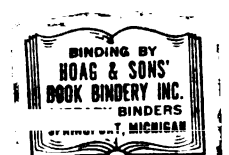


SOME CONSIDERATIONS FOR AN  
INTERCONNECTED NATIONAL  
EDUCATIONAL TELEVISION NETWORK

Thesis for the Degree of M. A.  
MICHIGAN STATE UNIVERSITY  
WILLIAM OUZER COOPERMAN  
1970

THESIS



## ABSTRACT

### SOME CONSIDERATIONS FOR AN INTERCONNECTED NATIONAL EDUCATIONAL TELEVISION NETWORK

By

William Ouzer Cooperman

#### Purpose

The Educational Television system in the United States stands on the threshold of a development which can transform it from a collection of individual scattered stations into a unified national force--a national interconnected network. The present paper examines some of the factors that must be considered in the planning of such a national Educational Television network. Since the structure of an interconnected network will naturally be a reflection of the men who participate in it, the first area of exploration is the philosophy and attitudes towards interconnection held by those individuals and organizations that are currently operating Educational Television facilities. The second area of examination is the present state of interconnection throughout the country, to determine what physical climate exists, and what types of networks have developed. Third, a study of the programming broadcast by the individual stations was undertaken to determine the amount and

nature of programing available for transmission by a national network.

### Procedure

Through personal correspondence, a survey was conducted of all Educational Television stations, networks, and program distribution agencies operating in 1967. Information sought was primarily concerned with programing and network practices, with station program guides as the major source of information. Information regarding programing was then tabulated to determine what programing practices are in effect throughout the United States, and how a national network may best serve the stations and fit within the present pattern. A comprehensive review of the literature was also conducted regarding interconnection attitudes and recommendations.

### Conclusions

The growth of interconnected networks throughout the United States has been rapid and widespread, though mostly limited to areas East of the Mississippi River. Support is found for interconnection on all levels, local, state, regional and national. Although all the interconnections are utilized almost exclusively for simultaneous broadcasts, there seems to be some division as to whether the interconnection nationally should be used for simultaneous networking, or as a means of program distribution. The analysis of

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William Ouzer Cooperman

programming finds that sufficient programming is already broadcast "nationally" by the stations to program a national network. Programming practices are such that changes in an individual station's broadcast schedule will have to be made to accommodate a national network, but that these changes would not be drastic.

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NATIONAL EDUCATIONAL TELEVISION NETWORK

By

William Ouzer Cooperman

A THESIS

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the Master of Arts Degree.

  
Thomas F. Baldwin  
Thesis Director

## ACKNOWLEDGMENTS

During the course of this study, assistance in obtaining information was provided by scores of individuals and organizations. In many cases, the names of the individuals themselves are unknown to the author, but their organizations, individual Educational Television stations, state and regional networks, and national programming agencies are listed in the appropriate appendices. To all, I express my heartfelt thanks.

Special acknowledgment must be given to three individuals, without whose aid this project would not have been possible. First, a special thanks to Dr. Thomas Baldwin, Department of Television and Radio, Michigan State University, who has guided me throughout my graduate program, and who has been a most helpful advisor for this project. Thanks to Mr. Harry M. Brawley, Executive Secretary, West Virginia Educational Broadcasting Authority, who has allowed me to continue work on this project and use of his extensive files while in his employ. Finally, a special thanks to Miss Cecille Weiss, whose kind and understanding encouragement has enabled me to stick with this project when the going got rough.

Chapter

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## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION: THE CHALLENGE OF INTERCONNECTION . . . . .	1
Introduction . . . . .	1
Problems of Educational Television . . . . .	4
The Corporation for Public Broadcasting . . . . .	6
The Present Study . . . . .	10
II. ATTITUDES TOWARD INTERCONNECTION . . . . .	16
Support for Interconnection . . . . .	16
The Carnegie Commission: Champion of the Local Station . . . . .	18
The Ford Foundation: Support for a National Network . . . . .	22
Public Broadcasting Act of 1967 . . . . .	27
National Educational Television: Further Network Support . . . . .	29
Local Station Safeguards . . . . .	31
III. THE NETWORKS TODAY . . . . .	36
Interconnected Networks . . . . .	37
Centralized programming networks . . . . .	38
Decentralized networks . . . . .	50
Local Interconnections . . . . .	61
Tape Networks . . . . .	63
Interconnections Under Development . . . . .	65
Summary . . . . .	68
IV. NATIONAL PROGRAMING PRACTICES . . . . .	72
Introduction . . . . .	72
The Programing Survey--Procedures . . . . .	75
The Programing Survey--An Overview . . . . .	80
The Programing Survey--Broadcast Patterns . . . . .	91
Summary . . . . .	142

Chapter

v.

Section

Appendix

...

...

...

...

...

...

...

...

...

