while long-term predictiveness was measured after five months. Axelrod found that first brand awareness (i.e., name all brands that you can think of; also known as top-of-mind awareness) and the constant sum measure were the most stable and predictive measures of purchase behavior (i.e., of the 8 measures retained after the sensitivity phase of the study). In particular, Axelrod found that the constant sum was the best measure of repeat purchase, that is, the probability that a person will keep buying the same brand. From the aggregate data, Axelrod (1968, p. 17) concluded:

> In those situations where research users are concerned not only with short-term predictions, but also with providing diagnostic information -- what beliefs are held by those who are going to switch to various brands, what do they like, want, etc. -- the Constant Sum is superior because it spreads customers along a continuum.

In other words, the constant sum most accurately reflects how customers fall in relation to the various categories of possible behavior.

b. <u>The Haley and Case Study</u>

Haley and Case (1979) conducted a comparative study of thirteen popular rating scales to determine (1) which scales are related (i.e., consistency of the measures themselves; measuring the same thing), and (2) which discriminated best among brands of frequently purchased packaged goods. The thirteen scales,

including two versions of the constant sum measure, were culled from a longer list of testing scales partly on the basis of popularity and diversity.

The scales were tested across six packaged goods categories with relatively high purchase frequency and sales concentration among a small set of brands. The subjects were 630 women over age 18 who were responsible for family shopping. One constant sum scale asked subjects to allocate ten pennies among the selected brands as an indication of brand liking; the other measure, a paired comparison procedure, asked subjects to allocate 10 points among pairs of brands.

Haley and Case found that the constant sum measure was one of five scales to adequately discriminate among brand liking and to be strongly associated with current brand usage. In other words, the constant sum technique was one of the measures that most accurately reflected the brand preferences of the tested sample of respondents.

3. Field Applications

The pragmatic value of the constant sum technique for measurement purposes may be demonstrated by its application in the field. Though no industry-wide surveys are publicly available, large marketing research firms such as Decision Research, Eric Marder & Associates, Maritz Marketing Research, McCollum/Spielman Worldwide, Oxtoby-Smith, and Marketeam/Doane Marketing Research, use the constant sum technique in numerous

marketing surveys each year. The two industry-based applications described below are presented to illustrate the utility of the constant sum for the actual practice of marketing research.

a. The Assessor Model

The constant sum technique is incorporated as a fundamental measurement component of the ASSESSOR Model. The model was developed at the Massachusetts Institute of Technology, and first described by Alvin J. Silk and Glen L. Urban in a 1978 Journal of Marketing Research article entitled "Pre-Test-Market Evaluation of New Packaged Goods: A Model and Measurement Methodology."

According to Silk and Urban, the ASSESSOR Model and its measurement procedure were developed to estimate sales potential for new products before they are test marketed, in an effort to reduce product failures and test costs. As employed in the model, the constant sum measure is used to evaluate brand preference among a set of tested brands. The constant sum procedure was selected, as noted by Silk and Urban, because of its superior ability to elicit preference judgments from consumers. In practice, the ASSESSOR Model has been used by a number of major marketers to test more than 1,000 products.

b. Coca-Cola's QCT

Another example of a field application of the constant sum procedure is provided by Coca-Cola's QCT (Quantitative Copy Testing). QCT is an instrument that was developed and utilized by Coke to test advertising effectiveness. Included among the

cognitive and attitudinal scales is a constant sum scale designed to measure brand-purchase likelihood.

In the procedure, subjects are asked to allocate 10 points among a set of soft drink brands. Each point, as defined in the procedure, represents one future purchase. The total points allocated per brand is interpreted to mean likelihood of future purchase -- the more points given to a particular brand, the greater the likelihood that brand will be purchased.

It should also be noted that Coke has used the constant sum technique in non-advertising tests. In product tests, Coke uses the technique to measure brand preference. This application is similar to the use of the constant sum in the ASSESSOR Model.

B. **Nielsen Audience Data**

As noted above, the CRT favored the MPAA viewing study in part because the study measures "actual behavior" and was conducted in the relevant year. However, I do not believe the Nielsen data, which underlie the MPAA study, are immune to recall problems. Nor are the Nielsen audience data a direct measure of "viewing" behavior.

Diaries suffer from problems of nonresponse and response error. Though I will deal mainly with problems of response error in the following paragraphs, it should be noted that nonresponse error is particularly troublesome for diaries. Typically, diaries are completed by only 50% of those households sampled, and those individuals who fill out and return diaries tend to be

systematically different from nonrespondents in significant ways (e.g., younger people, especially males, are less responsive; blacks are less likely to complete and return; and heavy viewers are more likely to return diaries than are other viewer-types). The CRT's concerns regarding behavior and recall are problems of response error, and are inherently associated with the diary method of data collection.

The Nielsen-based MPAA study is the product of self-reported recall of past behavior; it is dependent upon individuals completing diaries of their viewing behavior. These diaries are often reconstructed from memory. When diaries are used to determine program ratings, viewing behavior is not directly measured; rather, viewers' recall of past viewing behavior is measured. As documented in the literature, diary-based audience data (such as those which underlie the MPAA study) reflect "faulty recall" and should not be equated with absolute viewing behavior.

One reason why Nielsen diary-based ratings are susceptible to recall problems is that viewers who complete Nielsen diaries have little involvement in the measurement process; they are not directly or professionally concerned with the process of measuring viewing. Furthermore, viewers may forget which programs they watched when completing diaries; they may make honest reporting mistakes; and they may enter false viewing choices in order to reflect more "socially acceptable" viewing

(Fletcher and Bowers, 1991; Ogles and Howard, 1990; Sissors and Bumba, 1989).

Perhaps even more important (given the nature of the CRT proceedings) is the fact that recall of viewing is a particular problem for cable TV subscribers. According to Ogles and Howard (1990) and to Sissors and Bumba (1989), audience data from cable TV homes tend to be inaccurate because there are too many stations for diary keepers to remember; it simply takes too much time and attention to detail for cable subscribers to complete diaries.

In summary, the CRT's concerns regarding behavior and recall apply also to MPAA viewing studies. Nielsen diary-based data neither directly measure actual viewing behavior, nor are they immune to faulty recall.

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APPENDIX A

Keeping Up with Changes in Broadcast Audience Measurement: Diaries and People Meters

By Robert M. Ogles and
Herbert H. Howard

The measurement of radio and television audiences has been an important activity since the beginning of broadcasting in the United States. Early radio ratings were derived by telephone recall (Crossley's Cooperative Analysis of Broadcasting), the telephone coincidental method (C. E. Hooper), passive meters (the A.C. Nielsen audiometer), and roster-recall (The Pulse). More exotic methods were also used, such as measuring responses to premium offers on children's programs or recruiting college students and off duty police officers to ask drivers stopped at traffic lights which stations they were listening to. More recently, structured diaries were central to both radio and television ratings (e.g., Sterling & Kittross, 1970; Fornatale & Mills, 1980). Today, the latest innovation in audience data gathering is the people meter, a type of electronic diary that is used to measure network television viewing.

Although passive meters are used in conjunction with diaries to measure non-network (local) TV audiences in 12 to 15 of the largest markets, the A. C. Nielsen and Arbitron Companies continue to use the diary method to measure local TV audiences in other markets. The network radio audience is measured by telephone recall (RADAR). Local listenership is assessed by the diary method (Arbitron) and the telephone coincidental technique, in which potential audience members are simply called to ask what program or station they are listening to at the time(Birch).

Most broadcast educators are familiar with structured diaries themselves, which are logs typically divided into 15 or 30 minute intervals. On the other hand, broadcast educators may be less familiar with diary methodology as a form of survey research because it is infrequently studied compared to other common methods such as personal interviews, mail questionnaires, and telephone sampling techniques. In addition, broadcast educators may not be familiar with the problems inherent in newer methodologies such as people meters. Here, we review some of the biases and analytical problems associated with these techniques and make suggestions regarding what we should try to help our students appreciate when teaching them about the latest developments in audience measurements.

A brief background on diaries and people meters

Television Ratings

Although the people meter may be the most significant development in audience research during the past 35 years, the use of meters to measure audience patterns dates back to the 1930s. In 1942, the Nielsen Audiometer became the foundation for network radio ratings. Its purpose was to record the time listening began and ended (i.e., when the set was turned on and off) and the station to which the radio was tuned. In 1950, the Nielsen Television Index (NTI) was launched, using a similar passive tuning device for TV. In reality, those household meters were merely set meters, which detected the tuning activity of the set to which they were attached.

Network executives resisted people meters at first

Until recently Nielsen, the preeminent television ratings firm, measured nationwide viewing by combining demographic data from 865 diary respondents and viewing data from 1,700 households wired with "passive" set meters, which recorded when a television was turned on, the station to which it was tuned, any channel changes,and when the set was turned off. These electronic meters were linked to Nielsen computers via special telephone lines (Daley, 1986; A. C. Nielsen, 1980).

Resistance to the use of diaries by advertising agencies crystalized with the development of "active" people meters. Instead of requiring written diary entries, these electronic devices measured television usage by individual viewers who pushed buttons on a key pad at prescribed times while watching. The people meter was developed by London-based AGB Research, which conducted extensive pilot testing and planned to launch its service in the United States in 1987. However, the entrenched Nielsen organization countered with its own people meter system and won the fierce competitive struggle to provide people meter service to the U. S. Arbitron also came out with its people meter version, ScanAmerica, which so far has been used in only a few markets.

Slightly larger than a TV channel selector, the people meter is a hand-held device attached to each television set in a house-

hold. A specific button is assigned to each member of the family. Each time a person selects a program of any kind — broadcast television, cable, or videocassette — the appropriate button is pushed. Thus, the people meter gives agency, advertiser, and media subscribers virtually instant (next morning) feedback 52 weeks a year on the size and demographic composition of those who viewed a particular program (Gay, 1985).

Diary challenge

Why was the diary method challenged? Sandomir (1986) reports two reasons. First, the proliferation of viewing choices brought about by cable, satellite, and video recording equipment made diaries increasingly difficult to fill out. Second, advertising professionals believed people meters were methodologically more precise than diaries because they enabled ratings firms to assess very detailed demographic information about broadcast audiences, including ratings for individual commercial messages. Young & Rubicam Executive Vice President Joseph Ostrow said "all evidence shows [the people meter] is a more accurate representation of viewing habits" than are written diaries (Sandomir, 1986, p. 39). In addition to their presumably greater accuracy, people meters also were favored because of their ability to deliver viewing information instantly 52 weeks a year. Other factors cited were a growing unwillingness by the public to fill out diaries, as well as "halo" biases introduced when viewers filled out diaries hours or days after viewing when perhaps they were more likely to remember only their favorite or better known programs.

While advertising executives initially tended to favor people meters, network executives were hesitant to endorse their adoption because preliminary people meter data indicated approximately 10% lower average ratings for network shows compared to diary-based ratings. Losses among adult viewers occurred during both daytime and prime-time, while the most severe losses (25 to 30%) took place among child viewers on Saturday morning. Late-night network viewing, however, increased with the people meter measurements (Sandomir, 1986, p. 39).

Understating

In addition to concerns about "understating" the size and composition of the audience, network executives initially criticized the people meter sample frame (list of survey respondents) for including too many pay-TV households and a disproportionate number of young families. They also cited the inability of young children to handle the people meter control buttons and the erratic week-to-week variations of ratings for specific programs during the test period. Forgetting to use the people meter device as a result of fatigue with the system was another concern stated by network broadcasters (Gay, 1988).

Officials of the broadcast networks proposed a hybrid approach to a measurement system: conventional passive metering to measure total audience size; and people meters, instead of diaries, to measure demographics. But USA Network President Kay Koplovitz said "the two-sample proposal sacrifices validity, reliability, sample size and sample efficiency for a presumed, short-term economic advantage to the broadcast networks. One large sample will simply provide better quality data than two small combined samples" ("Koplovitz decries," 1986). Dr. William Baker, president of Group W Television, expressed a similar opinion. Baker warned against making a historic break with the past based on *insufficient evidence that people meters are any less flawed than diaries* ("Group W's Baker," 1985. Italics supplied). We consider this to be an important point for broadcast educators.

Many methodological issues linger

The dispute was exacerbated by the entry into the domestic broadcast rating industry of British-based AGB Research, which proposed to use people meters exclusively. At about the same time, a Seattle-based entity, R. D. Percy Co., wired 1,400 households in the New York market with people meters that were both "active" and "passive." All viewers in a household had access to a remote control device whereby their responses to questions presented on the screen were measured. The "Percy system" featured a heat sensor (instead of buttons to push) which recorded which individuals were seated in the room during the programs and commercial breaks ("New measurement device," 1986). The developer touted the fact that this passive system could overcome an inherent problem in active people meters whereby a person could leave the room and fail to punch out. Critics countered that pet dogs might register on the Percy meter; company officials, however, claimed pets could be singled out and not included in the final data (Gay, 1986).

People meter methods

Nielsen began national data collections with its people meter in the fall of 1986. It also continued to use the diary method until August, 1987, providing parallel reports to clients during the 1986-87 season that were based on both the diary/passive-meter system and a sample of 1,000 people meters. The number of people meters in the Nielsen national sample subsequently has been increased to 1,400 ("You know about," 1989). Now that the people meter has supplanted the diary in network ratings, its impact on the television industry can be summarized in a decrease in reported network viewing during the daytime and primetime, great variations in network evening news audiences from night-to-night, and as much as a 20% drop in the viewing of Saturday morning children's shows. The television networks have also changed certain business practices, including making guarantees ("make goods") for lower-than-expected ratings in the "upfront" marketing of fall advertising time ("New meters seen," 1986).

Methodological issues include questionable compliance with on-screen requests to "punch in" the names of the viewers, the use of the people meters by children, and a 50% rate of decline-to-participate among potential respondents. There may be technology related bias associated with the latter, as data indicates those who agree to have their television sets wired for people meters are comparatively more comfortable with video and television technology. Obviously, these individuals may not be representative of the general population (Unger, 1988).

Local Television Ratings

Market-by-market ratings are produced fours times per year ("sweeps") by Nielsen and Arbitron. Both firms rely primarily on the diary method for gathering in the more than 200 U. S. television markets. However, both companies have been racing to launch metered-overnight ratings services in the largest markets, where the economics can justify the expense. At present, both Arbitron and Nielsen use passive

meters for tuning information and dairies for demographics in each of the top-10 markets, plus a few others ("Metering of markets," 1986).

Radio Ratings

The only firm that measures the network radio audience is RADAR, Radio's All-Dimension Audience Research, financed by the radio networks under contract with Statistical Research, Inc. Issued twice a year, the RADAR report is based on 6,000 telephone respondents who are asked to recall their listening activity (Head & Sterling, 1986, p. 376).

Diary method primary

The diary method continues to be the primary instrument used to measure local radio listening, primarily because the estimation of away-from-home radio use in various settings such as automobiles and lightweight headsets is not amenable to passive metering. (The original Nielsen Audimeter for radio was introduced before the age of television, when living rooms had console radios.)

Biases remain that threaten the believability of ratings

The dominant radio ratings firm, Arbitron, estimates both radio and television use based on diary respondents selected from households with telephones located within geographic (market) survey areas. As of August, 1989, Arbitron measured 79 markets year-round, 148 markets at least twice a year, and a total of 260 markets at least once a year ("Counsel on the advisory," 1989). In 1978, a competitor, Birch, began offering ratings based on the telephone coincidental method. The emergence of Birch seemed to parallel the audience shift from AM to FM and the resulting proliferation of station choices among listeners. Birch capitalized on an important bias of the diary method: Young persons tend not to complete diaries. Many stations with youth target demographics fare comparatively better with telephone-coincidental than diary-generated ratings. By 1987 Birch offered monthly reports and quarterly ratings in 125 markets (Head & Sterling, 1987, p. 376).

