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American Commercial Television
and the
Federal Communications Commission

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AMERICAN COMMERCIAL TELEVISION AND THE
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I. Introduction

The last several years have witnessed a revolution in the economic theory of government regulation, a revolution which began when economists exploited the assumption that government regulators are motivated by the same self-interest as individuals elsewhere in an economy. Landmark contributions to the economic theory of government regulation come from George Stigler¹ and Sam Peltzman.² To Stigler, government regulation is a valuable product provided within the political system. Industries wish to use government regulation to restrict entry and increase product prices and profit. Stigler asserts an individual firm has more to gain from favorable government regulation than does an individual consumer and that organizing a lobbying effort is less costly for a small number of firms than for a large number of consumers. Stigler concludes

regulators are "captured" by industry and act to increase profit to firms in a regulated industry.

Peltzman extends Stigler's work by asserting government regulators maximize political support received from both firms and consumers. Political support comes from consumers as votes and comes from firms as financial contributions. Peltzman's model recognizes the political power of voters and thus the importance to government regulators of balancing preferences of voters and of the regulated industry.

Other writers use economic theory to examine the role of government regulation in particular industries. Thomas Moore³ analyzes government regulation of the trucking industry concluding that regulation increases prices and returns to labor and capital in that industry. Gregg Jarrell⁴ shows how state regulation of electric utilities results in higher electricity prices than would have occurred without regulation. Airline industry regulation is examined by Vincent Olson and John Trapan⁵ who present evidence that airline regulation increases profit to airline companies.

The television industry is not a unique subject for economic analysis. In a landmark contribution, Arnold Coase⁶ examines actions of the Federal Communications Commission and in particular FCC allocation of the electromagnetic spectrum to television stations. Coase shows how regulation of broadcast television could be

simplified by assigning transferable property rights to television channels. Other writers try to predict the effect introduction of cable television will have on commercial broadcast television in particular and the television industry in general. Representative of these writers, Rolla Park⁷ predicts cable will reduce audience share of the major commercial networks and increase audience to those independent stations which use cable to show programs to an audience in a larger area.

Although it does not break new theoretical ground, this paper makes at least two original contributions. In contrast to other work on broadcast television regulation, this paper uses the economic theory of government regulation to explain behavior of the Federal Communications Commission in its treatment of commercial broadcast television and the cable industry rather than to propose policies the FCC ought to adopt. Such an analysis helps us understand why a particular pattern of regulation occurs.

A second feature of this paper is its dynamic approach to government regulation. The paper does not stop by explaining the pattern of regulation which once existed or the pattern of regulation which now exists. This paper shows how the pattern of regulation of commercial broadcast television has changed in a predictable way in response to changes in the broadcast industry.

II. Government Regulation

The modern theory of government regulation introduced by George Stigler and refined by Sam Peltzman asserts government regulators are motivated by the same self-interest as are consumers in private markets. Since government regulators are generally appointed by elected officials, or operate under some legislative mandate, a government regulator must ultimately satisfy preferences of elected officials. Elected officials must in turn get reelected to remain in power. Thus, to assure continued employment, government regulators act to maximize political support.

In Peltzman's model, a government regulator gains political support from two sources. A regulator gains political support from firms in the regulated industry as financial contributions made to politicians who appoint regulators. Firms in an industry give contributions when regulations are imposed which increase profit to those firms. Peltzman emphasizes government regulation of price of the product regulated firms sell. To increase political support from firms in an industry, a government regulator enforces a product price which is higher than the price which would otherwise occur.

A government regulator also obtains political support from consumers of the regulated industry's product. When consumers of the regulated product are voters, a government regulator receives political support from consumers as votes

for politicians who appoint regulators. A regulator increases votes by reducing price the regulated industry's product.