Chapter	Page
V. NETWORK PROPOSALS . . . . .	147
A Brief Review . . . . .	147
Network Proposals . . . . .	154
Some Recommendations for Consideration . . .	173
BIBLIOGRAPHY . . . . .	180
 <b>Appendix</b>	
I. EDUCATIONAL TELEVISION STATIONS BROAD- CASTING JANUARY 1967 . . . . .	184
II. POST JANUARY 1967 STATIONS PROVIDING INFORMATION CONCERNING PROGRAMING . . . . .	187
III. EASTERN EDUCATIONAL TELEVISION NETWORK FALL, 1967 . . . . .	188
IV. CENTRAL EDUCATIONAL NETWORK, FALL, 1967 . . .	189
V. WESTERN EDUCATIONAL NETWORK, FALL, 1967 . . .	190
VI. SOUTHERN EDUCATIONAL NETWORK . . . . .	191
VII. STATEWIDE NETWORKS--INTERCONNECTION JANUARY 1968 . . . . .	192
VIII. PROGRAMING ON STATE NETWORKS . . . . .	194

Table

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

LIST OF TABLES

Table	Page
1. Distribution of Stations by Type of Licensee . . . . .	77
2. Distribution of Stations by Geographical Time Zones . . . . .	77
3. Distribution of Stations by Type of Licensee--Revised . . . . .	80
4. Distribution of Stations by Geographical Time Zones--Revised . . . . .	80
5. Nationally Broadcast Educational Television Programs . . . . .	82
6. Broadcast Patterns of "NET Journal" . . . . .	97
7. Broadcast Patterns of Wednesday "Public Affairs" Programs . . . . .	98
8. Broadcast Patterns of "NET Playhouse" . . . . .	100
9. Sunday Repeats of "NET Journal" . . . . .	104
10. Thursday Repeats of "Public Affairs" Block . . . . .	106
11. Sunday Repeats of "NET Playhouse" . . . . .	107
12. "French Chef"--Weekday Distribution . . . . .	110
13. "French Chef"--Broadcast Patterns . . . . .	111
14. "Smart Sewing"--Broadcast Patterns . . . . .	113
15. "Smart Sewing"--Weekday Distribution . . . . .	114
16. "Folk Guitar" and "Playing the Guitar"--Broadcast Patterns . . . . .	116
17. "Folk Guitar" and "Playing the Guitar"--Weekday Distribution . . . . .	116



Table	Page
18. "Antiques"--Broadcast Patterns . . . . .	118
19. "Antiques"--Weekday Distribution . . . . .	118
20. "Creative Person"--Broadcast Patterns . . . . .	120
21. "Creative Person"--Weekday Distribution . . . . .	120
22. "The Dissenters"--Broadcast Patterns . . . . .	122
23. "The Dissenters"--Weekday Distribution . . . . .	122
24. "Speaking Freely"--Broadcast Patterns . . . . .	124
25. "Speaking Freely"--Weekday Distribution . . . . .	124
26. "Book Beat"--Broadcast Patterns . . . . .	125
27. "Book Beat"--Weekday Distribution . . . . .	126
28. "Business Roundtable"--Broadcast Patterns . . . . .	128
29. "Business Roundtable"--Weekday Distribution . . . . .	129
30. Science Series--Broadcast Patterns . . . . .	130
31. Science Series--Weekday Distribution . . . . .	131
32. "Museum Open House"--Broadcast Patterns . . . . .	132
33. "Museum Open House"--Weekday Distribution . . . . .	133
34. "Misterogers Neighborhood"--Broadcast Patterns . . . . .	136
35. "TV Kindergarten"--Broadcast Patterns . . . . .	137
36. "What's New"--Broadcast Patterns . . . . .	138
37. "The Friendly Giant"--Broadcast Patterns . . . . .	139
38. Broadcast Patterns--Summary . . . . .	144
39. Sample Schedule of Transmission by an Interconnection Network . . . . .	145

## CHAPTER I

### INTRODUCTION: THE CHALLENGE OF INTERCONNECTION

#### Introduction

A decade ago, in September 1959, a conference sponsored by the National Association of Educational Broadcasters and the United States Office of Education met in Washington to discuss the feasibility and proper role that state and regional networks could play in educational broadcasting. With networks operating in only three states--Alabama, Florida and Oklahoma--educational broadcasting was barely on the threshold of a development that could lead to its role as an important element in the educational and broadcasting environments of the United States.<sup>1</sup> The problems and potentials facing the conference were summarized by Mr. Richard Hull, Director of Radio and Television Broadcasting at Ohio State University.

Networking is an old concept as electronics go in this country. It must be in broadcast terms,

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<sup>1</sup>Betty McKenzie, ed., The Feasibility and Role of State and Regional Networks in Educational Broadcasting (Washington: National Association of Educational Broadcasters, 1959), p. 6.

nearly thirty five or forty years old. . . .