Arbitron has recognized another problem with the diary method. The return rate for minorities generally is low, resulting in an underestimation of their media use. [1] To counter this bias, Arbitron employs expanded sample frames and differential survey treatments (DST) for populations containing significant proportions of black and Hispanic persons. These treatments entail sampling from households with unlisted telephone numbers based on files of potential telephone numbers from which known listed numbers, known business numbers, and nonresidential exchanges have been eliminated. Increased cash incentives and follow-up procedures are used to stimulate interest in the survey and to encourage minority diary respondents to fill in and return their diaries. As of this writing, reaching the black survey respondent remains problematic (Corbitt, 1989).

Moreover, because diary return rates hover around 40% ("Arbitron says," 1987), Arbitron has established a procedure to correct for insufficient sample size. A buffer sample is drawn manually, though in the same manner as the original computer-drawn sample. If initial dairy returns appear low, the buffer sample is used to augment the original sample, but only to the extent necessary to ensure representativeness (Arbitron Ratings Company, 1985).

Another methodological development is the daypart diary, which is designed to prevent respondents' confusion about time of day by eliminating the need for a.m. and p.m. designations. Although this diary design may reduce errors in crediting stations with listeners, a general decline in radio listening evident before the change to the daypart diary persists ("Arbitron says," 1987).

Diary criticisms

Even with these safeguards, Arbitron publications report criticisms of the diary method. Two of the the more common are that diaries are filled out on the last days of survey weeks, and that diaries measure only habitual use of favorite stations. Arbitron officials hold that these criticisms are not valid (Bosley, 1986). Nevertheless, the Arbitron diary continues to be refined. Company officials are experimenting with changes in graphic design, paper stock and language composition ("Arbitron says," 1987).

Foster (1978) identified basic questions which must be addressed by users of diary-based ratings: Was it clear when respondents were to make notations in the diaries? Should it be whenever the program changed, the dial was changed, or the composition of the audience before the set changed? Or, was it acceptable to fill in the information at the end of the day? Was one station more socially acceptable to view or listen to than another? Did respondents elevate to a high priority news, documentaries, or cultural programs they rarely bother to watch or listen to? Howard and Kievman (1983) recognized another problem with the diary method: heightened consciousness of viewing and listening associated with knowing one's media use is being measured, which could lead to artificial program choices and inflated media use, or so-called Hawthorne effects. [2] Some research firms discard the first week of data from diary respondents in an attempt to correct for this possibility. We raise another issue: Do listeners and viewers always know what they are listening to or viewing? When scanning the radio dial or slipping through the cable channels, some audience members may spend significant time listening to or viewing programming, but tune away before discovering the name of the program or its source.

What should we emphasize when we teach about ratings biases?

The biases inherent in broadcast audience research are not likely to be eliminated by people meters, as evidenced by the words of one people meter respondent: "We watch mostly PBS and, on cable, Arts and Entertainment. . .This is my chance to let the people who put on the shows know what I want. So I turn on PBS, even when I'm not that interested, just to keep it up there in the ratings" (Unger, 1988, p. 24). Instead, people meters merely add to the number of tradeoffs among instrument biases: diary vs. questionnaire, diary vs. phone coincidental, diary vs. people meter, etc. Any "active" measure of radio and television audiences remains problematic. Nevertheless, such measures enable collection of detailed data about media use.

Some students may be tempted to assume that because a viewer is punching buttons on a key pad instead of making entries in a diary, the accuracy of broadcast ratings is increased. Indeed, diaries may overestimate network television viewing audiences, and people meters may underestimate them—depending on the type of viewing situation, the time of day, and the individual viewer at the people meter controls. Nevertheless, even if people meters are found to assess television viewing more accurately than diaries, there are qualitative biases that could render people-meter based ratings suspect.

Whether a less-flawed instrument will

Fewer flaws

ever be devised is anybody's guess. In the meantime, it is unreasonable to expect the broadcast ratings industry to emphasize the limitations of its services. Such criticism is our job as broadcast educators. A prudent aim would be to help students understand the complexity of human behavior and the difficulty of its measurement by tracing the history and development of broadcast ratings and showing that each technological development is subject to fundamental biases which can be traced to variations in the structure of society and individual differences among audience members. By doing so, our students should be prepared to evaluate critically the future refinements in instrumentation that undoubtedly will emerge from advances in technology.

Notes

[1]Among diary respondents, Steeves and Bostain (1942) report a nonsignificant trend in the opposite direction for ethnic and racial minorities.

[2]Controversy exists concerning the origin and existence of the Hawthorne effect. See Rice (1982).

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Fundamentals of Advertising Research

Fourth Edition

Audience Research: Broadcast

Advertising researchers expend a considerable amount of money and effort to measure audiences of advertising vehicles because advertisers want to know the size and characteristics of the audiences they reach with their advertising messages. Although advertising agencies and other users of audience information must pay for the data, most of the cost of measuring audiences is borne by the media vehicles being measured. The cost can be extremely high; individual stations may have to pay thousands or even hundreds of thousands of dollars each to have their audiences measured.

There is no absolute requirement that media have their audiences measured. In fact, many publications and broadcast stations elect not to be measured because of the prohibitive expense. Audience measurement is a virtual requirement, however, for stations and publications that hope to garner significant amounts of national advertising. Many buyers of advertising, including agencies and advertisers, have policies against buying advertising from newspapers or magazines that do not have audited circulations.

While most vehicles in a market are usually measured by audience measurement companies, only the ones that pay for the service are allowed to use the resulting audience data for their own promotion purposes. For example, some radio stations may decide not to pay for the measurement services of either Arbitron or Birch. The stations of those audiences will still be measured and reported, but those stations will not be able to promote their audience figures.

The research companies discussed in Chapters 15 and 16 are the most widely used sources of syndicated audience data. Broadcast audience services discussed in this chapter include network radio (RADAR®), spot radio (Birch, Arbitron), spot television (Arbitron, Nielsen Station Index), and network television (Nielsen Television Index, TvQ). Print audience sources are discussed in Chapter 16.

Data Gathering Procedures

Companies that gather and report broadcast audience data use three basic methods. With *diaries* or other self-report techniques, respondents keep their own records of media exposure. *Interviews* rely on another person to question the respondent—in person or on the telephone—about media exposure. *Meters* are electronic devices that record television viewing automatically. Each technique has advantages and problems.

. . . Diaries

A diary is a printed booklet in which individuals record their television viewing, radio listening, or other media exposure. Diaries are used primarily because they are inexpensive compared to other methods. About the only expense unique to diaries is postage, which is lower than the cost of interviews or meters. (All the methods have expenses related to sample selection, data analysis, and printing.) Diaries are the principal method used for local radio and television audience measurements, which require several hundred completed diaries in each market. Thus lower cost is a critical factor.

Problems with Diaries

Diaries are subject to the faulty memories of people who fill them out. Ideally, researchers hope that respondents keep diaries close to their television sets and radios and update them as they watch or listen. It is likely, however, that most diary entries are made only periodically or at the end of the survey period—usually one week. Respondents are likely to forget some details of their listening or viewing. It is also probable that only one family member (usually an adult female) reports viewing and listening for all others in the household. If she does that near the end of the diary week—as many probably do—the errors can be even greater.

Some respondents might also make honest mistakes in completing diaries because they get confused about station call letters and channel numbers. That can be a particular problem for people who watch cable television. For example, a person might

be watching WXXX-TV, which is broadcast over the air on channel 5. On the cable system, WXXX-TV might be carried on channel 9. Viewers have difficulty keeping all that sorted out in their minds. (Some viewers cannot even make the association between a station's call letters and its channel number.)

Diary information could also be incorrect because of deliberate untruthfulness by respondents. For example, some people who regularly watch daytime soap operas might not want to admit such behavior, even in an anonymous diary. It is easy for them to write the name of a more socially acceptable program — or nothing at all — in the diary. Another potential problem with diaries is the fact that people must be able to read and write to complete a diary. The U.S. Council on Literacy estimates that 20 percent of Americans are functionally illiterate, meaning they presumably do not have the verbal skills required to complete television or radio diaries.

Diaries require a considerable amount of time to process after the data have been gathered. Respondents must mail the diaries back to the company, and many forget to do that immediately. Diaries must be checked for completeness and accuracy and must be prepared for computer analysis before the rating books can be printed and mailed to users. That process can take several weeks.

. . . Interviews

Interviews can be conducted in person or by telephone. Either way, researchers have more control over data gathering than is true with self-report techniques such as diaries. Interviewers can probe for more complete answers or can explain questions that respondents might not understand. Such probing or explanation would not be possible with a diary or other form of printed self-report. Interviewers can also make sure that all needed information is collected. Diaries, on the other hand, are often returned to the company with important information left out. In some studies, interviewers call respondents and ask them to verbalize a diary by recalling their listening or viewing for the previous day.

Interviewers can also control the source of the information instead of leaving it to chance. In some audience surveys, for example, it might be important to have an equal number of male and female respondents, and interviewers could control that. Researchers have very little control over who fills out a diary.

Researchers can monitor and supervise telephone interviewers more easily than face-to-face interviews. Research firms that conduct telephone surveys usually do them from specially equipped facilities with many interviewers in one room. Supervisors are able to monitor telephone interviewers as they make their calls.

Problems with Interviews

Memory problems are not necessarily eliminated by interviews, for respondents may still be asked to remember their viewing or listening behavior for the previous few hours or days. They might legitimately forget what they watched or might lie to interviewers for fear of embarrassment.

A greater problem — and also true to a lesser extent with diaries — is a reluctance to cooperate with interviewers. Many people are reluctant to participate in surveys

because they don't want to talk to strangers, they are too busy to be bothered, or they fear their name will be put on a mailing list. That reluctance to participate has become an acute problem for companies that use personal interviews; interviewers sometimes have doors slammed in their faces. In some urban areas, they may face dangers from physical assaults.

Finally, interviews are more costly and time consuming than some other methods. A single personal interview may require more than an hour to complete, and the transportation time required to get from interview to interview might make it difficult to complete more than three or four interviews per day. Telephone interviews can be done more quickly and more economically, of course, but they must be brief. In addition, a respondent can easily hang up before finishing a telephone interview. It also takes a long time to process and distribute the information gathered by personal or telephone interviews.

. . . Meters

Meters are electronic devices that automatically record the duration of time that a television set is turned on and the station to which it is tuned. No action or effort is required by viewers. That eliminates memory and accuracy problems associated with diaries or interviews. The meters are connected to the research company's central computer, which regularly and automatically collects data stored in the meters. That reduces the time needed to process and distribute audience data to users. Many large advertising agencies have online computer connections with audience measurement companies and can receive television audience data a day or two after a telecast.

The People Meter

Television audience measurement underwent significant changes in the late 1980s with the introduction of the people meter to measure network television audiences. Prior to that time, meters measured only television set usage — the station that a television set was tuned to. To ascertain the composition or characteristics (demographics) of network program audiences, research companies used a separate sample of households that maintained diaries to report the kinds of people who were watching the programs. The diaries allowed them to report on what individual family members watched. In addition to using a different sample of households than the metered households, that methodology suffered from the problems of diaries in general.

Nielsen Media Research's introduction of the people meter changed much of that. It is a small device that looks like a calculator or a remote control unit. (See Exhibit 15.1.) Each family member has a different assigned button, and there are extra buttons for guests. The meter automatically records the station being viewed, and individual viewers are supposed to press their buttons when they start to watch and press them again when they leave the room. The people meter is like a miniature computer, and each family member's age, gender, and other demographic information is stored in it. (Guests enter that information when they use the meter.) Both television viewing and demographic characteristics are now measured by people meters in one sample, and Nielsen no longer uses diaries for its network audience composition studies.

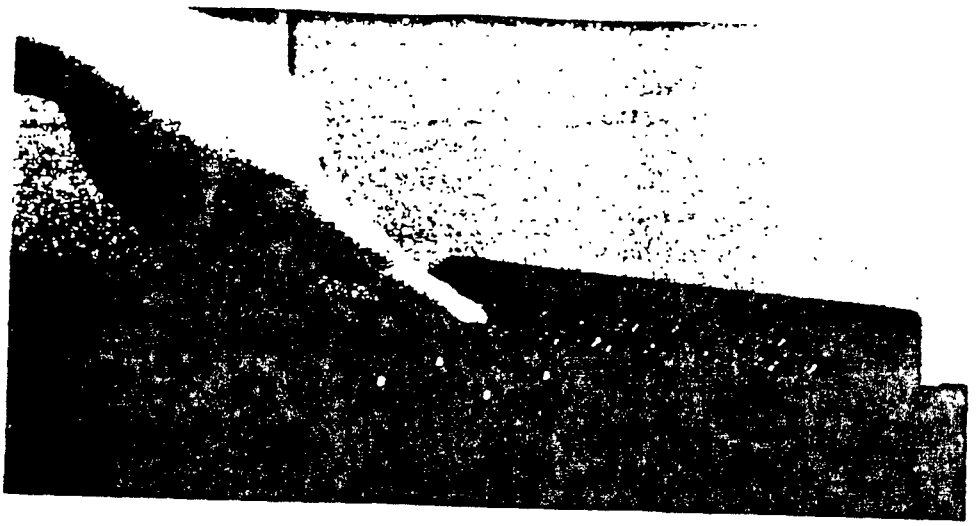

Exhibit 15.1 The Nielsen people meter that is used to record television viewing by different family members.

Problems with Meters

A major problem with meters is that they do not measure whether anyone is watching the television set while it is turned on. Some studies have shown that up to 25 percent of the time that sets are turned on, no one is in the room watching. That may be true during long program segments as well as commercial breaks. People meters have not solved that problem, for viewers must press a button to indicate they are in the room, and some may forget or ignore the button.

What is needed, and what the research industry is working toward, is a truly *passive* measuring device, one that can record viewing by individual viewers without requiring any action on their part. The technology for such passive meters is available, but costs and concerns about privacy are hindering their implementation. It would be technically feasible, for example, to give viewers a device to wear (or even to implant it under their skin) that would emit an electronic signal that could be read by a meter on the television set. It is also feasible for heat-sensing devices to identify and record the presence of individual viewers in the room while the set is turned on. (Such heat-sensing devices are sensitive enough to detect the presence of family pets.) To many people, however, devices like those pose threats of government surveillance. In addition, passive meters will detect only the presence of an individual in the room; they will not ascertain whether the person is watching or paying attention to the program or commercial.

Media researchers and television network executives are concerned about people meter problems with young children and with guests. Young children may not understand how to operate the people meter, and they are probably less likely than adults to remember to press the buttons. The requirement for guests in the household to provide demographic information when they watch is also seen as a hindrance.[1]

Another major problem with meters is the expense of installing and maintaining them. Consequently, meters are limited to the measurement of network television audiences and the audiences of television stations in the fifteen or so largest markets in the country. Stations in smaller markets simply could not afford to pay for audience measurement by meters

A couple of other problems are associated with television audience measurement, although not necessarily only with meters. One is the problem of out-of-home viewers, people who watch television at work or in hotels, dormitories, or bars and who are effectively beyond the reach of audience measurement companies. One study estimated that 5 million people watch "Monday Night Football" in bars, hotels, and dormitories, that 3.1 million college students watch daytime television in dormitories, and that 2.6 million women watch daytime television at work.[2] It remains to be seen whether the costs of alleviating such problems can be justified in light of the improved precision of measurement.