Making reasonable assumptions about industry profit functions and the political support function, Peltzman derives a number of implications about behavior of government regulators, several of which are important for this paper. Since a government regulator must recognize the political power of firms in the regulated industry, the regulator restricts entry and/or enforces a higher industry price than would otherwise occur, and so increases industry profit. However, a government regulator does not permit the industry to realize all potential profit since enforcing the industry profit-maximizing price sacrifices too much political support from consumers. Rather, the government regulator trades off some industry profit to reduce political opposition from consumers. Peltzman's model shows how political opposition is mitigated by requiring price below that which maximizes industry profit and by altering the structure of prices to favor politically responsive consumers. Depending on the nature of the political response by consumers, the industry may also be forced by the regulator to provide costly services to particular consumer groups, services the industry would not otherwise provide.* A government regulator grants monopoly power to an industry but does not allow the industry to fully exploit its monopoly power. Instead, to reduce political opposition

from consumers, the regulated industry is required to transfer some profit to consumers, particularly the most politically sensitive consumers.

III. Commercial Broadcasters

Like any other business firm, a commercial television station exists to earn profit for its owners. Profit maximization by firms is assumed in economics and no compelling reason to use a different assumption in the case of commercial broadcast television presents itself. What does make it different from other firms is the unique product sold by a television station. Contrary to common perception, the product a television station sells to advertisers is not commercial time. This fact is readily apparent when considering the price an advertiser would be willing to pay to a television station to show a commercial on a program which has no viewers. Commercial broadcasting time is of no value to an advertiser unless potential buyers of the advertised product are watching a program on which a commercial is shown. An advertiser wants viewers to see its commercials and is willing to pay to expose viewers to the commercial message. Thus a commercial television station sells to an advertiser the exposure of a viewer to a commercial message.' The price an advertiser is willing to pay for commercial time is in direct proportion to the number (and type) of viewers of the program on which the commercial is shown.

To change the number of commercial exposures it produces, a television station acts to increase the number commercial messages on a program or to increase the number viewers of the program. To increase the number of viewers of a program, a station can increase program quality or a station can change other program characteristics.¹⁰ The location of its transmitting tower also influences the number of viewers of a station's programs. Since the FCC exercises regulatory control most obviously in granting licenses and construction permits to commercial television stations, choice of transmitter location is of particular interest in studying government regulation of commercial television.

IV. Entry and Geographic Location

The first comprehensive system of electromagnetic spectrum regulation and station licensing emerged in 1927 in response to the chaos which dominated the early years of radio broadcasting. Because property rights to radio broadcast frequencies were not defined and because of the difficulty in negotiating agreements among existing and potential broadcasters, radio stations changed frequency, interfered with one another, and acted in a manner consistent with firms exploiting a valuable resource to which property rights have not been assigned. Congress intervened by creating the Federal Radio Commission,¹¹ charging it with assigning frequencies to radio stations and

enforcing regulations to prevent interference between signals of different stations.

In the late 1930's, when it became evident that television broadcasting was destined to expand throughout the nation, the newly formed Federal Communications Commission decided to prevent repetition of the chaos of early radio broadcasting by developing a comprehensive system of regulation for the then infant television industry. After one false start and a three year freeze on issuing additional broadcast television licenses, the Federal Communications Commission in 1952 issued its Sixth Report and Order.¹²

The Sixth Report and Order is a comprehensive set of broadcast television regulations filling nearly three hundred pages of text. Of interest to this paper are regulations which affect the geographic distribution of stations. At the time of the Sixth Report, about one hundred television stations were licensed to operate in the United States and seven hundred license applications were pending.¹³ Rather than simply grant pending or future license applications, the FCC assigned to cities one or more television frequencies (television channels). The channels represent empty slots in which stations currently operate or which stations will be permitted to fill at some future date. Thus, FCC frequency assignments limit the number of stations allowed in each city and define in advance a geographic distribution of stations.

Creating a comprehensive system of television channel allocations in advance does allow the FCC to distribute channels in a way that efficiently minimizes signal interference between stations. However, the allocation scheme chosen by the FCC is not the only possible way to allocate frequencies without interference, and the allocation scheme chosen by the FCC is consistent with a pattern of allocations predicted by the theory of government regulation.