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 Networks are only one aspect of one kind of device for television. The whole problem is to devise a feasible framework in which to operate, whether it is a little closed-circuit operation in one county, a state-wide or regional closed-circuit or open-circuit network, or a national network.<sup>2</sup>

Although no conclusions were drawn by the N.A.E.B. conference, as to the framework and direction that networks should take, interest in forming Educational Television networks was shown in at least thirty states. In the succeeding decade, fifteen states have instituted statewide Educational Television networks, and plans are under development in several others. Several state networks have recently joined together to form networks serving entire regions of the country. The growth and success of the state and regional networks has led to discussion and speculation as to the feasibility of linking the Educational Television stations on a nationwide basis, into a single system. As early as the 1959 conference, Hartford Gunn, general manager of the Boston Educational Television station, and later instrumental in the formation of the Eastern Educational Network, speculated that state and regional networks were a necessary and natural step toward a national interconnected network. He proposed,

If educational television is ever to have a national live network, it would seem that this would become a reality only through the growth

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<sup>2</sup>Ibid., pp. 20-21.

of regional networks and their eventual inter-connection, thereby completing a national system of educational television.<sup>3</sup>

The widespread growth of state networks, and the establishment of regional networks, has progressed to a point where it is only natural to speculate and consider the interconnection of these systems into a national system. The benefits of such a national system can be the increased availability of beneficial programs to individual stations, and therefore to the general public served. "National inter-connection is necessary," as one educational broadcasting leader has stated, "for it will make possible a much more effective program service."<sup>4</sup>

With over 160 Educational Television stations, located in 42 states, it is apparent that the time is opportune for consideration of the possibility of bringing all the various agencies into a nationwide interconnected system. The establishment of a nationwide interconnected system will naturally require much planning. Scores of individuals, stations, state and regional networks, program producers and agencies of the state and Federal governments all are concerned with the operation of educational broadcasting in the

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<sup>3</sup> Ibid., p. 139.

<sup>4</sup> John F. White, "National Educational Television as the Fourth Network," in Allen Koenig and Ruane Hill, ed., The Farther Vision ETV Today (Madison, Wisconsin: University of Wisconsin Press, 1967), p. 95.

United States, and will to some extent be involved with any national television system. As so many organizations, spread throughout the country, would be involved, a great deal of time and thought will be necessary for the formulation of a suitable framework for such a nationwide system. Many areas of operating procedure, educational broadcasting philosophy, and organization structure will have to be examined in the determination of whether a national system is to develop, and if so, then in what direction.

The present study, then, will be an exploration into those factors which must be taken into account in the planning for a nationwide interconnected Educational Television system. We shall examine these particular factors in depth, and then propose some guidelines for a nationwide system based on the studies previously conducted. It is hoped that this present work will prove beneficial to those actually involved in the planning now underway for a national Educational Television interconnected system.

### Problems of Educational Television

The growth of Educational Television has been one of the phenomena of the American system of broadcasting. Over the past decade, the number of noncommercial television stations devoted to educational purposes has grown from a mere thirty-five stations broadcasting in 1958, to 160

stations on the air in March 1968.<sup>5</sup> Stations presently under construction will raise this total an additional 24 per cent, to 198 broadcast stations.<sup>6</sup> Motivated solely by public service, prohibited from accepting advertising revenues, Educational Television has been hard pressed financially. Voluntary contributions from governmental agencies, individuals and private foundations, by their irregular nature, have not provided an adequate financial basis for the full development of Educational Television. Educational Television stations have been forced to spend considerably less than commercial stations for the development of programming, while the American public has come to expect a consistently high quality of programming from all television.

The relative lack of funds by Educational Television has affected not only program production, but the growth of individual stations and the entire development of Educational Television in the United States. While individual station growth has been somewhat encouraged by various government and foundation grants, the total Educational Television system has developed without any formal regional or nationwide planning. This fragmentation of the system has been emphasized by the lack of any meaningful nationwide network

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<sup>5</sup>Federal Communications Commission, "Educational Television," INF Bulletin No. 16-B (Washington, D.C.: April 1968), p. 3 (mimeographed).

<sup>6</sup>Addenda to TV Factbook, no. 38, August 26, 1968, p. 1.

that could unify the efforts and effects of the various individual stations. The interconnection of individual stations into a network, which has magnified the resources, stature and impact of the commercial network affiliates, has not as yet been readily available to educational broadcasters due to a lack of funds for the necessary technical facilities.

#### The Corporation for Public Broadcasting

Recognizing the promise, and the problems, of Educational Television, the Congress of the United States passed the Public Broadcasting Act of 1967. This law provides for the strengthening of Educational Television on both the local and national levels. To aid local station development, some thirty-seven million dollars was authorized for the building of new station facilities over three years.<sup>7</sup> These grants would provide 75 per cent of the total planning and construction cost.<sup>8</sup> To aid the local stations with the task of providing sufficient quality programing, Congress authorized nine million dollars for grants to finance both locally and nationally produced programs.<sup>9</sup> These grants would be administered by a new Federally chartered, but independent organization, the Corporation for Public Broadcasting.

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<sup>7</sup>U.S. Congress, Public Broadcasting Act of 1967, Pub. L. 90-129, 90th Cong. 1st sess., 1967, p. 1.

<sup>8</sup>Ibid., p. 3.

<sup>9</sup>Ibid., p. 8.

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The Corporation for Public Broadcasting (C.P.B.) was established by Congress with the primary objective to "facilitate the development of educational radio and television broadcasting."<sup>10</sup> This would be done, not only by helping the local stations with programing but also by strengthening the national system as a whole. The facilities construction grants, administered by the Department of Health, Education and Welfare, were required to be granted evenly throughout the various states. No state could receive more than 8½ per cent of the total facilities grants in any one year.<sup>11</sup> Likewise, the C.P.B. was prohibited from making a grant for any project, or to any one station, in excess of \$250,000 in a year.<sup>12</sup> This limitation on the Corporation would help insure that the funds granted would be distributed to a large number of recipients. The clear intention of Congress is to help financially as many stations as feasible, thereby strengthening the Educational Television system nationally.