The second problem concerns the difficulty of measuring the use of videocassette recorders to play prerecorded cassettes (rentals) and to play back programs recorded off the air. Nielsen Media Research does measure the viewing of prerecorded cassettes by families in its people meter sample, but there is not yet universal agreement about how to measure and to count viewers of programs recorded off the air. For example, should such viewing be counted if it takes place more than one or two days after the program was originally telecast?[3]

RADAR®

Network radio audiences are measured by Radio's All Dimension Audience Research (RADAR®). It was established in 1967 and has been operated by Statistical Research, Inc. (SRI) since 1972. Data are gathered by day-after telephone recall interviews of respondents for a seven-day period. Interviews with approximately 12,000 people are conducted throughout the year.

RADAR® reports audiences of stations that carry specific network programs and network commercials. To do that, it relies on network clearance reports—lists of stations that carried specific network programs and commercials.

. . . RADAR® Samples

SRI first generates a sample of possible telephone numbers that are allocated among the 111 U.S. telephone area codes. In that procedure, a computer generates four-digit numbers that are paired with central office (exchange) prefixes. That random-digit dialing procedure gives each telephone household (even those with unlisted numbers) an equal chance of being selected, so SRI does not make any other effort to contact households that might otherwise be underrepresented, such as minority households.

THIRD EDITION

Advertising Media Planning

Jack Z. Sissors
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member of the family (up to eight members. A special unit containing sixteen buttons is available for larger families).

Before the unit is ready for use, a field representative collects demographic data about age and sex of each family member. These data are recorded in a control unit. Each button must be pressed at the beginning and end of each viewing. Visitors must key-in their sex and age on two special buttons. There is also a small key-pad for people to make viewing entries from across the room. (See Figure 4–1.)

The AGB meter is also in the form of a small box that sits on top of the television set. It is an audience monitor. It has a series of seven push buttons on it—one button is assigned to each family member. It comes with a separate hand-held device, about the size of a package of cigarettes, with buttons on it that must be pressed to indicate viewing. When viewers press a button on this pad to indicate that they are viewing, a light goes on in the box. They must also press a button to indicate when to stop viewing. That box also flashes when the set is turned on so that people will be reminded to press the buttons of the smaller unit. Also, at intervals, all the lights in the box on top of the set flash to remind viewers to cooperate. A basic metering unit can measure up to four television sets and can even monitor VCRs.

ScanAmerica has a device that flashes a question mark in the left-hand corner of the screen. Family members who are watching have a small handheld device which allows them to move a pointer on the TV screen to an identification number. Then they move the pointer over to an X to indicate that they are watching.

Information from these meters are returned over telephone lines to a centrally located computer. The demographics of each family member are already stored in the computer's memory, and are combined with viewing data to provide program ratings of people's viewing. Meters are supposed to be kept by a sample of homes for a period of five years, when the sample is replaced.

The Need for People Meters

Ratings based on diary measurements have long been considered inadequate. But for years, there was no technique available to improve them. A list of diaries' inadequacies includes the following:

1. Most of the measurements were limited to a seven-day period. Therefore it was not possible to measure the cumulative tune-in for a four-week period of a demographic audience segment (for example, women aged 18–49). Of course, estimates could be, and were, made to provide this kind of information.

   Nielsen, for example, required a sample of viewers to fill out diaries for one week only, only about a fourth of its entire sample. This data was then unified into a four-week figure. On a nationwide basis, Nielsen collected demographic data for only thirty-nine weeks of a year, making it difficult to know the cumulative audience for certain time periods.
2. It was found that the last days of diary measurement were not necessarily as accurate as the first days in a seven-day period.

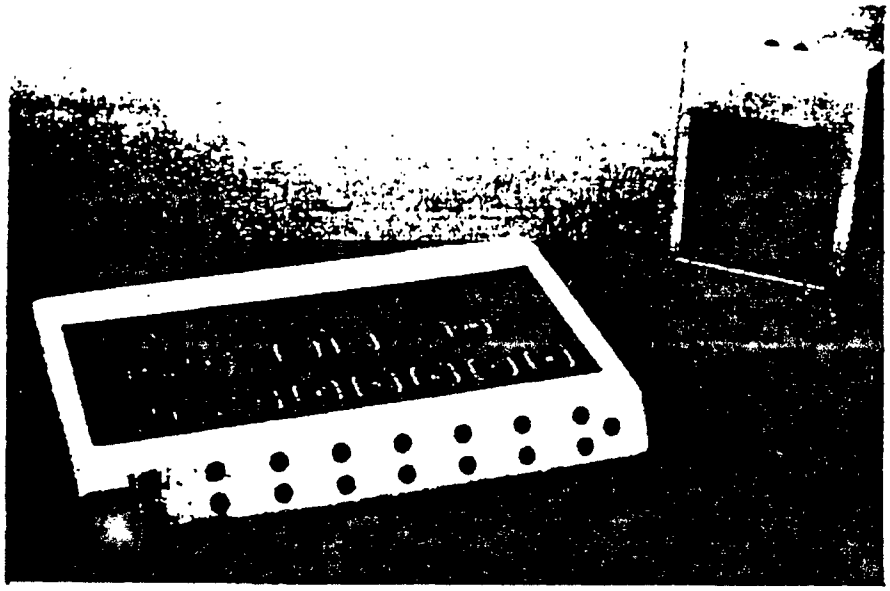

FIGURE 4–1. Nielsen's People Meter (with Hand-Held Remote Unit)
Reprinted courtesy of Nielsen Media Research.

3. Diaries tended to provide higher ratings for higher-rated shows. This indicates that respondents of diary samples may have reported their "typical" (rather than actual) viewing habits when filling out the diaries, thereby inflating the ratings of the more popular higher-rated shows.
4. People who can neither read nor write (or whose literacy skills were poorly developed) were not likely to fill out diaries. Some estimates of their number run as high as 20 percent of the total U.S. population.
5. Children and older people were not likely to fill out the diaries completely, to do it accurately, or to return them.
6. Diaries tended to inflate the number of viewers per viewing households in a sample. Therefore, the costs per thousands were lower than they should have been.
7. Ratings from cable TV homes tended to be lower than they should have been, presumably, because there were too many stations for diary keepers to remember, or it simply took too much time and attention to detail to fill out diaries.
8. Many diaries were not completed, and of those that were, only half may have been usable. Therefore the returns were nonrepresentative of the universe being measured.

Advantages of People Meters

The advantages of people meters for media planning purposes are as follows:

1. People meters are easier to use than diaries because no writing is necessary. Presumably, this fact may make measurements of TV watching more accurate than diaries.
2. Because writing is not necessary, the sample size and the characteristics of the universe being measured tend to be more representative than a diary sample.
3. Cable viewing may be much more accurately measured than it was in the past because viewers must only press buttons in order to record their cable viewing.
4. Measurements of cumulative viewing over a period of consecutive weeks result in reach and frequencies of demographic segments of target audiences that are measured directly. This direct measurement was not previously possible.
5. Reports of viewing can be made much more quickly because there are no long delays caused by the time taken to mail in diaries, edit and tabulate them.
6. People meters can measure movement of people in and out of the viewing room. If there is excessive movement, it may indicate that less attention is being paid to the program.

TESTIMONY OF SAMUEL H. BOOK, Ph.D.
PRESIDENT, MALARKEY-TAYLOR RESEARCH

August 1991

1. Introduction

I am president of the market research division of Malarkey-Taylor Associates, Inc. (MTA), the country's oldest, most experienced consulting firm specializing in cable television, with over 25 years of continuous consulting and research service to the cable industry. During the past five years, I have designed and conducted more than 100 statistically projectable surveys for cable operators, cable programmers, wireless cable companies and major international firms and governments contemplating entry into cable TV. Previously, I spent four years as research director for a Los Angeles market research firm; I designed and conducted hundreds of motion picture surveys for movie studios and independent producers. A copy of my resume is attached to this testimony.

The following companies, among others, have used and relied upon survey data and analysis which I provided while at Malarkey-Taylor: Continental Cablevision, Comcast Cable Communications, Jones Intercable, Time-Warner, American Television & Communications, Tele-Communications, Inc., Hughes Communications, Showtime Networks, Tribune Broadcasting, United Video, and Times-Mirror Corp. These studies included telephone surveys and personal interviews among cable consumers and cable operators.

I have been asked by the Joint Sports Claimants (JSC) to provide my opinions concerning the Bortz & Company constant sum survey of cable operators that has been submitted to the Copyright Royalty Tribunal (CRT) in the 1989 cable royalty distribution proceeding. (Cable Operator Valuation of Distant Signal Non-Network Programming, 1989, dated August 1991). I also have been asked to present my views of the criticisms made of a similar JSC constant sum survey during the 1983 cable royalty distribution proceeding.

2. 1989 Bortz Survey

Based on my market research experience and training, I would accept the 1989 Bortz survey results as valid and reliable, within the margins-of-error and confidence levels stipulated in the survey report. I believe the study provides accurate estimates of the relative amounts that cable operators would have spent in 1989 on the different categories of distant signal non-network programming they carried.

The constant sum method utilized in the Bortz study is appropriate for the purpose of assessing how cable operators would have allocated programming budgets among distant signal non-network programming categories. In fact, I do not believe there would have been any better way of determining how cable operators would have allocated their programming budgets. Constant sum surveys are often used in cable industry market research, and they are relied upon in the cable industry, especially in research situations where respondent trade-offs must be considered.

The Bortz study was competently designed and implemented. It utilized generally accepted methods of sampling, questionnaire design and interviewing. In addition, the survey response rate was outstanding at nearly 80 percent for the key survey question, thereby ensuring a high degree of confidence in the projectability of survey data to cable operators-at-large. Consistency of the 1989 survey data with prior constant sum survey data submitted to the CRT provides further confirmation of the 1989 study's acceptability.

3. Survey Criticisms Raised in 1983 Proceedings

During the 1983 cable royalty distribution proceeding, several parties presented a number of surveys of cable operators and cable subscribers. Professor Alan Rubin, a consultant retained by the Motion Picture Association of America, criticized each of those surveys. The CRT relied upon Professor Rubin's testimony in part as a basis for discounting the weight to be accorded to JSC's 1983 constant sum survey. In my opinion, the various criticisms advanced by Professor Rubin and relied on by the CRT do not provide a valid basis for discounting the 1989 Bortz constant sum study.

a. Recall

I agree with Professor Rubin that the reliability of survey data decreases when there is a long time lag between the survey and the behavior in question. Professor Rubin correctly pointed out that "[w]e cannot expect to gather meaningful information from people about how they would have acted two years ago." (Rubin, p.4) The Tribunal also accepted this criticism. (Fed. Reg. 12795)

However, the 1989 constant sum survey of cable operators was conducted at the end of 1989 and beginning of 1990. Therefore, the two-year lag in the 1983 cable operator survey does not apply to the 1989 survey. In the 1989 Bortz survey, some respondents, surveyed in 1989, were asked how they would allocate their program budgets for 1989. Other respondents, surveyed in early 1990, were asked how they would have allocated their programming budgets in 1989. Whereas consumers cannot be expected to recall their behavior in the recent or distant past, cable operators would be expected to recall what they would have done as part of their professional responsibilities a few months ago. Consequently, recall criticism of the 1989 constant sum survey of cable operators does not have the validity of Professor Rubin's criticism of the 1983 survey.

b. Constant Sum Techniques

Professor Rubin testified that the constant sum technique was "inappropriate" because ["[o]perators and subscribers were asked to do something completely abnormal to their routine cable television behaviors. They were asked to break out specific categories of programs and to report how valuable each type of program was to them." (Rubin, p.5) The same issue was raised in the Tribunal's 1983 Final Determination, where it was stated that Rubin found the constant sum survey "to be an activity that neither cable operators nor subscribers do in actuality . . . ." (Fed. Reg. 12795).

It may be abnormal for subscribers and TV viewers to break out categories of programs and report on their relative value, but it is not an abnormal task for cable operators. Although cable operators typically "program whole signals" (Fed. Reg. 12795), they engage in exercises similar to constant sum allocation when evaluating those signals. Cable operators are frequently called upon to assess the value of alternative types of programming--sports, movies, series, documentaries, news, etc.--when deciding to carry a new program service or drop an existing service. The 1989 Bortz survey asked cable operators to do what they often do as part of their jobs, namely to allocate percentages

of a fixed budget to different program categories based on the value of those categories in attracting and retaining subscribers.

The 1989 constant sum survey improved upon the 1983 survey by a small but significant change in the wording of the constant sum question. In 1983 cable operators were asked to allocate the value of program categories, while in 1989 cable operators were asked to allocate their 1989 program budget across program categories. The 1989 research exercise was more realistic than in 1983, since cable operators are used to thinking in terms of budget allocations.

c. The Interview Process

Professor Rubin questioned whether respondents could reliably recall values placed on program categories "in the very few minutes provided by a telephone interview." (Rubin, pp. 5-6) The Tribunal likewise noted Professor Rubin's testimony that "this type of exercise conducted in a few minutes over the telephone could not accomplish the goals of the survey." (Fed. Reg. 12795; see also p. 12809).

I believe such concerns are unwarranted. The survey instrument was appropriately designed to be easily administered and understood on the telephone. The questions were clearly worded and the instrument was concise and narrowly focussed on the key constant sum questions. I believe the questionnaire would have captured and held respondents' attention for sufficient time to complete the constant sum exercise accurately and reliably.

The respondents were cable system executives. In my opinion, they should have had no difficulty understanding and answering the questions posed in the survey. They also should have been familiar with the terminology and definitions used in the surveys.

Malarkey-Taylor and other cable research firms with which I am familiar have conducted numerous telephone surveys of cable operators in recent years, and the results have been relied upon by our clients. These surveys usually require 15 to 20 minutes to complete on the phone. My experience has been that cable operators are typically able to understand the questions and to respond in a thoughtful, meaningful and reliable manner to questions posed in a brief telephone interview.

The survey process used by Bortz, as well as the design of survey instruments, was up to professional standards. An independent, third-party research firm, the highly respected and experienced Burke Marketing Research, administered the surveys, thereby minimizing the possibility of interviewer bias and strengthening confidence in the survey results.

4. Conclusion

Malarkey-Taylor has conducted many different types of cable industry surveys during the past few years, including studies for seven of the top-ten cable industry MSOs, scores of surveys for smaller cable operators, in-depth market studies for cable programmers and dozens of surveys for firms introducing new technologies. I have also reviewed and analyzed numerous surveys of cable consumers and operators conducted by other research organizations.

I believe that the 1989 Bortz study was well designed and professionally implemented, and I believe it can be relied upon to determine how cable operators would have allocated programming budgets among various program categories. Professor Rubin's criticisms of the 1983 surveys of cable operators are, in my opinion, not valid as a basis for discounting the results of the 1989 Bortz constant sum study. The Bortz 1989 study rectified a few deficiencies in the 1983 study, especially by eliminating the time lag between the surveys and the behavior which cable operators were being asked to recall and by changing the allocation exercise to focus on program budgets rather than program value. These improvements overcame some of Professor Rubin's criticisms, while other criticisms emanating from the 1983 proceedings were simply not justified.

SAMUEL H. BOOK, Ph.D.

Dr. Book is president of the research division of Malarkey-Taylor Associates. He is a professional economist and market researcher, specializing in the design and implementation of consumer studies and economic analyses of telecommunications, cable television, and related technologies. Dr. Book has extensive experience in conducting focus groups, designing and managing statistically valid consumer surveys, writing in-depth reports on business, economic, and consumer aspects of cable television, wireless cable, direct broadcast satellite, home video, and other technologies. He has developed and used analytical models for cost-benefit studies and economic feasibility studies.