A television station chooses to build a transmitter and begin broadcasting if anticipated revenue from sale of commercial exposures exceeds long run cost of operation. A station chooses to locate its transmitter in the community which has the largest anticipated audience for the station's programs. Given a choice between broadcasting to a community with a large population and broadcasting to a community with a small population, a station ordinarily chooses to place transmitting equipment in the large community, leaving the small community with no television station. In fact, small communities obtain a television station only after enough stations move to large communities that the audience share to a new station in a large community is the same as the whole audience in a small community. Without regulation of station location, and given a limited number of available television channels, small communities tend not to receive television stations. If the potential number of stations has no technical limit,

stations in both large and small cities should have about the same number of viewers.

The Sixth Report and Order of the FCC established a pattern of station allocations different than would have occurred had stations been able to locate freely. As the theory of government regulation predicts, the FCC created a structure of station allocations which provides relatively more commercial stations to small communities than would have occurred with no restrictions.

The objective of the Federal Communications Commission, like all government regulators, is to maximize political support received from voters (viewers) and from the regulated industry (commercial television stations). In the case of television, viewers surely prefer more stations to fewer stations, *ceteris paribus*. New stations mean more viewing options and a greater chance that a viewer's most desired program is broadcast at any moment. However, additional stations have diminishing marginal value to viewers. A viewer finds the first television station in an area of greater value than second and subsequent stations.

To increase political support from viewers, the FCC increases the number of television stations in each community. Given a choice, however, the FCC prefers at least one station be placed in each community before a second station is given to another community, since the first station in any community has greater value to voters than second and subsequent stations.

The television industry would also choose to distribute television stations more widely among communities than would occur with no government restriction. A station choosing to locate in a more populous community gives up viewers who receive no programs in small communities and gains viewers in the populous community. The viewers gained in the populous community come in part from viewers of existing programs, however. The television industry would allow an additional station in a populous community only when the number of new viewers in the populous community exceeds the number of viewers in the less populous community. The industry considers the effect a new station has on existing stations. A new station ignores the fact that it takes viewers away from an existing station.

If its objective is to maximize the sum of industry profit and given a limited number of channels, an infant television industry seeks to distribute stations over a wider geographic area than would occur without government restrictions. If the Federal Communications Commission moves to fulfill the preferences of the television industry, the FCC receives political support from the industry.

To summarize, the Federal Communications Commission receives political support from both voters and the television industry for distributing a limited number of stations among communities more widely than would occur without restriction. In determining the geographic distribution of television stations among communities, both

viewers and industry agree television stations should be more widely distributed than the distribution which would occur under competition. To increase political support from viewers and industry, the FCC has a simple decision. Evidence shows that the FCC made that decision and has enforced a wider geographic distribution of stations than would otherwise have occurred.

The most obvious evidence that FCC choice of television station distribution is consistent with the theory of government regulation is that a wide distribution of television stations is an explicit part of FCC policy. The Sixth Report outlines priorities used when original station allocations were made. The FCC assigned frequencies using the following priorities: a) one television signal to each community, b) one television station to each community, c) two television signals to each community, d) two television stations to each community, e) additional stations to communities based on the size of the community. The FCC states in the Sixth Report that the actual allocation scheme provided at least one station to all communities with a population of fifty thousand or more.' The policy of assuring each community at least one television signal is consistent with the theory of government regulation and, as shown next, is a wider distribution than would have occurred without the FCC policy.

Given the frequency range assigned to television broadcasting by the FCC, a community can have a maximum of seven VHF and about twelve UHF television stations. All twelve VHF channels and sixty-nine UHF channels assigned by the FCC cannot be used in a given community because of interference between some adjacent VHF channels, interference between adjacent UHF channels, and between some nonadjacent UHF channels. However, no city in the United States was given the maximum possible number of commercial stations. The market area with the largest number of television viewers, New York,¹⁵ is assigned six VHF channels and no UHF channels, although signals of seven UHF channels assigned to nearby communities can be received in New York. The second largest market, Los Angeles, is assigned the maximum possible number of VHF channels (seven) and three UHF channels. An additional seven UHF channels from nearby communities can be received in parts of Los Angeles. All other cities in the United States are assigned fewer VHF and UHF channels.