Programing grants are useful to local stations in several ways. The grant facilitates expansion of stations' operations. A portion of the grant can be used to finance normal station operations. Local programing draws the station closer to the community it serves. The most important result of the grant, naturally, is the programing that has a place in the station's broadcast schedule.

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<sup>10</sup>Ibid., p. 5.

<sup>11</sup>Ibid., p. 1.

<sup>12</sup>Ibid., p. 8.

Stations are in great need, not only of locally produced programs, but also of programs produced by other organizations that have access to facilities and events beyond the reach of a single station. To fill this need, the Corporation for Public Broadcasting was empowered to give grants, not only to individual stations for local programming, but to national programming organizations for programming "for national or regional distribution."<sup>13</sup> Thus, the Corporation could also support the production activities of such national organizations as National Educational Television, as well as local productions that have a wide appeal and significance. Nor is the Corporation limited to the supporting of already existing organizations. Indeed, the Corporation is urged to "assist in the establishment and development of one or more systems of noncommercial Educational Television and radio broadcast stations throughout the United States."<sup>14</sup> The Corporation's responsibilities, then, are truly national in scope, "to enhance such service [Educational Television] on a local, state, regional and national basis."<sup>15</sup> Strengthening local stations, and providing them with programs, then, are two methods of providing a national service.

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<sup>13</sup> Ibid., p. 7.

<sup>14</sup> Ibid., p. 6.

<sup>15</sup> Ibid., p. 7.

There is yet a third method by which the C.P.B. is empowered to assist educational television and radio, and this method is interconnection. The Corporation can "assist . . . the establishment and development of one or more systems of interconnection to be used for the distribution of educational television and radio programs."<sup>16</sup> Interconnection of stations into a national network has been one of the basis of American broadcasting since the National Broadcasting Company formed its networks in 1927. An interconnected network, however, has not yet played a significant role in Educational Television. The growth and development of educational stations has only occurred during the past ten years. This development has just approached the point when it has enough potential affiliates to consider uniting into a national interconnected system. National coverage by Educational Television stations is still far from complete. In October 1967, nine states still had no local educational stations, and 13 states had only one outlet.<sup>17</sup> Therefore, the expanding of the present number of stations is a necessary prerequisite to the establishment of a full national system with coverage equal to that of the commercial networks. Nevertheless, the present Educational Television stations, with a potential audience of over 138 million

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<sup>16</sup>Ibid., p. 6.

<sup>17</sup>National Association of Educational Broadcasters, 1968 Directory and Yearbook of Educational Broadcasting (Washington: N.A.E.B., 1967), pp. 33-41.

people, certainly has reached a position of growth when a discussion and planning for a full interconnected system is warranted.<sup>18</sup>

### The Present Study

The present paper, then, will examine some of the factors that must be considered in the planning of a nationwide interconnection system. Until the present time, most discussion of interconnection for educational broadcasters has been concerned with the financial problems involved in operating a nationwide system. The seemingly insoluble problem of insufficient funds has hindered a full discussion of the problems and possible structure of an interconnection system itself.

While the present obstacle to interconnection, the lack of funds for technical facilities, continues, several recent events may indicate that a solution may be forthcoming.

National Educational Television (N.E.T.) has estimated that it would cost over six million dollars to interconnect its 135 affiliates on a permanent basis.<sup>19</sup> This is equal to the total yearly budget of N.E.T., and is clearly unaffordable at present. The hope of Federal funds,

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<sup>18</sup>Broadcasting, July 10, 1967, p. 57.

<sup>19</sup>U.S. Congress, House, Committee on Interstate and Foreign Commerce, Public Broadcast Act of 1967, Hearings on H.R. 6736 and S. 1160, 90th Cong., 1st sess., 1967, p. 36.

channeled through the Corporation for Public Broadcasting, however, may prove a solution to this financial crisis. Of equal importance is a provision of the Public Broadcasting Act that allows the communications common carriers to provide interconnection services free, or at reduced rates.<sup>20</sup> American Telephone and Telegraph has already offered to reduce by half interconnection costs for Educational Television, though only during the hours of 2 A.M. and noon.<sup>21</sup> This would benefit program distribution, though not full live simultaneous broadcasts. A more positive proposal by A.T.T. is to exempt educational broadcasters from its proposed 1968 rate increases for broadcast services.<sup>22</sup>

Another means of facilitating interconnection, while overcoming the present problem of insufficient funds, may be through the use of space communications satellites. The legislation passed by the Congress specifically includes "communications space satellites," as a method of interconnection available to educational broadcasters.<sup>23</sup> Various plans have been proposed to the Federal Communications Commission on the establishment of a domestic communications satellite system. While reflecting a wide range of interests, from the Communications Satellite Corporation to the

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<sup>20</sup>Public Broadcasting Act of 1967, p. 7.

<sup>21</sup>Broadcasting, April 24, 1967, p. 47.

<sup>22</sup>Broadcasting, January 29, 1968, p. 79.

<sup>23</sup>Public Broadcasting Act of 1967, p. 4.