From 1970 to 1979 Dr. Book was a university professor in Toronto, where he developed and taught courses in economics and management at the MBA and undergraduate levels. From 1980 to 1984, as research director of The National Research Group, he produced over 300 market research studies for the movie industry using a variety of data collection and sampling methods, including focus groups, telephone surveys, and audience research.

Qualifications and accomplishments include:

- Ph.D. in Economics, Columbia University, New York, NY.
- Research Director, National Research Group, Los Angeles, CA.
- Assistant Professor, Faculty of Administrative Studies, York University, Toronto, Ontario, Canada.
- Senior Research Consultant, The Ontario Arts Council.

Speeches and presentations:

- Spoke on "The Economics of Cable System Overbuilds" at The Florida Cable Television convention, The Eastern Cable Show and Florida Public Service Board, and The Western Cable Show.
- Speech, "Cable Rate Sensitivity" presented at the Great Lakes Cable Convention.
- Spoke as panelist at PKA Associates Overbuild Seminar.
- Spoke on techniques of cable viewership research at a CTAM seminar.
- Presented studies of cable system overbuilds at:
  - City Council meeting in Naples, FL,
  - County Commissioners hearing in Reston, VA.

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Testimony of Dr. Peter H. Lemieux
Before the Copyright Royalty Tribunal
August 16, 1991

I am Peter H. Lemieux, Managing Director of Information Architects and a Lecturer in Political Science at the Massachusetts Institute of Technology. A copy of my *curriculum vitae* is attached to this testimony. I will sponsor Sports Exhibit 3, "The Structure and Growth of the Cable Copyright Royalty Fund."

This report presents fundamental information concerning the pattern of royalty payments made by cable operators in 1989 and shows how the cable copyright royalty fund has changed over the decade since 1979. As discussed in the report, there has been a very significant rise in the carriage of satellite-delivered superstations, all of which broadcast a number of live sporting events. These seven stations generated fully 75 percent of all basic royalties paid by cable operators in the second half of 1989, more than double their share of 36 percent in 1979.

Peter H. Lemieux

CURRENT POSITIONS

Lecturer in Political Science, *Massachusetts Institute of Technology, 1984-*
Offer courses and conduct research in political behavior, comparative politics, and survey and quantitative research methodologies. Departmental Director of Computing. Affiliated with the Research Program in Communication Policy and the M.I.T. Communications Forum.

Managing Director, *Information Architects, Cambridge, Massachusetts, 1982-*
Principal of a consulting firm offering research services to the telecommunications and information industries. Recent clients include CBS, Time-Life, RCA, Motion Picture Association of America, Washington Post, A. C. Nielsen, Major League Baseball, Bell Canada, Symbolics, and the Corporation for Public Broadcasting.

PREVIOUS POSITIONS

Polling Consultant, *The Boston Globe, 1986-1988*
Conducted periodic election and public opinion polls for the *Globe*. Recent polls have examined the Presidential primaries in New Hampshire and Massachusetts and racial attitudes in the City of Boston.

Associate Director for Research, *Television Audience Assessment, Inc., Cambridge, Mass., 1981-82.*
Principally responsible for the research and development of a new system of audience measurement based on viewer reactions to television programs under the auspices of major satellite program networks, multiple system operators, and the John and Mary Markle Foundation.

Research Director, *Kalba Bowen Associates, Cambridge, Massachusetts, 1979-81.*
Participated in numerous studies of the telecommunications industry covering such areas as direct broadcast satellites, home video systems, multichannel subscription television, and educational telecommunications.

Visiting Fellow, *Department of Economics, Harvard University, 1978-79.*
Independent study and research in microeconomic theory and public finance under the auspices of a fellowship from the National Science Foundation.

Assistant Professor of Political Science, *University of Rochester, 1975-79.*
Taught courses and conducted research on comparative political behavior, policy analysis, and the application of quantitative statistical methodologies to social research.

EDUCATION

Ph.D., Political Science, Massachusetts Institute of Technology, 1977.
A.B. with honors, Government, Harvard College, 1971.

AWARDS

Who's Who in the East, 1981- .
Postdoctoral fellowship, National Science Foundation, 1978-79.
Gabriel. A. Almond dissertation award, American Political Science Association, 1978.

EXPERT TESTIMONY

Before the Federal Communications Commission, Docket 83-1009, 1984.

Conducted a study of the national spot television advertising market in support of a submission by the Motion Picture Association of America in the multiple ownership docket.

Before the Copyright Royalty Tribunal, Various Dockets, 1980-88.

Testified on numerous occasions on behalf of professional sports leagues concerning copyright issues arising from the carriage of sports telecasts on distant television stations imported by cable television systems.

ACADEMIC PAPERS AND PUBLICATIONS

"Why Doesn't Turnout Seem to Matter?" presented to the Annual Meetings of the American Political Science Association, Washington, DC, 1991.

"A Theory of Supreme Court Nominations," presented to the Conference on Political Economy, National Bureau of Economic Research, Cambridge, 1990.

"Modelling the Process of Supreme Court Confirmations: Positive Theories and Empirical Realities," (with C. Stewart), presented to the Annual Meetings of the American Political Science Association, Atlanta, 1989.

"Senate Confirmation of Supreme Court Nominations from Washington to Reagan," (with C. Stewart), 1989, submitted for publication.

"Politics and the Growth of Communications," (with R. Duch), 1988, submitted for publication.

"Advise? Yes. Consent? Maybe. Senate Confirmation of Supreme Court Nominations," (with C. Stewart), presented to the Annual Meetings of the American Political Science Association, Washington, 1988.

"Momentum and Candidate Support in the 1988 New Hampshire Republican Primary," presented to the Annual Meetings of the American Association for Public Opinion Research, Toronto, 1988.

"The Political Economy of Communications Development" (with R. Duch), presented to the Annual Meetings of the International Communication Association, Chicago, 1986.

"Multichannel Television: Can It Deliver the Diversity It Promises?" M.I.T. Research Program on Communications Policy, 1983.

"A Note on the Detection of Multicollinearity," American Journal of Political Science, 22, 1 (1978), 183-186.

The Liberal Party and British Political Change: 1955-1974, Ph.D. dissertation, Massachusetts Institute of Technology, Department of Political Science, 1977.

"Political Issues and Liberal Support in the February, 1974, British General Election," *Political Studies*, 25, 3 (1977), 323-342.

"Heteroscedasticity and Causal Inference in Political Research," *Political Methodology*, 3, 3 (1976), 287-316.

"Box-Jenkins Models, Quasi-Experimental Designs, and Forecasting in International Relations Research," presented to the Annual Meetings of the International Studies Association, Toronto, 1976.

CONSULTING REPORTS

Increasing Participation in Elections to the Board of Overseers, (with G. Orren), Orren/Lemieux Associates, 1990 (proprietary).

Opinions toward the Board of Governors Universities, Information Architects, 1990 (proprietary).

A Survey of Customer Satisfaction with Customer Services, Information Architects, 1986 (proprietary).

Factors Influencing the Growth of Magazine Sales, Information Architects, 1986 (proprietary).

Comparing Typeset and Typewritten Correspondence for Direct Mail Solicitation of Fortune-1000 Business Managers (with E. Lewis and D. Sykes), Project on Interdisciplinary Research in Information, 1986.

Analysis of the Basic Cable Copyright Royalty Fund, submitted in testimony on behalf of the Joint Sports Claimants (Major League Baseball, National Basketball Association, National Hockey League, National Collegiate Athletic Association) before the Copyright Royalty Tribunal, Docket 84-1-83CD, Information Architects, 1985.

Analysis of the 3.75% Cable Copyright Royalty Fund, submitted in testimony before the Copyright Royalty Tribunal, Docket 84-1-83CD, Information Architects, 1985.

"Statement of Peter H. Lemieux, Ph.D., on behalf of the Motion Picture Association of America," submitted in testimony before the Federal Communications Commission, Docket 83-1009, 1984.

The Emerging Multichannel MDS Industry (with R. Duch, et. al.), Information Architects, 1984 (proprietary).

An Empirical Comparison of the Effectiveness of Typeset, Typewritten, and Dot Matrix Business Documents (with E. Lewis and D. Sykes), Compugraphic Corporation, 1984.

Four Markets for Premium Sports Television Services, Information Architects, 1984 (proprietary).

Factors Influencing Movie Attendance, Information Architects, 1983 (proprietary).

The Market for a College Basketball Pay Television Service, Information Architects, 1983 (proprietary).

Cabletext Advertising Awareness Study: Summary Report, Information Architects, 1983 (proprietary).

The Audience Rates Television: Summary Report (with E.J. Roberts, et. al.), Television Audience Assessment, Inc., 1983.

The Audience Rates Television: Methodology Report (with R. Wulfsburg, et. al.), Television Audience Assessment, Inc., 1983.

Audience Attitudes and Alternative Program Ratings (with E.J. Roberts), Television Audience Assessment, Inc., 1981.

Supplemental Television Services for Bermuda (with D. Cantor and B. Ayvazian, et. al.), Kalba Bowen Associates, Inc., 1981 (proprietary).

Voter Information Programs: A Handbook for Election Officials, prepared for the Federal Election Commission, Kalba Bowen Associates, 1980.

"Implications of New Communications Technologies for Higher Education," in *Advisory Report to the Joint Task Force of the Annenberg School of Communcations and the Corporation for Public Broadcasting* (with M. Savage and K. Kalba, et. al.), Kalba Bowen Associates, Inc., 1980 (proprietary).

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Future Costs and Performance of Videocassette and Videodisc Technologies, Kalba Bowen Associates, Inc., 1980 (proprietary).

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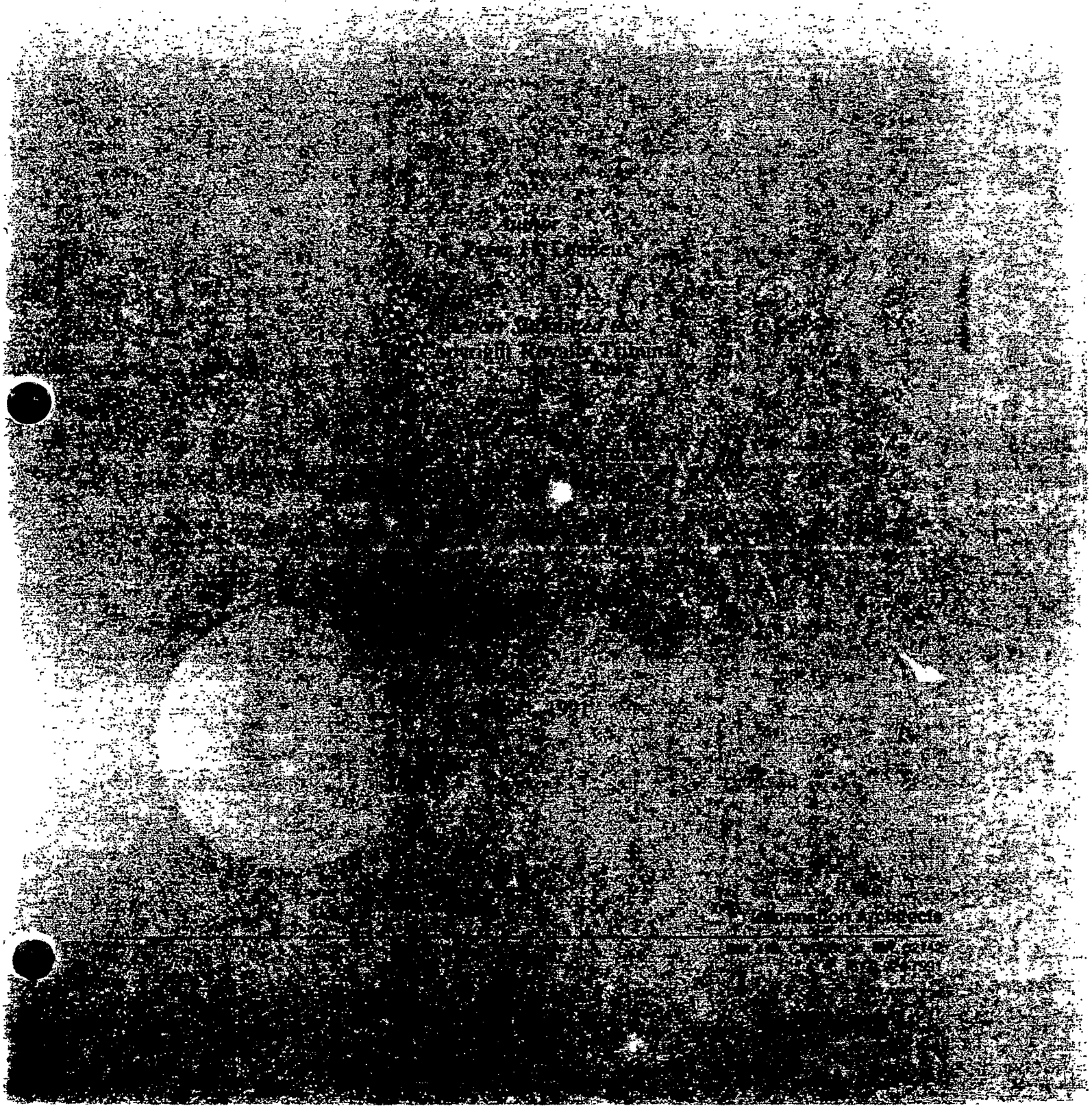
The Structure and Growth of the Cable Copyright Royalty Fund: 1979-1989



The Structure and Growth of the Cable Copyright Royalty Fund: 1979-1989

Executive Summary

This report presents some summary findings concerning the structure of the 1989 cable copyright royalty fund and examines how this fund has developed over the decade since 1979. The principal findings are these:

- *The most striking development over the decade has been the rapid expansion of the role of the satellite-delivered "superstations."* While nearly eight hundred different television stations were imported by cable television operators in the second half of 1989, just three of those stations — WTBS, Atlanta; WGN, Chicago; and, WWOR, New York — accounted for 47 percent of all "instances of carriage" and generated 67 percent of all basic royalty payments made by Form-3 systems. The three original superstations have since been joined on satellite by four additional signals, accounting for another five percent of total instances and eight percent of basic royalties. *In all, the seven satellite-delivered stations accounted for 52 percent of all instances of carriage, up from 22 percent in 1979. Furthermore, these signals generated fully 75 percent of all basic royalties paid in 1989-2, compared to just 36 percent in 1979-2.*

- *All seven superstations carry a number of live sporting events.* They each televise the games of a Major League Baseball team; five carry National Basketball Association events; and, two broadcast National Hockey League games. In addition, three of the seven carried a variety of college sporting events under the auspices of the National Collegiate Athletic Association.

1.0 The Composition of the Copyright Royalty Fund

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, those serving communities that are generally located farther than thirty-five miles from the cable system. The Act also established the Copyright Royalty Tribunal to determine the proper distribution of these fees to the various owners of the copyrighted programming carried over the distant television stations. This report will present some fundamental information concerning the pattern of royalty payments made by cable operators in 1989 and show how the cable copyright royalty fund has changed over the decade since 1979. Throughout this report I shall refer to royalties paid under this rubric as the "basic" royalty fund, which totalled some $100 million in 1989.