FCC station allocation provided relatively more channels to smaller communities. Virtually all channels allocated to commercial broadcast television are occupied by stations in large cities, but not all allocated channels are being used in small communities. In the twenty television market areas with the largest number of television viewers, only one of seventy-eight VHF channel allocations remains unoccupied by a commercial television station. In those

same twenty largest market areas, only ten of sixty-nine UHF channel allocations remain unoccupied and seven of the ten unoccupied allocations have one or more license application pending before the FCC. By contrast, in the smallest twenty television markets, three of eighteen VHF channel allocations remain unoccupied and nine of nineteen or nearly half of UHF allocations remain unoccupied. FCC choice of station allocations has restricted entry in large markets and encouraged entry in small markets.

Evidence also shows stations would broadcast on the additional channels available in large cities had the maximum possible number of channels been assigned to large cities by the FCC. Because of the station assignment policy of the FCC, large cities have more television households per commercial television station than do small cities. With no FCC regulation, if other characteristics and cost of station operation are similar in large and small cities, population per station or number of stations per population would be similar in small and large cities. However, the twenty largest markets currently have an average of 272,000 television households per operating commercial station versus 22,500 television households per operating commercial station in the twenty smallest markets. That stations continue to operate with only 22,500 households viewing suggests far more stations would enter large markets if allowed to do so by the FCC.

In the first years of television, each of the three major radio networks established networks of operating television stations and stations applying for FCC licenses to operate. The major threat of new station and network entry came from the DuMont Television Network. During the three years the FCC used to put together the table of channel assignments, DuMont sought to influence FCC decisions. The changes sought by DuMont are predictable and FCC response to DuMont petitions shows clearly how the FCC chose a pattern of station allocations different than would otherwise have occurred. DuMont proposed to increase the number of channels in more densely populated areas and reduce the number of stations in less densely populated areas. DuMont proposed a minimum of four commercial VHF channels be assigned to all large cities. DuMont also wanted to reduce the geographic distance between stations having the same or adjacent channels. Finally, and most revealing, DuMont wanted to shift some VHF allocations from small cities to large cities.'⁶ DuMont felt that without its proposed alterations it could not survive as a network because insufficient stations would exist under the FCC plan which were not members of the three major networks. DuMont was not making an idle threat. The FCC rejected DuMont's proposals and within three years DuMont ceased all operation.'⁷

The FCC could have allocated more channels to large cities and fewer to small cities. The unoccupied

allocations in smaller cities and petitions by the DuMont network confirms the FCC sought a wider distribution of signals than would have occurred under competition.

V. Small Group Interests

One important implication of the theory of government regulation is that a government regulator gives special recognition to politically powerful consumer groups. This implication explains why government regulators frequently set prices to some consumer groups which are below average cost and even below marginal cost, even when such pricing is not consistent with perfect price discrimination. The bulk of consumers subsidize these consumer groups by paying relatively higher prices. In addition, a regulated industry is often required to provide products or services to consumer groups that the industry would not otherwise provide. As the theory predicts, the Federal Communications Commission requires broadcasters to provide a set of special services which otherwise would not be provided. Actions required by the FCC include requirements for public service broadcasting and the requirement of what the FCC calls community ascertainment.

The FCC uses a polite form of extortion to encourage television stations to show public service programs. The Chief of the FCC Broadcast Bureau is required to bring before the full Commission any television license renewal application which proposes to show public service material

for less than five percent of a program day. A license may be revoked if a station shows less public service material than it proposes to show in its renewal application.'*

The five percent minimum for public service programs is a modification of an earlier standard requiring that a minimum of ten percent of a program day be devoted to news and public affairs programs. In the 1970's, news programs became increasingly popular to viewers and television stations increased news programming at the expense of public service programs. In 1976, the FCC established a separate minimum for public service programs.'* Had the FCC not adopted a separate standard for public service programs, stations would have produced fewer public service programs. The FCC is forcing stations to produce more of one type of program than stations would produce without regulation. The FCC gains political support from organizations which receive free public service promotion.