Ford Foundation, all the proposals advanced at least agree that Educational Television should be carried at greatly reduced rates, or even without charge. The Communications Satellite Corporation has offered, not only to provide its services without charge, but also to contribute a portion of its revenues from domestic satellites for the support of educational programming.<sup>24</sup>

The final resolution of the question of domestic communications satellites is a matter of public policy, and it may be several years before any system will be in operation. Educational Television can, of course, operate with conventional land based facilities until satellites become available. Though the possibility exists that the nature of satellites themselves may have some affect on the nature of the interconnection and networks, the Educational Television system will have the opportunity to serve the country, and develop into a viable system able to remain intact through such a conversion.

There are several other important factors beyond those of a financial and technical nature to be taken into consideration in the planning of an interconnection system for Educational Television. The present structure of the educational broadcasting system has developed over the past fifteen years, and any interconnection system will have to

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<sup>24</sup>Fred Friendly, *Due to Circumstances Beyond Our Control* (New York: Random House, 1967), p. 322.

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be integrated into this existing structure. A careful analysis of the existing system with regard to interconnection must be made before the role of interconnection can be determined. Planning for interconnection cannot be done in a vacuum, as interconnection cannot merely be imposed on the present system without regard to those people and programming practices already operating within it. The Corporation for Public Broadcasting has no power to impose interconnection, and indeed is specifically prohibited from owning or operating "any television or radio station, system or network, community antenna television system or interconnection or program production facility."<sup>25</sup> The cooperation of the many parties involved will be necessary for the success of an Educational Television interconnection project.

The planning of such an interconnection project requires that at least three areas of existing practices and policies be explored. These three areas will have a direct influence on the final form any interconnected system of Educational Television will take.

The first area of exploration must be the philosophy and attitude toward interconnection held by those present leaders involved in Educational Television. The structure of an interconnected system will naturally be a reflection of the men who guide it. Nevertheless, the attitudes of all

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<sup>25</sup>Public Broadcasting Act of 1967, p. 7.



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the parties involved must be considered, as the final system will of necessity be a compromise involving many individuals and organizations. Those organizations opposed to the system's final form or objectives may choose not to participate, thereby lessening its effectiveness to all.

The second area of exploration is the operation of the existing interconnection systems. While no permanent national interconnection exists, there are a multitude of local and regional interconnections in operation. A full investigation of the nature and operation of these systems is necessary to facilitate the integration of a new nationwide network into the existing networks operational plans.

The third area of exploration is a study of the programming carried by the Educational Television stations. As the distribution of programming is a primary function of station interconnection, a study of the programming broadcast is necessary to determine the nature of the interconnection the stations desire. While the presence of interconnection itself may have some influence on the future of Educational Television programming, a good portion of the programming will serve the same audiences and needs that present programs serve. The interconnection will also have to be somewhat compatible with the station's present practices and program schedules, as any drastic imposition of programming on the 160 stations will undoubtedly create animosity and the breakdown of the system.

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Having completed the exploration of the three preceding areas, we shall take a brief look at some of the interconnection plans proposed, and then attempt to propose a framework based on our previous study. It is hoped that this proposal, based on the research completed, will provide some ideas to those who are actually involved in the planning of a national system.

A brief note on the sources for this study. The bulk of this study, containing information on network practices in Chapter III, and on programing information in Chapter IV, was obtained through personal correspondence with over 140 Educational Television stations operating throughout the United States. Unless otherwise indicated by footnotes, all material referred to was obtained through this personal correspondence and is available in the files of the author. As a common reference point in time for the scores of stations and networks involved we have selected the week of November 12-19, 1967. All information cited, unless otherwise noted, refer to operations by the parties during this period.

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## CHAPTER II

### ATTITUDES TOWARD INTERCONNECTION

#### Support for Interconnection

There can be no doubt that interconnection of Educational Television stations is one of the most desirable and widely supported proposals concerning educational broadcasting today. The rapid and widespread growth of regional and state networks is certain proof of the support shown interconnection by those operating broadcast stations. Working cooperatively with broadcasters, the legislatures and agencies of a score of states are now assisting in the financing and operation of statewide networks, with many others in planning stages. Almost every national organization involved in Educational Television has supported the principle of interconnection. The Carnegie Commission on Educational Television has stated that "Public Television can never be a national enterprise until effective interconnection has been provided."<sup>1</sup> John F. White, president of National Educational Television, feels that "interconnection is again our only

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<sup>1</sup>Carnegie Commission on Educational Television, Public Television: A Time for Action (New York: Bantam Books, 1967), p. 7.

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hope in increased quality service."<sup>2</sup> The Educational Television Station division of the National Association of Educational Broadcasters, speaking for its member broadcast stations, urged that "conventional means for ground interconnection must be encouraged immediately."<sup>3</sup> As previously noted, the Public Broadcasting Act of 1967, passed by the 90th Congress and supported by every witness testifying before the Congressional committees, fully supported the concept of interconnection of Educational Television stations.