The Copyright Act also included a provision that empowered the Tribunal to set new royalty rates if the Federal Communications Commission 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 importation of distant signals, while the other removed the "syndicated exclusivity" rule requiring 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 the FCC's action, the Tribunal conducted a rate-setting proceeding to set new royalty rates for the programming now allowed by the change in the rules. In its 1982 decision the Tribunal assigned a rate of 3.75 percent of cable system revenues 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. The royalties collected for programming formerly disallowed under the syndicated exclusivity rules will be termed the "syndex" fund.[1]

1.1 The 1989 Copyright Royalty Funds

Table 1 on the next page presents the distribution of all royalties collected in the second accounting period of 1989 ("1989-2") by type of fund. The majority of payments were made into the basic fund with the remainder divided about equally between the 3.75 and syndex funds.

Both the royalty fees cable operators pay, and the amount of detail they must supply in their filings, vary according to the total revenues of the cable system. While some 12,493 cable systems paid royalties for signal carriage during the second half of 1989, Table 1 shows that nearly 98 percent of all royalties collected came from the 2,032 so-called "Form-3" systems, those whose gross semi-annual revenues from *basic* cable

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[1] The new rates became effective in the first accounting period of 1983. The 3.75 percent rate applies to a full "distant-signal equivalent (DSE)." See footnote 4 below for details. The syndicated exclusivity rules have since been reinstated by the FCC and syndex payments ended as of January, 1990. Syndex payments were, of course, collected in 1989.

Table 1
Composition of the 1989-2 Copyright Royalty Fund

Fees Paid by Type of Fund

Royalty Pool	Royalties Paid	
Basic Fees	$59,151,836	57.1%
3.75% Fees	22,311,855	21.5
Syndex Fees	22,132,389	21.4
Total	*$103,596,080*	*100.0%*

Fees Paid by Type of Cable System

Type of System	Number of Systems		Royalties Paid	
Form-1 Systems	7,997	64.0%	$223,916	0.2%
Form-2 Systems	2,464	19.7	2,058,581	2.0
Form-3 Systems	2,032	16.3	101,313,583	97.8
Total	*12,493*	*100.0%*	*$103,596,080*	*100.0%*

Source: 1989-2 Statements of Account as compiled by Cable Data Corporation.

service totalled at least $292,000.[2] Operators of Form-3 systems are required to identify each local and distant television station they carry to document the royalty payments made. This information permits us to determine the amount of royalties paid for each distant signal. I will limit my attention to Form-3 systems because of their preponderance in the royalty funds and their more detailed signal information.

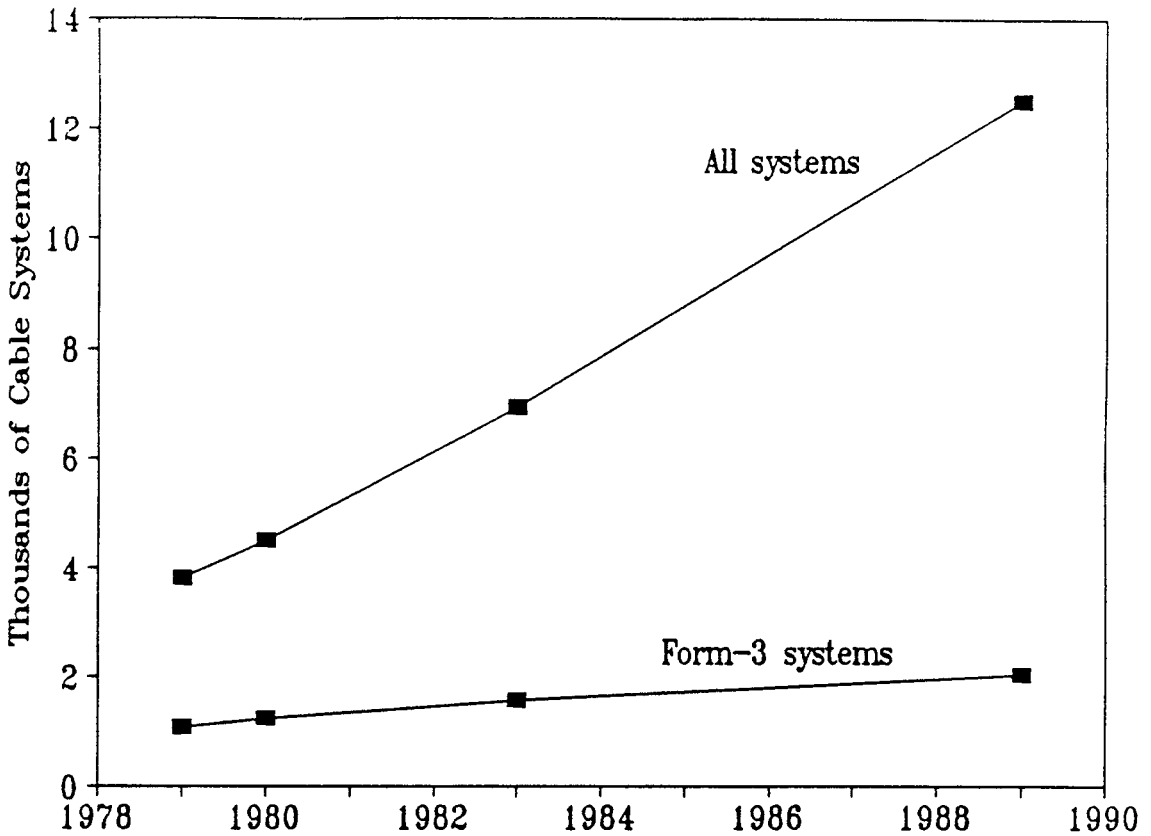
1.2 Growth in Cable Systems and Total Royalties: 1979-1989

The various proceedings before the Tribunal have produced a substantial amount of information that can be used to put the 1989 copyright royalty fund into historical context. To accomplish this task I have combined data for various years from the Statements of Account filed with the Copyright Office as compiled by the Cable Data Corporation. All data I report for a given year refers to the *second accounting period*, from July 1st through December 31st. I begin this historical analysis with the trends in both the number of cable systems filing Statements of Account to the Copyright Office and the amount of royalties these systems paid.

Figure 1 on the next page presents the data for cable systems. In the second accounting period of 1979 a total of 3,806 systems filed with the Copyright Office, of

[2]This figure excludes revenues from "premium" cable programming for which subscribers pay a per-channel monthly fee such as Home Box Office (HBO) and the various regional sports programming services like the New England Sports Network (NESN), or "pay-per-view" services like individual movies or boxing matches.

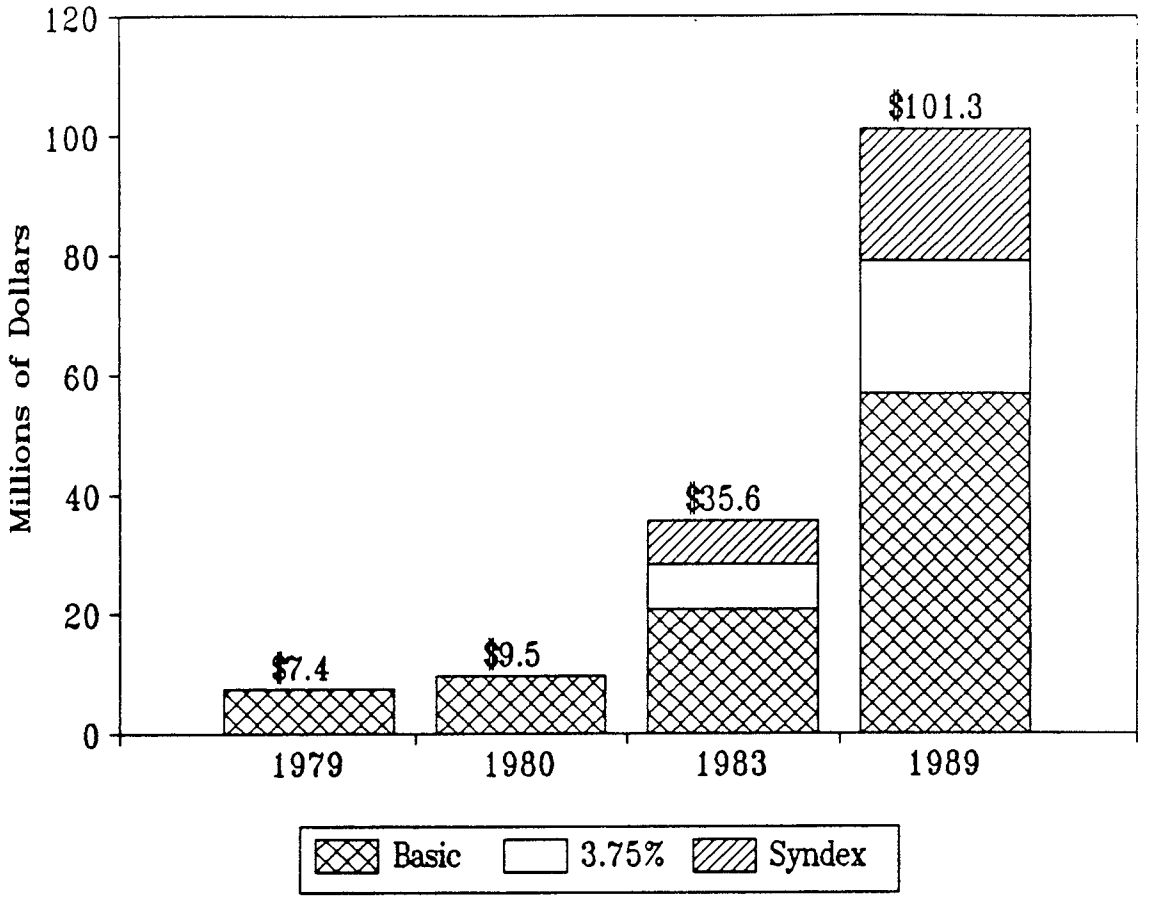
Figure 1
Growth in Cable Systems: 1979-2 to 1989-2



which 1,067 were Form-3 systems. The total number of systems nearly doubled between 1979 and 1983 to 6,896, but Form-3 filings grew much more slowly. Only 1,573 systems filed in 1983, about 50 percent more than in 1979. Over the next six years the gap between the total number of systems and the number of Form-3 systems widened substantially. While the total number of systems nearly doubled again by 1989 to 12,493, the number of Form-3 systems grew only about 30 percent to 2,032. However, despite the slower growth of Form-3 systems, their much higher royalty payments meant that the fraction of all basic royalties paid by Form-3 systems actually grew slightly between 1983 and 1989 from 94.7 percent to 96.1 percent.

Figure 2 shows the growth in Form-3 royalty payments (for the second accounting period of each year) since 1979. While the addition of the 3.75 and syndex funds naturally expanded the total fund after 1983, basic payments also rose substantially over the decade. This growth in basic royalties resulted from increases in both of the components that determine royalty payments — the average number of subscribers per

Figure 2
Growth in Form-3 Royalty Payments by Fund:
1979-2 to 1989-2



system, and the average receipts per subscriber.[3] Both figures nearly doubled over the decade. The average number of subscribers per Form-3 system rose from 11,221 in 1979 to 19,991 in 1989, while average basic revenues per subscriber increased from $7.62 per month to $14.72.

[3]Since royalty fees are computed as a fraction of cable system revenues, increases in either the number of subscribers, or the amounts those subscribers pay for basic cable service, will increase total revenues and thus total royalties.

2.0 Royalty Payments by Type of Signal

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.[4] Table 2 presents a breakdown of patterns of distant-signal carriage and basic royalties paid according to the type of signal.

Table 2
Instances of Carriage and Basic Royalty Payments by Type of Signal: 1989-2 Form-3 Systems

Type of Signal	Number of Signals		Instances of Carriage		Basic Royalties	
Original Superstations*	3	0.4%	3,367	47.0%	$38,119,867	67.2%
Newer Superstations	4	0.5	347	4.8	4,588,893	8.1
All Superstations	*7*	*0.9*	*3,714*	*51.8*	*42,708,760*	*75.3*
Other U.S. Independents	213	27.6	1,228	17.1	8,917,195	15.7
U.S. Network Affiliates	396	51.4	1,638	22.8	2,768,533	4.9
U.S. Educational	131	17.0	488	6.8	1,157,427	2.0
Canadian	21	2.7	102	1.4	1,176,370	2.1
Mexican	3	0.4	3	0.04	9,443	0.02
All Other Signals	*764*	*99.1*	*3,459*	*49.2*	*14,028,968*	*24.7*
All Signals	*771*	*100.0%*	*7,173*	*100.0%*	*$56,737,728*	*100.0%*

*"Superstations" are satellite-delivered independent stations.

Source: 1989-2 Statements of Account as compiled by Cable Data Corporation.

2.1 Patterns of Signal Carriage: 1989-2

During 1989-2, the 2,032 Form-3 cable systems carried, on average, 3.53 distant signals, for a total of 7,173 different "instances of carriage." Yet, while some 771 different television stations were represented in that total, *nearly half of the instances of carriage consisted of just three signals — WTBS, Atlanta; WGN, Chicago; and, WWOR,*

[4]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 noncommercial, educational stations are attributed 0.25 DSE. Thus a cable system carrying as distant signals an independent station, a Canadian station, an educational station, and a network-affiliated station would pay royalties for 2.50 DSE's (= 1.00+1.00+0.25+0.25). In this report, however, I shall be discussing "instances of carriage," which treats all types of signals equally.

New York, the three original satellite-delivered "superstations." These three stations, a mere 0.4 percent of the 771 different distant signals, accounted for 47 percent of all instances of carriage and 67 percent of the basic royalty fees paid by Form-3 cable operators in 1989-2.

Four other independent stations have joined these three on the satellites in recent years: WPIX, New York; WSBK, Boston; KTLA, Los Angeles; and, KTVT, Dallas-Fort Worth. While not as dominant as the three original superstations, which had all achieved this status before 1979, these four nevertheless command a substantial share of the royalty fund. While representing only one-half of one percent of all retransmitted distant signals, these four stations accounted for about five percent of the instances of carriage, and eight percent of all basic royalties. *Collectively the seven superstations represent over half the instances of distant-signal carriage and generated three-fourths of all basic royalties paid by cable operators.*

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 1989. In addition, WGN, WWOR, KTLA, and KTVT were the "flagship" stations for a team in the National Basketball Association, while WTBS carried both the games of the Atlanta Hawks basketball club and a substantial lineup of other NBA games including the divisional playoffs. WWOR and WSBK complemented their carriage of professional baseball with telecasts of National Hockey League games. Finally, WTBS, WGN, and WWOR augmented their telecasts of professional sporting events with football and basketball games between members of the National Collegiate Athletic Association.