FCC community ascertainment requirements are another example of the FCC requiring a station to act in ways which it would otherwise not act, and show how the FCC uses regulation to mitigate opposition from powerful political groups. Among material it must keep on public file and submit with its annual report to the FCC, a station must "ascertain" ten community problems or needs. Ascertainment is supposed to include community surveys, interviews with community leaders, and unsolicited comments submitted to the station. A station must include in the public file a list

of activities or programs which address these problems and needs.²⁰ Placing ten community needs on file seems innocent enough. However, the process of ascertainment is costly and complicated for a station. An entire publication produced by the national television trade association is devoted to helping stations with ascertainment.²¹ The FCC also released an extensive guide to ascertainment.²²

Ascertainment is an activity required by the FCC in which a station would otherwise not engage. A television station does not ignore the community of course. Financial success of a station depends on producing programs which attract viewers. Stations spend substantial resources on viewer surveys, Nielsen ratings being the most obvious example. Without the FCC requirement, however, a station has no incentive to survey the community or community leaders to find out community needs and problems. Ascertainment is used by the FCC to mitigate political opposition to television regulation and is used to increase political support from those whose "needs" are recognized. Ascertainment taps some economic profit granted to a television station by the FCC and transfers it to other politically powerful groups. The fact that stations must consider views of community leaders and views expressed in unsolicited comments means ascertainment gives most consideration to politically powerful and vocal community members. Regulation theory predicts this same result.

Regulation is used to mitigate opposition from the most powerful or vocal consumer groups first.

VI. Cable Television

Treatment by the Federal Communications Commission of cable television provides an excellent application of the theory of government regulation. In particular, the theory is applied to an industry which has dramatically changed in the last several years causing interesting though predictable changes in the form of government regulation.

Astoria, Oregon is credited with establishing the first cable television system in 1949.²³ Community Antenna Television (CATV), as it was then labelled, developed first in cities denied television stations during the FCC license freeze of 1948. Cable operators installed equipment to receive signals from television stations in other cities and then charged subscribers a fee to hook up to the receiving equipment.

The FCC was aware of the first cable systems. An FCC lawyer inspected a number of systems during the early years of cable and circulated a memo suggesting the FCC regulate CATV systems as common carriers. The FCC ignored the memo and chose not to regulate cable television. Existing broadcast stations had no objection to early cable systems since existing stations could only gain from the increase in their effective range. Cable systems represented no threat to existing stations.

After the end of the television license freeze in 1952, commercial broadcasters became more sensitive to the existence and growth of cable systems. Cable systems appeared in cities which already had commercial stations or where commercial stations were being built. Now cable was attracting viewers away from local programs by using signals from other cities. Any signals imported to an area reduced audience size of local stations. No regulation required cable systems to pay program royalties and cable systems could import programs to a market even when a local station had been granted exclusive right to show that program. In early cable systems, a cable subscriber could not choose to watch local stations unless signals from local stations were received by the cable system. Local stations often had to compete with high quality signals of a distant station shown by a cable system.

In 1955 150,000 households subscribed to cable.²⁴ In 1958 the FCC denied a request by commercial broadcasters to assert control over cable.²⁵ By 1960 650,000 households were cable subscribers and the FCC could no longer ignore pleas of broadcasters. In a 1962 decision, ²⁶ upheld by the Supreme Court,²⁷ the FCC denied permission for Carter Mountain Cable Company to use a microwave repeater because of economic damage a cable system would do to local stations. The threat of additional FCC action, however, did not stop cable growth in other communities. By 1965 1.28 million households were cable subscribers.

The FCC in 1966 issued its first series of cable regulations.²⁸ The regulations required cable systems to carry all local television signals and forbade cable systems from importing a signal which duplicated a local station. Cable operators were also forbidden to carry syndicated material which duplicated a local station within fifteen days of the time the local station showed the program.²⁹

In 1968 the FCC went a step farther and forbade cable systems from importing a television signal without permission of the originating station.³⁰ The 1968 decision discouraged expansion of cable systems since permission from the originating station was often not forthcoming. The decision also represented the limit on FCC restriction of cable television.