Although there is widespread agreement on the desirability of interconnection for Educational Television, there is not as wide agreement on what form the interconnection should take. Interconnection can be used for the distribution of programs, for broadcast whenever an individual station determines. It can also be used for the simultaneous broadcasting by many stations, as in commercial networks. The use of interconnection for the establishment of an "educational network" would of necessity involve the formation of some sort of central agency to supervise and coordinate network operations. Such a central agency, it

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<sup>2</sup>U.S. Congress, Senate, Committee on Commerce, Progress in Space Communications Hearings before the Subcommittee on Communications, Senate, 89th Cong., 2nd sess., 1966, p. 221.

<sup>3</sup>U.S. Congress, House, Committee on Interstate and Foreign Commerce, Public Broadcast Act of 1967, Hearings on H.R. 6736 and S. 1160, 90th Cong., 1st sess., 1967, p. 455.



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is feared by some, could dominate the Educational Television system to the detriment of the local station. Proponents of interconnection, then, are divided as to the nature of the interconnection's final form--distribution or networking. The arguments for each position can best be summarized by examining the relative positions of two of the most influential organizations in educational broadcasting, the Carnegie Commission and the Ford Foundation.

The Carnegie Commission: Champion  
of the Local Station

The chief champion of the local station, and opponent to a national network, has been the Carnegie Commission on Educational Television. The Carnegie Commission's report, Public Television: A Time for Action, was released in January 1967, and was the impetus behind the passage of the Public Broadcasting Act of that year.<sup>4</sup> While fully supporting the principle of interconnection, the Commission felt "ordinary networking . . . to be incompatible in general with the purpose of Public Television," and proposed that "Public Television look to interconnection primarily as a device for the distribution of programs."<sup>5</sup>

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<sup>4</sup>The Carnegie Commission on Educational Television, sponsored and financed by the Carnegie Foundation, was formed in 1965, and its objectives endorsed by President Johnson. The Commission's report was released in January 1967, and its recommendations served as the basis for Pres. Johnson's recommendations to the Congress. The Public Broadcasting Act of 1967 was signed into law on November 10, 1967.

<sup>5</sup>Carnegie Commission, Public Television, p. 55.



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The Commission's opposition to networking was that "it minimizes the role of the local station, where Public Television, as we see it, is to be as decentralized as the nature of television permits."<sup>6</sup> The Carnegie Commission saw strong independent local stations as the necessary foundation of any system of Educational Television in the United States. Independent local stations could provide the diverse programs necessary to fulfill the specific needs of the community served. To strengthen the position of local stations, the Commission supported interconnection for distribution of quality programming, while still trying to "foster local autonomy by placing the responsibility for scheduling upon the managers of the local station."<sup>7</sup> If the stations had ready access to a network, Commission chairman James Killian feared that "they would come to rely too much on the central sources of programming."<sup>8</sup> By relying on a central programming source, the local stations would not be able to fulfill the specific programming needs of their area. "A fixed, scheduled set of programs," Killian testified before a congressional committee, "will come to dominate this whole educational system, and these programs will be derived from one or two central points, so we do not get the

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<sup>6</sup>Ibid.

<sup>7</sup>House Committee on Interstate and Foreign Commerce, Public Broadcast Hearings, p. 127.

<sup>8</sup>Ibid., p. 169.

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diversity."<sup>9</sup> Central control of the system, and lack of program diversity would be to the detriment of the individual stations serving local community needs.

While opposed to networking as a basis for the interconnection system, the Carnegie Commission certainly was not opposed to live networking when conditions warrant. "The need for live networking," the Commission report states, "is as great for Public Television as for commercial television."<sup>10</sup> The use of live networking, however, would be limited to the live coverage of events. Such use would be "not only the best use of television, but the most exciting and the most rewarding. . . . Occasions when the system goes 'live' may be rare."<sup>11</sup>

The existence of any form of interconnection, of course, entails its supervision by some central agency. The Carnegie Commission not only supported such a central organization, but the Commission's major recommendation was the establishment of such an agency. "It is essential," Killian stated, "that there be a national institution that could provide quality programming and leadership to a system as a whole, even though the local station would have full autonomy."<sup>12</sup> The Commission felt that a central agency, restricted

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<sup>9</sup>Ibid., p. 168.

<sup>10</sup>Carnegie Commission, Public Television, p. 54.

<sup>11</sup>Ibid.

<sup>12</sup>House Committee on Interstate and Foreign Commerce, Public Broadcast Hearings, p. 124.

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to the use of interconnection mainly for distribution, would not dominate the individual stations. The area of responsibility of the central organization concerning interconnection would be in "determining national program distribution, in order to preserve the opportunity for such decentralized scheduling of programs," by the local stations.<sup>13</sup> This division, distribution by the Corporation, scheduling by the stations, was felt by the Carnegie Commission to insure the autonomy of the local station.

The Carnegie Commission report, submitted to President Johnson, served as the basis for the Public Broadcasting Act of 1967. The President's proposals to the Congress followed the Commission's recommendations with regard to interconnection. The Department of Health, Education and Welfare supported legislation with the intent that the proposed Corporation for Public Broadcasting "should not engage in interconnection projects as a regular practice and should not undertake to operate a network."<sup>14</sup> Indeed, HEW spokesmen even went beyond the Carnegie Commission, and advocated that the Corporation "is not to contract directly with common carriers for interconnection facilities."<sup>15</sup> Perhaps being overly sensitive to possible charges of governmental control of broadcast media, Secretary of HEW James Gardiner felt that

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<sup>13</sup> Ibid., p. 127.