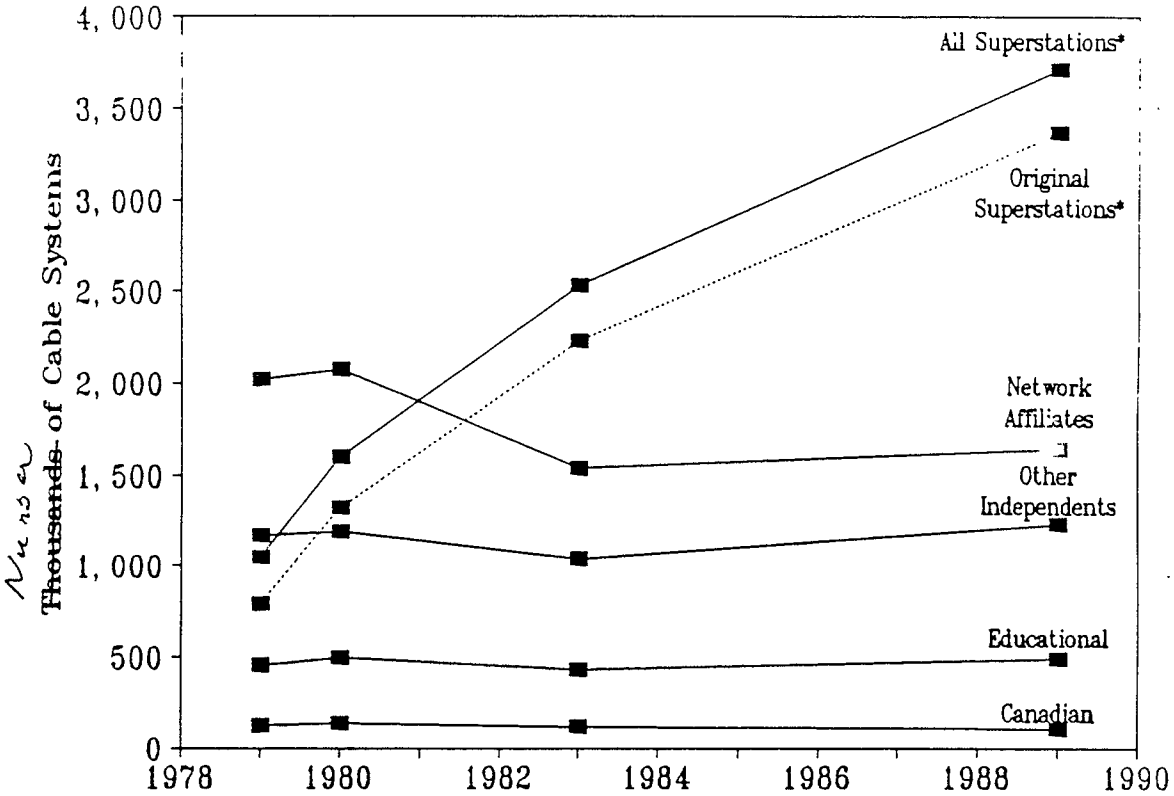
The other 213 independent television stations retransmitted as distant signals accounted for 1,228 instances of carriage, or 17 percent of the total. The 396 different stations affiliated with one of the three major television networks that were carried as distant signals in 1989-2 accounted for 1,638 (23 percent) of the instances of carriage. However, because the Copyright Act assesses a royalty fee four times greater for independents than for affiliates, these 213 independents generated nearly 16 percent of basic royalties compared to just 4.9 percent for network affiliates.

Cable operators retransmitted 131 different noncommercial, educational stations on a distant basis in 1989-2, accounting for 488 instances of carriage or 6.8 percent. Because educational stations receive the same treatment as network affiliates under the Copyright Act, their carriage generated only 2.0 percent of basic royalties. Turning finally to the foreign stations, 21 different Canadian stations were carried on American cable systems, accounting for 1.4 percent of the instances and 2.1 percent of the royalty pool. Three Mexican stations were carried as distant signals and generated less than $10,000 in total basic royalty payments.

2.2 Patterns of Signal Carriage: 1979-1989

The superstations' rise to dominance over the past decade resulted from a rapid upward trend in their carriage by cable operators. As Figure 3 shows, the growth of

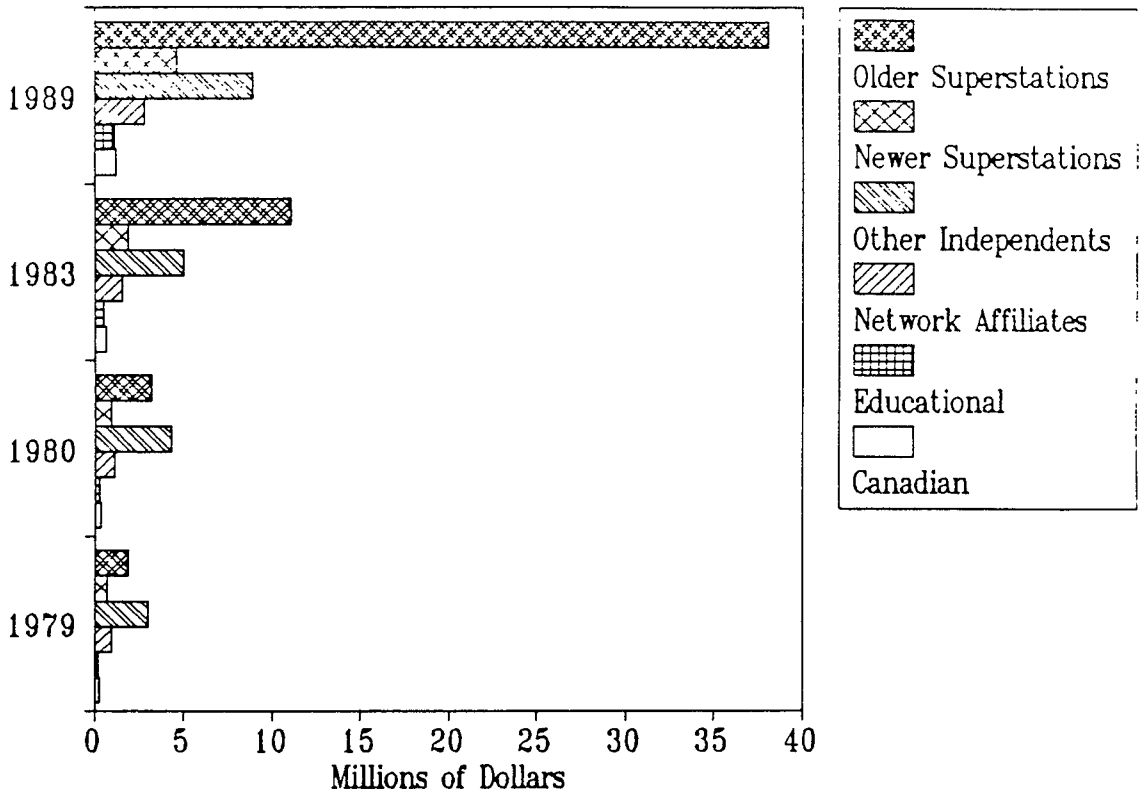
Figure 3
Instances of Carriage by Type of Signal:
1979-2 to 1989-2



*"Original" superstations are WTBS, WGN and WWOR. "All" adds WPIX, WSBK, KTLA, and KTVT.

superstation carriage between 1979 and 1989 stands in stark contrast to the stagnation or decline in carriage of the other types of signals. As the decade progressed the gap between the superstations and all other types of distant signals widened enormously, and not just because four more stations became available by satellite. Between 1979 and 1989, instances of carriage for the three original superstations grew 328 percent from 787 to 3,367, while carriage of the four more recent superstations rose 34 percent from 258 to 347 instances. Other independent stations, in contrast, grew only 5.2 percent from 1,167 instances in 1979 to 1,228 ten years later. Carriage of educational signals also saw only limited growth from 451 to 488 instances, a rate of 8.2 percent. Finally, while both the total number of Form-3 systems and the total number of instances of carriage increased substantially between 1979 and 1989, distant retransmissions of network-affiliated and Canadian stations actually fell in absolute terms. Instances of carriage of network affiliates declined from 2,023 to 1,638 over the decade, while retransmissions of Canadian signals fell from 125 to 102.

Figure 4
Basic Royalty Payments by
Type of Signal: 1979-2 to 1989-2



The rapid rise in superstation carriage was paralleled by an even more substantial increase in the royalty payments cable operators made to offer those signals to their subscribers. Figure 4 shows the basic royalties generated by each type of signal over the past decade. Cable operators paid just $1.9 million to carry the three original superstations in 1979-2. A decade later this figure had grown to $38.1 million, or fully *two-thirds of all basic royalties paid,* and roughly *twenty times* the amount cable operators paid to carry these stations in 1979. Royalty payments also rose substantially for the newer superstations, from about $744,000 to $4.6 million, or six times the 1979 amount. No other category of distant signal saw an increase in royalty payments at the rates tallied by these seven satellite-delivered signals. Payments for independents other than the seven superstations rose from $3.0 million in 1979 to $8.9 million in 1989, a growth rate of 200 percent. Royalties for network affiliates showed even less growth, rising 175 percent from $1.0 million in 1979 to just $2.8 million in 1989. Finally, payments for educational and Canadian stations actually increased somewhat faster than did payments for non-superstation U.S. commercial signals: Royalties for educational stations rose from about $267,000 to $1.2 million

(333 percent), while payments for Canadian stations grew from $312,000 to $1.2 million (277 percent).

2.3 The Shape of Cable Copyright Royalties: 1979-89

I conclude this report on the structure and growth of the cable copyright royalty fund with a comparison of the distribution of basic royalties by type of signal over the past decade. Table 3 presents total basic royalties and share of the basic pool for each type of signal over the decade. A graphic version of these data appears as Figure 5 on the next page.[5]

Table 3
Distribution of Basic Royalties by Type of Signal: 1979-2 to 1989-2

(Thousands of Dollars)

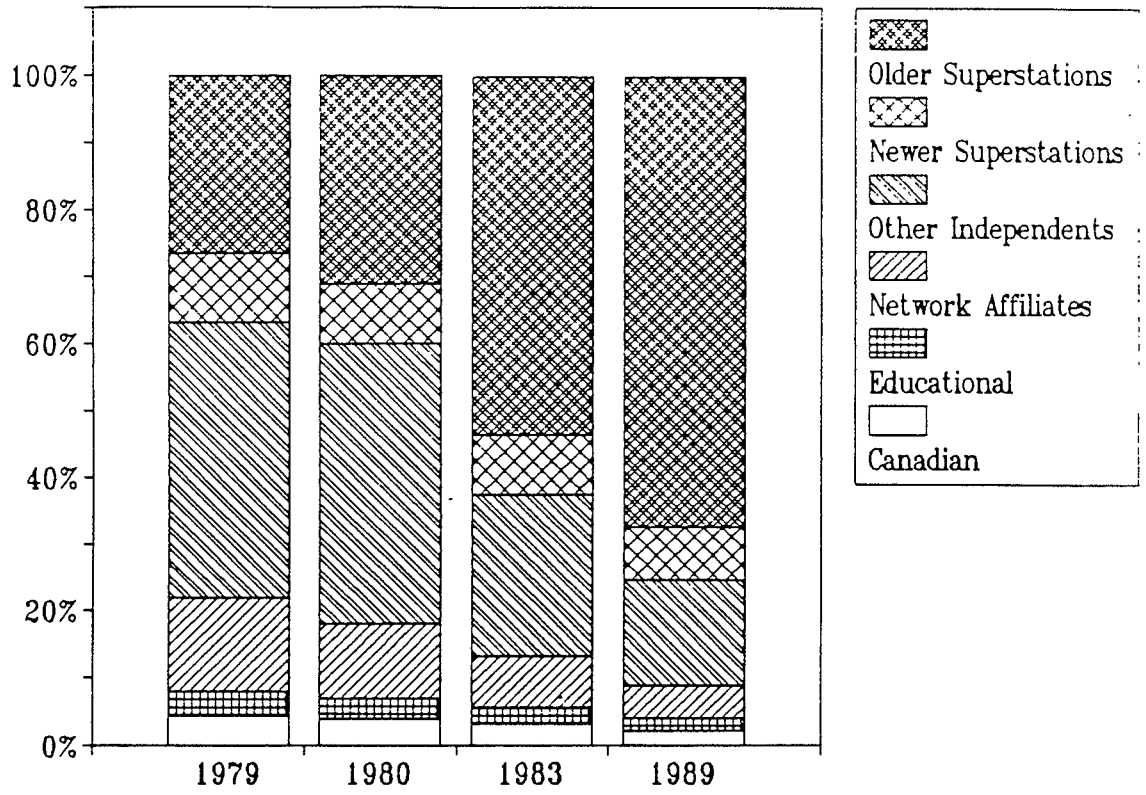
	1979		1980		1983		1989	
Orig. Superstations	$1,898	26.2%	$3,197	30.9%	$11,038	53.3%	$38,120	67.2%
New Superstations	744	10.3	930	9.0	1,875	9.0	4,589	8.1
All Superstations	2,642	36.5	4,127	39.9	12,193	62.3	42,709	75.3
Other Independents	2,973	41.1	4,308	41.7	4,996	24.1	8,917	15.7
Network Affiliates	1,008	13.9	1,141	11.0	1,574	7.6	2,769	4.9
Educational	267	3.7	324	3.1	500	2.4	1,157	2.0
Canadian	312	4.3	398	3.8	672	3.2	1,176	2.1
Mexican	39	0.5	46	0.4	71	0.3	9	0.02
Total	*$7,241*	*100.0%*	*$10,344*	*100.0%*	*$20,726*	*100.0%*	*$56,738*	*100.0%*

Source: Statements of Account as compiled by Cable Data Corporation.

Only one conclusion can be drawn from this information: The share of the basic royalty fund that is generated by the carriage of superstations has systematically eroded the shares of all other types of distant signals. This erosion has come primarily from independent stations not available by satellite, whose share fell from 41 percent of all basic royalties in 1979 to only 16 percent in 1989, and to a lesser degree from network affiliates whose share fell from 14 percent to just under 5 percent ten years later. The much smaller royalty contributions of educational and Canadian stations also fell by half over the decade from about four percent in 1979 to two percent in 1989. Finally, distant-signal carriage of Mexican stations has now reached *de minimis* levels.

[5]The figure deletes the minor contribution from Mexican stations and repercentages the remainder to one hundred percent.

Figure 5
Distribution of Basic Royalties by
Type of Signal: 1979-2 to 1989-2*



Rebuttal Testimony of
DOROTHY E. STEIN
Before the Copyright Royalty Tribunal

I am submitting this rebuttal testimony on behalf of Major League Baseball, the National Basketball Association, National Hockey League and National Collegiate Athletic Association (Joint Sports Claimants or JSC) in the 1989 cable royalty distribution proceeding.

Qualifications

I am President of the Market & Audience Research Group (M&AR), which I established in July of 1985. M&AR provides marketing research and consulting services for television stations, advertisers, industry associations and others. M&AR's clients have included approximately 30 individual television stations, as well as the National Association of Broadcasters, the Association of Independent Television Stations, the Capital Centre, and Nielsen Media Research.

Among the services that I have provided for my clients are the review and analysis of diaries collected by Nielsen and Arbitron. I have advised broadcasters and others concerning the diary process

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and its application to station audience estimates. I have personally reviewed or supervised the review of approximately ten thousand television diaries during the past six years. Through my work for clients and work on industry committees, I also am familiar with the audience measurement procedures of the major ratings services.

Prior to founding M&AR, I was Director of Research for Station WDCA-TV (Washington, D.C.) for eight years. In that position I was responsible for the analysis and evaluation of audience and broadcast trends for management, sales, programming and promotion use. As part of that evaluation, I periodically reviewed diaries for the Washington, D.C. market.

Before joining WDCA-TV, I spent fourteen years with Arbitron serving primarily as Product Manager of non-syndicated television and radio products. These products included, among others, special studies and special diary tabulations which involved custom recalculations of raw diary data. During my tenure at Arbitron, I personally reviewed or supervised the review of approximately one hundred thousand television diaries.

In 1982, I became a member of the Research Advisory Committee of the Association of Independent

Television Stations (INTV) and served as Chairman of that committee for three years. In 1985-86, I served on the NAB's Committee for Local Television Audience Measurement (COLTAM). I have also served on the Board of Directors of the Mid-Atlantic Chapter of the Market Research Association.

I have conducted numerous seminars on understanding Arbitron and Nielsen audience estimates for television stations, advertising agencies and others. I have also spoken on the subject of audience measurement at several trade association conventions.