By 1970 4.5 million households subscribed to cable and the political power of cable television interests could no longer be ignored by the FCC. In 1972 the FCC revised its regulations, again allowing cable systems to use the signal of a station without that station's permission.³¹

In 1980 the number of cable subscribers had grown to nearly 13 million. Political power of cable television interests was so great that the FCC discarded rules which required cable systems to import certain signals and discarded rules which prevented cable systems from importing programs to which local stations had been given exclusive right.³² The FCC decision was made despite an unprecedented effort by local broadcasters and by the National Association

of Broadcasters, the main television trade association and lobbying group. By October, 1974 the NAB had spent \$480,000 and committed an additional \$400,000 to efforts to stop cable subscription television.³³ The NAB budget for 1980 included \$656,000 for government activities, nearly ten percent of the total NAB budget.³⁴ A substantial portion of the money for government activities was committed to stopping the growth of cable television. As of December 1982, 29 million households subscribe to cable, representing about thirty-five percent of television viewers.³⁵

The pattern of regulation over time is clear. In years when it represented no threat to broadcast stations, cable was ignored by the FCC. As cable posed an increasing threat to politically powerful broadcast interests, FCC cable regulation grew increasingly restrictive. At some point, political power of cable operators and users became large enough that their interests had to be recognized by FCC regulation.

VII. Summary

The theory of government regulation refined by Sam Peltzman asserts government regulators maximize political support received from voters and from the regulated industry. Because political support comes from both regulated firms and from voters, a government regulator cannot completely ignore preferences of either group. The Federal Communications Commission receives political support

from commercial television stations and from television viewers. The main regulatory tool of the FCC is its power to assign television channels to communities and to grant licenses to applicants for those television channels. The FCC has used its regulatory power to establish a geographic pattern of television station locations different than would otherwise have occurred, but a pattern predictable by the theory of government regulation.

With no FCC restriction on station location and given a limited number of television channels, stations tend to neglect small cities since the audience size in a small city is smaller than the audience available to an entering station in a large city even if the large city has several existing television stations. A television station entering a large city takes some viewers away from existing stations. The television industry gains more viewers, with no increase in cost, if the FCC reduces the number of stations in large cities and encourages entry in small cities, thus recognizing the effect a new station has on viewers of existing stations.

The FCC gains political support from viewers by increasing the number of television channels in a city, since additional viewing options are valuable to consumers. However, television viewers have diminishing marginal value of additional television stations. The first television station in a community earns for the FCC more political support than a second or subsequent station earns. Thus, to

increase political support from both the commercial television industry and from television viewers, the FCC encourages station entry in small cities and restricts entry in large cities.

To increase political support from politically active consumer groups, the FCC requires stations to provide programs and services which they otherwise would not provide, just as is predicted by the theory of government regulation. Community ascertainment rules require stations to recognize interests of politicians and vocal consumer groups. Public service program requirements recognize interests of socially active community groups.

Regulation of cable television by the FCC serves as an excellent example of how treatment of an industry by a regulator changes over time in a predictable way as the structure of the industry changes. When they were first introduced, cable systems represented no threat to existing commercial television stations and so were ignored by the broadcast television industry and by the FCC. As they became more common in cities where commercial television stations already existed, cable systems attracted the attention of the broadcast television industry and of the FCC since existing stations were losing viewers to the cable systems. In response, the FCC introduced ever more restrictive cable regulations. When the cable industry became powerful enough, its interests and the interests of consumers using cable systems, had to be recognized by FCC

regulations. The FCC relaxed its restrictive cable regulations in stages. Current FCC cable regulations place few restrictions on the signals a cable system can transmit to subscribers.

¹George Stigler, *The Theory of Economic Regulation*, 2 *Bell J. Econ. & Management Sci.* 3 (Spring 1971).

²Sam Peltzman, *Toward a More General Theory of Regulation*, 19 *J. of Law & Econ.* 211 (August 1976).

³Thomas Gale Moore, *The Beneficiaries of Trucking Regulation*, 21(2) *J. of Law & Econ.* 327 (October 1978).

⁴Gregg A. Jarrell, *The Demand for State Regulation of the Electric Utility Industry*, 21(2) *J. of Law & Econ.* 269 (October 1978).