<sup>14</sup> Ibid., p. 40.

<sup>15</sup> Ibid.



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the proposed Corporation "would not, should not, in my opinion, be an operating organization."<sup>16</sup> Further restrictions supported by HEW included a prohibition against the proposed Corporation from owning or operating any station or production facility, and a financial limit on any grant made for interconnection purposes. The Carnegie Commission itself, however, was more flexible and opposed any restriction on the amount of funds that the Corporation could provide for interconnections. It even proposed that the Corporation be allowed to operate a single station, for demonstration purposes.<sup>17</sup>

The Ford Foundation: Support  
for a National Network

Support for the use of interconnection facilities as the basis of a network type operation has centered around proposals of the Ford Foundation. The Ford Foundation has spent more than \$100,000,000 in support of educational television during the past fifteen years, and believes that "nothing is more needed, in our society and for television itself than first rate national noncommercial broadcasting."<sup>18</sup> The establishment of a first rate system is dependent, the Foundation believes, on both the interconnection of a network and the increasing of money available for programing. "The

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<sup>16</sup>Ibid., p. 29.

<sup>17</sup>Ibid., p. 175.

<sup>18</sup>Broadcasting, December 12, 1966, p. 36.

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absence of a true national network," McGeorge Bundy, Ford Foundation chairman stated, "has been a severe handicap to the development of an effective service."<sup>19</sup>

The case for networking is not merely the distribution of programs nationally, it is the increased impact possible when vital programs are shown throughout the country simultaneously. As Fred Friendly, adviser to the Ford Foundation and former president of CBS News has said,

If you want to grab this country and reach it, the idea of reaching it in a way in which the method of distribution can be promoted by all of the news media, national, regional and local--is terribly important.<sup>20</sup>

Donald Quayle, director of the Eastern Educational Network, largest operating interconnected educational television network, agrees that,

The psychological effect of a live broadcast--and many more of these would be made possible with interconnection--must not be overlooked. The excitement on the part of a viewer watching something while it is happening is an important ingredient. Moreover, a live broadcast is more likely to get free publicity in the press than is a recorded broadcast that has no timeliness.<sup>21</sup>

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<sup>19</sup>Senate Committee on Commerce, Space Communications Hearings, p. 80.

<sup>20</sup>Fred Friendly, "World Without Distance," N.A.E.B. Journal, XXVI (January-February, 1967), 4.

<sup>21</sup>Donald R. Quayle, "The Regional Network," in The Farther Vision: Educational Television Today, ed. by Allen Koenig and Ruane Hill (Madison, Wisconsin: University of Wisconsin Press, 1967), p. 121.

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Only simultaneous networking can reach large numbers of people, for, as Friendly emphasizes, "lack of interconnection cripples promotion and exploitation."<sup>22</sup>

Certainly if a program is broadcast over a period of several weeks, as NET programs bicycled through the mails are now, it is difficult and expensive to effectively inform large segments of a national audience as to when particular programs are to be broadcast. The use of networking, then, will provide larger audiences, and increased stature so Educational Television can compete with the commercial networks more effectively. Fred Friendly summarized, "Commercial networks exist thanks to interconnection, and NET is not worthy of the name without it." "A network without interconnection is not a network at all, but only a film syndicate."<sup>23</sup>

The support of a nationwide network by the Ford Foundation does not preclude its support for strong local stations, or diverse programming as supported by the Carnegie Commission. "Carnegie and Ford," Bundy told a Congressional committee, "both believe in local autonomy, stronger local programming and strengthened and diversified national programming."<sup>24</sup> Concerning programming, Bundy agrees that "it

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<sup>22</sup>Fred Friendly, Due to Circumstances Beyond Our Control (New York: Random House, 1967), pp. 306-307.

<sup>23</sup>Ibid.

<sup>24</sup>House Committee on Interstate and Foreign Commerce, Public Broadcast Hearings, p. 318.

would seem to us better that there should be a plurality of sources of programing."<sup>25</sup> However, Bundy does not feel that there is any conflict between national and local programing. "I do not suppose," he stated, "that strengthening national programing weakens local programing."<sup>26</sup> Bundy and the Ford Foundation support programing on all levels, though Bundy admits that the Carnegie Commission "gives a somewhat heavier emphasis to the need for local diversified sources and station activity than we do."<sup>27</sup>

Despite this difference in emphasis, the Ford Foundation fully supports the autonomy of the local stations, and in 1967 granted over six million dollars to aid thirty educational television stations.<sup>28</sup> The Foundation realizes the potential danger that a centralized organization possesses, and has no desire "to create in a nonprofit system some sort of total centralized authority."<sup>29</sup> Rather, the Ford Foundation envisions a system balanced between strong local stations and a strong network. However, McGeorge

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<sup>25</sup>Senate Committee on Commerce, Space Communications Hearings, p. 113.

<sup>26</sup>House Committee on Interstate and Foreign Commerce, Public Broadcast Hearings, p. 382.

<sup>27</sup>Ibid., p. 380.

<sup>28</sup>Broadcasting, February 19, 1968, p. 34.