Summary of Testimony

I understand that the Motion Picture Association of America (MPAA) has presented the Tribunal with a viewing study based on 1989 Nielsen (NSI) diary information. I am not familiar with the details of the MPAA study, but I am familiar with the Nielsen diaries and the collection and processing of diary data for local market measurements.

During his testimony concerning the MPAA study, Mr. Allen Cooper of the MPAA stated that "in general, the industry has supported the diary methodology as being an objective and accurate method of determining viewing by the nation's TV households." According to Mr. Cooper, the MPAA study provides

"'hard data' with respect to viewership in cable households of individual" programs. Mr. Jack Valenti of the MPAA likewise expressed his view that the MPAA study, because it relies on Nielsen diary data, provides an "objective measure" of cable subscribers' "actual viewing behavior."

My testimony here is intended to respond to the foregoing statements of MPAA witnesses, and is based upon my 29 years of experience in conducting research related to audience measurements and reviewing diaries. For the reasons that I will discuss, I do not agree with those statements.

Diaries are useful because they are less costly than other audience measurement methods and do provide important demographic information. The industry does use diary-based estimates of viewing, at least when such estimates are the only ones available. However, the industry has recognized the fallacies in diary-based data. In my opinion, the diary method does not show actual viewing behavior, but reflects only estimates of reported behavior subject to a multitude of inherent potential errors. Furthermore, because viewing opportunities on cable have become more diverse and complex, and the technology of station program access via remote controls has become more

prevalent, diary-based estimates of viewing have become less and less reliable.

The problem with the diary methodology is not the ratings services. Nielsen and Arbitron do a professional job considering what they have to work with. The problem is with the diary system itself, which is a self-administered questionnaire with all the limitations inherent in such a measurement tool.

Both Nielsen and Arbitron, in offering their metered market services, have done so with enthusiasm for that methodology over diary-based measurement. Major advertising agencies have endorsed metering as a replacement for the diary method. Meters, rather than diaries, are now used to provide household viewing estimates in some 25 major local television markets (representing approximately 50 percent of the nation's television households). National viewing estimates, which include superstations like WTBS in Atlanta, are derived from peoplemeters rather than diaries. As I understand it, the MPAA 1989 study is diary only, and excludes meter estimates and meter-diary integration, although that is the methodology used for half of all TV households and is the source the industry considers more reliable than diary information.

Discussion

Diary-based viewing estimates are subject to several types of potential error. First, such estimates are based on a sample of television households (overall less than one percent of the nation's television households are NSI diary-keepers during any given sweep period). As with all samples, the NSI viewing estimates are subject to sampling error --that is, they may differ from estimates based on a complete census of television households. Nielsen routinely provides, in its published reports, standard error estimates.

Second, additional error in the NSI diary-based viewing estimates can come from non-response error. Typically, only about half of the households in the predesignated NSI sample return usable diaries. In spite of a strong effort on Nielsen's part, response rates have been trending downward, and are a matter of concern within the industry. The concern is that the sizeable number of non-respondents may differ from the respondents (e.g., in terms of age, race, sex, education, geography) and may have different viewing habits.

Third, additional error in diary-based viewing estimates can come from response error -- that is, the

viewing information contained in the diary may not be accurate or complete. Viewing of particular programs may be omitted (inadvertently or intentionally) or may be entered incorrectly in the diary.

There are a number of factors that contribute to response error for diary-based viewing estimates. For example, notwithstanding industry and ratings services efforts to simplify and/or improve the diary, the diary remains a complex questionnaire that is inhibiting to some people (particularly less educated diary keepers). The problem has become compounded over the years with the increase in viewing options in cable households and the use of remote controls. The latter encourages channel switching, but the construction of the diary does not easily accommodate recording more than one program in a quarter hour. Furthermore, the respondents do not always record viewing concurrently with that viewing; such recording may be done hours or even days after the fact, thereby giving rise to recall problems. In addition, it is recognized that viewing estimates for programs aired during the end of a sweep week are generally lower than those estimates for programs aired at the start of the sweep week (a result of so-called "diary fatigue").

When a household agrees to keep a diary, it is

sent one diary for each working TV set in the home. One member of the family is usually designated as the "gatekeeper" -- the person who accepts responsibility for family viewing entries and the return of the diaries. That person is often the female head of house. To the extent that the "gatekeeper" is not present during the viewing of particular programs by other family members, such viewing may not be recorded at all or may not be recorded accurately. Typically, diary keepers tend to report "normative" viewing, which may not be the same as actual viewing. Partly in recognition of this problem, and the inability to control for multi-set viewing, the industry has been considering moving to "personal diaries" for each member of a household.

Fourth, diaries may contain illegible or confusing entries, which raise questions as to the correct identity of the program viewed. In such cases, Nielsen applies certain "editing rules." Although edit rules are designed to clarify and "save" viewing credit, the application of these editing rules and other edit discrepancies can result in the improper crediting or viewing to programs that were not in fact viewed by the household. Conversely, it may result in the failure to credit programs that were viewed.

Fifth, there may be processing error occasioned by

the entry of diary data into computers. In this regard, it should be remembered that Nielsen key-punch operators must process, at a minimum, 50,000,000 NSI diary entries each year.

Finally, there are several other factors which may call into question the accuracy of diary-based viewing estimates and cause additional error, e.g., the existence of significant out-of-home viewing and "hyping" during sweep weeks.

I do not suggest that the above factors render diary-based viewing estimates unusable. Such estimates are used in the industry, but with the understanding that they are subject to potentially significant error, and must be evaluated accordingly. Based on the foregoing, the statements of MPAA witnesses that their study provides "hard data" that "accurately" reflects "actual viewing behavior" are not consistent with my views or experience.

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

Dorothy E. Stein Nov. 15, 1991

Dorothy E. Stein Date

Rebuttal Testimony of
WILLIAM S. RUBENS

1. Qualifications

I joined the National Broadcasting Company (NBC) in 1955 and was elected a Vice President in 1970. Between 1972 and 1988 I served as Director of the NBC Research Department, with a professional staff of approximately 30-40 people. In that capacity I was responsible for all of NBC's research activities, including NBC's audience measurement and programming research. My responsibilities at NBC required substantial familiarity with the audience measurement techniques of, and data generated by, the A.C. Nielsen Company.

I retired from NBC in 1988. I am currently serving as a consultant for NBC, ABC and CBS in connection with their evaluation of Nielsen procedures. I have also consulted with the three major networks on CONTAM (Committee on Nationwide Television Audience Measurement) activities. CONTAM consists of representatives of each of the three major networks and the National Association of Broadcasters. CONTAM was formed some 30 years ago to conduct methodological research on national audience measurement issues and to ensure accuracy in audience research. I was a member of CONTAM throughout most of my career at NBC.

I was also a member of the Electronic Media Ratings Council (EMRC) Board from 1972 to 1988. EMRC was organized by a coalition of industry groups to audit audience measurement services, and to accredit those services that meet its standards. EMRC's audits are conducted by certified public accounting firms, and are designed to detect and to correct operational

errors in audience measurements procedures. EMRC also employs mediation when there are disputes about such procedures.

I have served as a member of the Committee on Local Television and Radio Measurements (COLTRAM). COLTRAM conducts methodological research on local television and radio audience measurement under the aegis of the National Association of Broadcasters (NAB). (It has since split into separate television and radio groups -- COLTAM and COLRAM).

I am a past Chairman of the Advertising Research Foundation; a former President of the Market Research Council; and a former Trustee of the Marketing Science Institute. I also have served on the TVB Research Advisory Committee; on the board of the American Marketing Association (New York Chapter); on the National Association of Broadcasters Research Council; on the Conference Board Research Council; and on the National Academy of Television Arts and Sciences. I also have been a member of the American Association of Public Opinion Research.

In 1989 I became the first recipient of the Hugh Malcolm Beville, Jr. Award, presented annually by the National Association of Broadcasters and the Broadcast Education Association. This award states that it was presented for:

> "superior leadership in the development of the audience measurement field. For his advancement of research which is fair and accurate. For his part in integrating audience research into the broadcast management process. And for over three decades of dedicated commitment to the highest standards in broadcast audience research."

2. The MPAA Study

At the request of the Joint Sports Claimants, I have reviewed the written testimony of the Motion Picture Association of America (MPAA) witnesses in the 1989 cable royalty distribution proceeding. That testimony describes an MPAA Study, which is based on data obtained from the A.C. Nielsen Company. The purpose of the MPAA Study is to show the relative number of hours that cable subscribers spent watching certain program categories on distant signals in 1989. For this purpose, MPAA has developed a concept which it terms "household viewing hours" (HHVH).

As I understand it, MPAA provided Nielsen with a list of 147 non-randomly selected television stations carried by cable systems as distant signals in 1989, as well as the specific counties in which viewing to those signals was to be measured. Nielsen then provided MPAA with: (1) the number of quarter hours that individual programs were broadcast on the 147 stations (Broadcast Time); and (2) the estimated average number of distant cable households that viewed each of these programs during each quarter hour (Cable Viewing). MPAA had the Broadcast Time and Cable Viewing numbers multiplied to determine the household viewing hours for each program.

The Cable Viewing estimates provided MPAA were derived solely from diary entries. These diaries were collected by Nielsen, as part of its NSI (Nielsen Station Index) audience measurement service, for the regular sweep periods in 1989 (February, May, July and November) -- as well as for January and October 1989.

My understanding is that MPAA has asked the Tribunal to place principal reliance on its Study of viewing hours in allocating the $200 million

1989 cable royalty fund. I also am advised that the Tribunal has relied upon similar MPAA studies in past proceedings to distribute cable royalties.

3. Opinions Concerning MPAA Study

The Joint Sports Claimants have asked that I provide the Tribunal with my opinions concerning the MPAA Study. For several reasons, I do not believe that the MPAA Study meets the television industry's standards for audience research. The Study's estimates of viewing exclude the best available data -- data that are relied upon by the industry. The MPAA Study also fails to provide sufficient information which would allow one to assess the reliability and validity of its results. Finally, the MPAA Study's gross audience measures are not used in the television industry in determining program values.

As one whose professional career has been devoted to evaluating audience research, I would not rely upon the MPAA Study as presented to the Tribunal for the purpose of assessing program valuations.

a. Nature of Data

The MPAA witnesses state that Nielsen data are used extensively in the industry and have been subject to "industry scrutiny" over the years. This, of course, is true. In important respects, however, the MPAA Study is not based upon the same Nielsen data on which the industry has relied and subjected to careful review (such as the review provided by the Electronic Media Ratings Council and individual client vigilance).

The viewing estimates in the MPAA Study are taken from NSI diary data alone. In 1989, however, viewing estimates for more than 30 percent of the nation's television households were based on meters, and not on diaries.

The diaries in metered markets were used only for demographic information and not for determining audience size. Likewise, Nielsen's nationwide viewing estimates for superstations, such as WTBS, in 1989 were based on meters.

In 1979 (the first year for which MPAA submitted a viewing study to the Tribunal), only three markets were on the meter, and superstations' national audiences were not meter-measured. Today, however, some 25 markets (with approximately half the nation's television households) are on the meter, and Nielsen meter measures the national audiences of several superstations. (Sample pages from one of the Nielsen reports which measure superstation viewing are attached as Sports Exhibit 38). Nielsen meter data have become the measurement of choice for the industry in estimating audience size.

Meters are considered a superior methodology since they provide objective measures of set and channel tuning which are not subject to the various problems inherent in the diary methodology. As Beville has noted in the classic treatise entitled Audience Ratings, there has been a "dwindling regard for the accuracy of diary results . . . ." Meter data also are available 365 days per year and thus avoid the problems associated with audience measurements during the sweep periods alone -- an issue which, I understand, has been a concern of the Tribunal (as well as of the industry).

The MPAA Study does not make use of available meter data that formed the basis of standard Nielsen reports used by the industry. Thus, it fails to provide the Tribunal with the best available evidence of viewing. In addition, the data in the MPAA Study deal with "distant signal" viewing alone, and are used only by MPAA for purposes of the Tribunal proceedings; thus, they are not subject to the usual checks and balances provided by the industry.

b. Methodological Disclosures

As noted above, the purpose of the MPAA Study was to determine the amount of cable subscriber viewing to certain stations outside their normal viewing area. To achieve the best possible estimates of such viewing, it is most important to construct an appropriate sample of cable households with access to those stations. One must be certain that each station in the study could be viewed by an appropriate number of randomly selected cable households.

The MPAA Study does not provide sufficient information from which it can be determined whether its sampling plan was adequate. MPAA has relied upon the samples that Nielsen selected for each of its local market measurements. But these samples were selected for an entirely different purpose than the purpose underlying the MPAA Study. Mr. Cooper estimates that the 1989 MPAA Study is based on over 300,000 diaries. While this number is impressive, it does not mean that the sample on which distant viewing to each of the individual signals in the MPAA Study is acceptable. This is a matter of particular concern given the relatively low audiences generated by most of the distant signal programs measured by the MPAA Study.

Typically, Nielsen provides in its standard reports detailed information concerning the number of sample households on which viewing estimates are based. (Attached as Sports Exhibit 39 are pages from a standard Nielsen NSI report for the New York market, reflecting the type of information that Nielsen typically discloses on sample size). Such information does not accompany the MPAA Study, and cannot be ascertained from published Nielsen documents.

Nielsen also includes other information in its standard reports which researchers consider essential in evaluating a study's results -- such as standard error estimates, cooperation rates, and geographic areas measured. (See Sports Exhibit 39). Again, the MPAA Study does not include such data. Indeed, it is my understanding that Nielsen has never before calculated standard error estimates for any of the MPAA viewing studies. Absent properly calculated standard error estimates in a study, it is not possible for a researcher to determine the relative accuracy of the audience measurements in that study. As Beville has noted:

> "Under the aegis of the [EMRC], all ratings services have performed major studies to calculate more accurately the standard [error] of all estimates they produce. Also with this has come improved presentation of standard error data in ratings reports, so that users can more readily judge the reliability of figures presented.
>
> Unfortunately, few users of audience ratings appreciate the value of error figures in selecting numbers for decision purposes."

It should be noted that the Nielsen audience measurements are only rough approximations of viewing behavior. As Beville also has noted, "we know that all ratings by their very nature are estimates and are therefore subject to errors and variations of several types." Even with properly calculated standard error estimates and full data on sample size, one cannot make precise determinations about viewing behavior. One also needs to account for errors occasioned by non-response, reporting, administrative processing, and the weeks not covered by the report period. All survey research is subject to limitations affecting its accuracy. The MPAA Study, however, does not provide sufficient information on which to make any informed judgment about the validity or reliability of its results.

c. Analysis and Use of Data

A critical concern of audience researchers is the application and proper interpretation of data provided by the ratings services. This is a complex task because ratings data are used in several different ways, and because ratings are not a pure measure of a program's popularity with viewers. The reliance of the MPAA Study on "household viewing hours" as the measure of program value does not reflect the type of careful analysis of the Nielsen data that would be customary in the industry.

The MPAA Study treats each hour of household viewing equally. For example, 1,000 households viewing a one-hour syndicated show at 9:00 a.m. are given equal weight to 1,000 households viewing one hour of a prime-time Baseball telecast. However, this approach is not one that corresponds to the way that the television industry uses Nielsen data. Advertisers, for example, may pay significantly different amounts for programs that have the same number of households viewing each such program -- depending on such factors as age, sex, education and income of the viewers; the nature of the program (first run, live, etc.); and the time when the program airs (prime-time, early morning).