⁵Vincent C. Olson and John M. Trapan III, *Who Has Benefitted from Regulation of the Airline Industry?* 24 *J. of Law & Econ.* 75 (April 1981).

⁶R.H. Coase, *The Federal Communications Commission*, 2 *J. of Law & Econ.* 1 (October 1959).

⁷Rolla Edward Park, *The Growth of Cable TV and its Probable Impact on Over-the-Air Broadcasting*, *Amer. Econ. Rev.* 69 (May 1971).

⁸Sam Peltzman, supra note 2, at 216 and 219.

⁹The term "commercial exposures" is introduced by Howard Beales, *Television Program Quality and Restrictions on the Number of Commercials*, Federal Trade Commission Working Papers, no. 30 (June 1980).

¹⁰For a detailed examination of station choice of number of commercials, program quality, and program characteristics see Brooks Hull, American Commercial Television: Competition, Collusion, Regulation (Ph.D. dissertation, University of Washington, 1982).

¹¹Radio Act of 1927, Public Law no. 632, 69th Congress (1927).

¹²41 F.C.C. 148 (11 April 1952).

¹³Broadcasting Publications Inc., The First 50 Years of Broadcasting (1982).

¹⁴41 F.C.C. 148 (11 April 1952) pars. 63, 68.

¹⁵Data on number of television viewers come from the Arbitron Company. The data measure number of households with television. The market areas measured may extend beyond city limits to include nearby areas where the signals of major stations are viewed. Broadcasting Publications, Inc., Broadcasting-Cable Yearbook: 1983 (1983).

¹⁶41 F.C.C. 148 (11 April 1952) pars. 73-84, 127-132. DuMont also wanted more VHF frequency spectrum assigned to television broadcasting, par. 20.

¹⁷The First 50 Years of Broadcasting: 1955, Broadcasting, 6 April 1981, p. 149.

¹⁸47 C.F.R. sec. 0.281(a)(8).

¹'41 Fed. Reg. 20170, 17 May 1976.

²'47 C.F.R. secs. 73.5326(9),(11),(12).

²'National Association of Broadcasters, Ascertainment of Community Needs: Suggestions for the Survey of the General Public, (booklet, n.d.).

²'U.S., Federal Communications Commission, Primer on Part 1, Section IV-A and IV-B of Application Forms Concerning Ascertainment of Community Problems and Broadcast Matter to Deal With Those Problems, 27 F.C.C. 2d 650 (1971); reissued as, Primer on Ascertainment of Community Problems, FCC mimeo no. 71-176 (23 February 1971); amended by 33 F.C.C. 2d 394 (1972).

²'Mary Alice Mayer Phillips, CATV: A History of Community Antenna Television (1974).

²'Bruce M. Owen, Jack H. Beebe, and Willard G. Manning, Jr., Television Economics (1974).

²'Frontier Broadcasting Co. v. Collier, 24 F.C.C. 251 (1958).

²'32 F.C.C. 459 (1962).

²'Carter Mountain Transmission Corp. v. F.C.C., 375 U.S. 951 (1963).

²'Cable systems with microwave relays were covered in 38 F.C.C. 638 (1965). Other cable systems were given similar

regulation in 2 F.C.C. 2d 725 (1966). The FCC's right to regulate cable was affirmed in U.S. et al. v. Southwestern Cable Co. et al., 392 U.S. 157 (1968).

²⁹The model of government regulation of television predicts both the FCC and the television industry eschew exact duplication of programs. Duplication increases fixed cost without increasing the number of viewers. Station profit falls. Consumers are no better off with duplicated programs so the regulator increases political support by forbidding exact duplication of television programs.

³⁰15 F.C.C. 417 (1968). This action has become known as the "cable freeze."

³¹36 F.C.C. 2d 1 (1972).

³²79 F.C.C. 2d 663 (1980).

³³Broadcasting, 7 October 1974, p. 7.

³⁴Broadcasting, 28 January 1980, p. 30.

³⁵Broadcasting, 20 December 1982, p. 27.