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

William S. Rubens

Date

Rebuttal Testimony of
Dr. Peter H. Lemieux

Before The Copyright Royalty Tribunal

On Behalf of:
The Joint Sports Claimants

1989 Cable Copyright Royalty Distribution Proceeding

November, 1991

Information Architects

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Rebuttal Testimony of Dr. Peter H. Lemieux

1.0 Qualifications

My qualifications were set forth in the testimony I presented on behalf of the Joint Sports Claimants (JSC) in the direct case portion of the 1989 cable royalty distribution proceeding. For the Tribunal's convenience, I have attached a copy of my most recent curriculum vitae. In this rebuttal testimony, I shall focus on the 1989 study of distant-signal viewing conducted by the A.C. Nielsen Company on behalf of the Motion Picture Association of America (MPAA). In this regard, I might observe that I was the sponsoring witness for the original study of distant-signal viewing conducted by Nielsen on behalf of the Joint Sports Claimants, which was presented to the Tribunal in the 1978 cable royalty distribution proceeding.

2.0 Summary of Testimony

I have reviewed the written and oral direct testimony of Mr. Allen Cooper of the MPAA in this proceeding. For the reasons presented below, I do not believe that Mr. Cooper's testimony accurately or fairly portrays the results of the 1989 viewing study and its relationship to the 1983 MPAA viewing study. In several important respects, this testimony overstates the relative performance of syndicated programs and movies in the MPAA study, particularly when compared with major sports programming.

I shall also respond here to the testimony of Mr. Jack Valenti that the MPAA's share of viewing hours is "indicative of the broad appeal of syndicated programming and the loyalty of its viewers." (Valenti Testimony at 7) As I explain below, the large share of viewing hours attributed to syndicated programming is primarily determined by the large share of time such programming occupies. When properly analyzed, the MPAA study confirms that live sports programming had greater "appeal" than syndicated programming, and that this appeal was higher than in any other year.

3.0 Shares of Viewing by Program Category

In his written testimony Mr. Cooper reports that the MPAA's share of viewing hours in the MPAA study for 1989 is 83.86%. He then states that the "comparable" figure for 1983 was 76.35%, suggesting that the MPAA's share has risen by over seven percentage points in the six-year interval. (Cooper Testimony at 10) For the reasons set forth below, these two figures cannot be validly compared. When more "comparable" data are examined, however, whatever differences are found indicate that shares of viewing to syndicated series and movies between 1983 and 1989 probably declined, while the viewing share for sports programming grew. Moreover,

though Mr. Cooper claims that syndicated programming and movies reached a "record high" share of viewing in 1989 (Cooper Testimony at 10), that feat was actually accomplished by sports.

3.1 Adjustments resulting from NAB "projections"

The figure of 76.35% that Mr. Cooper presents as the MPAA's 1983 share of viewing is, in fact, not the number he gave in his 1983 testimony but the *Tribunal's "adjusted" figure* as published in its 1983 Final Determination (at 12808). In determining this value the Tribunal accepted a number of adjustments to the data originally reported by the MPAA as suggested by the National Association of Broadcasters (NAB).

The NAB objected that the MPAA's decision to sample television stations nonrandomly, a practice continued in the 1989 study, overestimates the share of viewing attributable to syndicated series and movies.[1] They developed a method to "project" the MPAA's viewing share based on the 117 stations in the 1983 sample to the universe of over 600 distant signals. In accepting this adjustment the Tribunal reduced the MPAA's share of 1983 viewing by approximately two percentage points. The figure MPAA presents for its 1989 viewing share includes no such downward adjustment. Thus any comparisons between 1983 and 1989 should employ an unadjusted 1983 figure that is "comparable" to the figure reported for 1989.

3.2 Adjustments resulting from the use of different measurement periods

The 1989 share of viewing in the MPAA study relies upon data collected by the Nielsen Station Index (NSI) during six months of the year. In four months - February, May, July, and November - Nielsen conducts its surveys throughout the country, while in the remaining months of January and October only certain major markets are measured. The figures presented in Mr. Cooper's testimony indiscriminately mixes together the "four-cycle" data for all markets with the "six-cycle" data for the major markets.[2] This mixture works to the advantage of MPAA, whose viewing share is over three percentage points higher on a six-cycle basis, and to the detriment of major sports whose viewing share is underrepresented in the six-cycle data.

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[1]The MPAA could, if it wished, develop a stratified sampling methodology that preserves random selection but allows for efficient estimation of viewing given the wide variation in the relative contribution of television signals to the royalty pool. In my 1978 study, I employed a random sampling strategy based on minimizing the "mean square" error of estimate. The Bortz study of cable operators in 1989 also employs a defensible stratified random sampling procedure whose premises could be adapted to the MPAA study. The use of such scientifically drawn samples would enable more valid comparisons of viewing shares across years. Such comparisons are rendered much more difficult because of the nonrandom sampling method the MPAA currently employs.

[2]In his testimony at page 7, Mr. Cooper claims that "distant-signal viewing of non-network programs was measured by Nielsen for four or more cycles for 146 of the 147 stations for the 1989 Special Study...." This suggests that the Nielsen sweeps are designed to sample the viewers of particular television stations. However the Nielsen samples are actually designed to measure *geographic markets, not individual stations.*

3.3 Adjustments resulting from the recategorization of programming

A third source of noncomparability between the 1983 and 1989 studies concerns the classification of individual programs. In the 1983 study, shares of viewing were provided for two categories of programming omitted from the 1989 report, "specialty" programs and "minor" sports. Together these two categories accounted for more than two percent of the four-cycle viewing in 1983 (CRT Final Determination, at 12794.) Some of this programming has been recoded to the "syndicated" category in 1989, thus inflating any differences observed between the two studies.

In addition, MPAA credits the viewing of programming distributed by the Fox Television Network to its "syndicated" column in the 1989 study, where it accounts for approximately one percent of the study's total viewing hours. The Fox network did not, of course, exist in 1983. The Fox telecasts are indistinguishable from other "network" programming and thus are ineligible for compensation through the compulsory license. The inclusion of Fox network programming further inflates the MPAA's estimate of its share of 1989 viewing.

Finally I have been informed that there are classification errors in the 1989 study which will be addressed by the National Association of Broadcasters. The proper categorization of this programming will further reduce the share of viewing attributable to syndicated programs.

3.4 Shares of Viewing Compared: 1980-1989

For the reasons given above, comparisons of the sort given in Mr. Cooper's testimony between the 1983 and 1989 MPAA viewing shares cannot be validly made. Taking the various adjustments just described into account, the share of viewing hours attributable to movies and syndicated programming has actually declined over the period between 1983 and 1989. The extent of the decline will depend on the effects of any program recategorization.

In contrast, comparable data on the share of viewing attributable to major sports shows an increase between 1983 and 1989. On a four-cycle basis, the share of viewing to major sports grew from 10.7% in 1983 to 12.7% in 1989.[3]

4.0 Total Viewing Hours by Program Category

Mr. Cooper has also testified that total viewing to syndicated programs and movies, as measured by the number of "household viewing hours," increased by 41.7 percent between 1983 and 1989 (Cooper Testimony at 10-11). In contrast, he reports that

[3]Any final determination of royalty shares has, of course, involved a variety of factors. However, it should be noted that, in the 1979 and 1980 proceedings, the Tribunal awarded the Joint Sports Claimants fifteen percent of the royalty pool, about twice its viewing share of 7-8 percent in those years. The viewing share of major sports rose to nearly thirteen percent by 1989.

viewing hours to all other categories of programming (including sports) fell by 12.0 percent. He concludes that "these data clearly demonstrate that Program Suppliers are entitled to an increased share of calendar year 1989 funds." (Cooper Testimony at 11)

For all the reasons outlined above, comparisons such as these cannot be made. In addition, while the 1989 figures for total viewing hours come from the six-cycle viewing study submitted by MPAA, the 1983 figures are not taken from the equivalent source. As I noted at the outset, the CRT reduced the share of viewing allocated to MPAA in 1983 to 76.35%. The figure of 2,235,572.5 thousand viewing hours cited by Mr. Cooper on page 10 of his testimony *applies the 1983 CRT-determined figure to the total number of household viewing hours.* Since the CRT reduced the MPAA's share in 1983, the effect of this method is to inflate the apparent growth in MPAA's total viewing over the six-year period.

Table 1
Total Household Viewing Hours for Major Sports, Movies, and Syndicated Programs: 1983 and 1989

	Total Four-Cycle Household Viewing Hours (in thousands)		
Program Category	*1983*[1]	*1989*[2]	*Percent Change*
Major Sports	240,000	330,000	37.5%
Movies	570,000	710,000	24.6%
Syndicated Programs	1,210,000	1,380,000	14.0%

[1]Source: Computed from 1983 Program Suppliers Exhibit 15.
[2]Source: 1989 Program Suppliers Exhibit 1, at 638.

A comparison of total four-cycle viewing hours for the two years appears in Table 1. On this basis it is clear that *total viewing of sports programming grew faster than viewing to either movies or syndicated programming between 1983 and 1989.*

5.0 The Viewing-to-Time Ratio

In his testimony Mr. Cooper observes that MPAA's share of viewing is "substantially greater" than its share of time.[4] According to Mr. Cooper, this favorable viewing-to-time ratio indicates "the extent to which viewers are interested in particular types of programming." (Transcript at 334) In contrast he notes that the share of viewing for "all other categories" is "more than double" their share of viewing. (Ibid.)

By considering all non-MPAA programming together, Mr. Cooper's testimony misrepresents the actual viewing-to-time ratio for major sports. Far from having a share of viewing smaller than its share of time, the 1989 ratio for major sports substantially exceeds the ratios achieved by either movies or syndicated programming. Furthermore, the 1989 sports ratio is higher than its comparable values in all prior MPAA viewing studies, while the ratios for MPAA's programming have remained relatively constant over the years.

Using four-cycle data, the ratio of share of viewing to share of time for major sports has grown from 3.2:1 in the 1980 MPAA study, to 7.2:1 in 1983, and to 10.6:1 by 1989. The ratio for movies has, in contrast, remained relatively unchanged over this period.[5]

6.0 The Role of Time in the MPAA Studies

As I noted at the outset, Mr. Jack Valenti argued in his testimony that MPAA's large share of viewing hours indicates the "broad appeal of syndicated programming." (Valenti Testimony at 7) A more careful examination of the MPAA study indicates, however, that the primary reason why the MPAA's programming commands such a large share of viewing is simply because its programming occupies a large share of time, and not any extraordinary "appeal."

The concept of "household viewing hours" employed by the MPAA is simply the product of each program's total hours of telecast time multiplied by its average audience size. Syndicated programs generate a large amount of "viewing" because they command a large portion of broadcast time even though they are watched by only average, or even below average, audiences.

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[4]The MPAA study measures "time" in terms of the total number of quarter-hours of programming on the 147 sampled stations. An alternative definition of "time" would take into consideration the total number of hours that each signal is available to the universe of cable subscribers. On this measure, a superstation like WTBS, which is available to nearly every cable household, would occupy a greater share of "time" than it is credited using the MPAA's method.

[5]In its 1978 Final Determination the Tribunal looked to the viewing-to-time ratio in determining its award to sports (45 *Federal Register* at 63038).

The average four-cycle audience for syndicated programs in the 1989 MPAA study was about 12 thousand households, or less than a tenth the number of households viewing an average hour of major sports (123 thousand). Thus it is the large share of broadcast hours devoted to syndicated programming, and not any extraordinary "appeal," that results in its high share of "viewing" as defined by the MPAA.

In this regard, I might observe that the original study of viewing commissioned by the Joint Sports Claimants in the 1978 proceeding was intended to demonstrate that the value of an hour of programming in the cable marketplace was not the same across all types of programs. In 1978 some claimants argued that shares of "time" should be the primary determinant of royalty shares, a position the Tribunal rejected in its 1978 Final Determination (at 63036-37). In arguing for a reliance on marketplace factors to determine the distribution of royalties, the JSC presented measures of relative viewing *as one of a variety of factors* indicating that cable operators value live sports programming more highly than other types of programming. The MPAA viewing studies have continued to demonstrate the extraordinary "appeal" of major sports programming as evidenced by such measures as its high viewing-to-time ratio cited above.

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

Peter H. Lemieux 11/18/91

Peter H. Lemieux Date

Peter H. Lemieux

CURRENT POSITIONS

Lecturer in Political Science, Massachusetts Institute of Technology, 1984-

Offer courses and conduct research in political behavior, comparative politics, and survey and quantitative research methodologies. Departmental Director of Computing. Affiliated with the Research Program in Communication Policy and the M.I.T. Communications Forum.

Managing Director, Information Architects, Cambridge, Massachusetts, 1982-

Principal of a consulting firm offering research services to the telecommunications and information industries. Recent clients include CBS, Time-Life, RCA, Motion Picture Association of America, Washington Post, A. C. Nielsen, Major League Baseball, Symbolics, and the Corporation for Public Broadcasting.

PREVIOUS POSITIONS

Polling Consultant, *The Boston Globe*, 1986-1988

Conducted periodic election and public opinion polls for the *Globe*. Recent polls have examined the Presidential primaries in New Hampshire and Massachusetts and racial attitudes in the City of Boston.

Associate Director for Research, Television Audience Assessment, Inc., Cambridge, Massachusetts, 1981-82.

Principally responsible for the research and development of a new system of audience measurement based on viewer reactions to television programs under the auspices of major satellite program networks, multiple system operators, and the John and Mary Markle Foundation.

Research Director, Kalba Bowen Associates, Cambridge, Massachusetts, 1979-81.

Participated in numerous studies of the telecommunications industry covering such areas as direct broadcast satellites, home video systems, multichannel subscription television, and educational telecommunications.

Visiting Fellow, Department of Economics, Harvard University, 1978-79.

Independent study and research in microeconomic theory and public finance under the auspices of a fellowship from the National Science Foundation.

Assistant Professor of Political Science, University of Rochester, 1975-79.

Taught courses and conducted research on comparative political behavior, policy analysis, and the application of quantitative statistical methodologies to social research.

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EDUCATION

Ph.D., Political Science, Massachusetts Institute of Technology, 1977.
A.B. with honors, Government, Harvard College, 1971.

AWARDS

Who's Who in the East, 1981- .
Postdoctoral fellowship, National Science Foundation, 1978-79.
Gabriel A. Almond dissertation award, American Political Science Association, 1978.

EXPERT TESTIMONY

Before the Federal Communications Commission, Docket 83-1009, 1984.

Conducted a study of the national spot television advertising market in support of a submission by the Motion Picture Association of America in the multiple ownership docket.

Before the Copyright Royalty Tribunal, Various Dockets, 1980-88.

Testified on numerous occasions on behalf of professional sports leagues concerning copyright issues arising from the carriage of sports telecasts on distant television stations imported by cable television systems.

ACADEMIC PAPERS AND PUBLICATIONS

"Why Doesn't Turnout Seem to Matter?" presented to the Annual Meetings of the American Political Science Association, Washington, 1991.

"A Theory of Supreme Court Nominations," (with C. Stewart), presented to the National Bureau of Economic Research Conference on Political Economy, Cambridge, 1990, submitted for publication.

"Modelling the Process of Supreme Court Confirmations: Positive Theories and Empirical Realities," (with C. Stewart), presented to the Annual Meetings of the American Political Science Association, Atlanta, 1989.

"Advise? Yes. Consent? Maybe. Senate Confirmation of Supreme Court Nominations," (with C. Stewart), presented to the Annual Meetings of the American Political Science Association, Washington, 1988.

"Momentum and Candidate Support in the 1988 New Hampshire Republican Primary," presented to the Annual Meetings of the American Association for Public Opinion Research, Toronto, 1988.

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