<sup>29</sup>Senate Committee on Commerce, Space Communications Hearings, p. 114.

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Bundy refuses to speculate just where the balance of the resulting system would be, preferring to allow the system to balance itself.<sup>30</sup>

The operation of a national Educational Television network is not even seen by the Ford Foundation as a full-time, highly centralized organization similar to that of the commercial networks. Bundy doubts that Public Television "will want to go to the level of continuous live interconnection which is characteristic of the commercial networks."<sup>31</sup> Furthermore, such interconnection that results will not necessarily be of a centralized nature. David Ginsburg, council to the Ford Foundation, expressed the opinion that:

We don't think there can be a simple system of interconnection. There are almost bound to be various arrangements for interconnection, including regional or statewide systems, ad hoc national arrangements, and perhaps changing groups of local stations.<sup>32</sup>

The network system envisioned by the Ford Foundation, while providing for live simultaneous broadcasting, avoids the threats to local station autonomy feared by the Carnegie Commission. It is the Ford Foundation's position that:

There is no conflict here in the broad sense between individual strong, local stations and

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<sup>30</sup>House Committee on Interstate and Foreign Commerce, Public Broadcast Hearings, p. 381.

<sup>31</sup>Ibid., p. 397.

<sup>32</sup>Ibid., p. 375.

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their choice about what appears on their stations, and strong, regional, national programming.<sup>33</sup>

The final responsibility as to what a station broadcasts, naturally, rests with the local station management.

#### Public Broadcasting Act of 1967

The Public Broadcasting Act of 1967 deals with interconnection in a manner closer to the philosophy of the Carnegie Commission than that of the Ford Foundation. The purpose of interconnection, the Act states is:

Distribution of educational television and radio so that all noncommercial educational television or radio broadcast stations that wish to may broadcast the programs at times chosen by the stations.<sup>34</sup>

The Corporation for Public Broadcasting is specifically prohibited from owning or operating, among other things, a network or interconnection facility.<sup>35</sup> Furthermore, grants by the Corporation for interconnection projects are limited to \$250,000 for a single project.

While Congress placed several restrictions on the Corporation's interconnection activities, it nevertheless encouraged the use of interconnection by the Corporation. The Corporation for Public Broadcasting, as noted previously, was created to "assist in the establishment and development

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<sup>33</sup> Ibid., p. 396.

<sup>34</sup> U.S. Congress, Public Broadcasting Act of 1967, Pub. L. 90-129, 90th Congress, 1st sess., 1967, p. 6.

<sup>35</sup> Ibid., p. 7.

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of one or more systems of interconnection."<sup>36</sup> It was authorized to contract directly with the commercial common carriers.<sup>37</sup> Congress also authorized the common carriers to provide their services at free or reduced rates.<sup>38</sup>

Although the Corporation is somewhat restricted in its direct dealings concerning interconnections, these restrictions do not apply to other organizations involved in arranging interconnections. The Corporation for Public Broadcasting then can cooperate with other organizations to support any means of interconnection system that they desire. The Corporation can assist such organizations financially, and also contribute directly to their interconnection projects, as well as its own. Indeed, this is in keeping with the clear interest of Congress. Both the House and Senate Committee Reports contain almost identical language that:

This change does not mean that others--such as a group of noncommercial educational broadcast stations or a noncommercial educational radio or television network--could not also arrange for interconnection and receive financial assistance for it in the form of a grant or contract from the Corporation.<sup>39</sup>

Congress placed restrictions on the Corporation it was chartering to nullify any criticism that it was establishing

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<sup>36</sup>Ibid., p. 6.

<sup>37</sup>Ibid., p. 7.

<sup>38</sup>Ibid.

<sup>39</sup>U.S. Congress, House Committee on Conference, Conference Report to Accompany S. 1160, 90th Cong., 1st sess., 1967, p. 13.

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a governmental television network. The freedom of action of the Corporation in the area of interconnection, therefore, lies mainly in its activities in support of other organizations.

National Educational Television:  
Further Network Support

The leading national organization presently engaged in Educational Television operations is National Educational Television. N.E.T., through its extensive experience in program production and distribution, is a natural selection as an organization for the Corporation to work within interconnection projects. Largely financed by the Ford Foundation, N.E.T.'s philosophy towards the use of interconnection is similar to that of its benefactor. William Kobin, Vice-President of Programming of N.E.T., echoes the Ford Foundation's position when he states:

If Public Television in the United States is to achieve its full potential, strong local stations, and strong national network capability will be essential and interdependent. The twin needs for network capability and effective local stations which serve their communities and region are inextricably interrelated. . . .<sup>40</sup>

The strong national network N.E.T. envisions would be an interconnection of its affiliated stations for a complete eight hour broadcast day, from 3 P.M. to 11 P.M. Such a network could be used for both program distribution and

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<sup>40</sup>William Kobin, "National or Local Power," Television Quarterly, VII (Winter 1968), 44.

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simultaneous broadcasts. N.E.T. has already proposed a daily half-hour program of news analysis as typical of programming to be initiated by the network.<sup>41</sup> Various special interconnection projects, such as coverage of the 1968 State of the Union message, also demonstrate N.E.T.'s commitment to live interconnection of its affiliates. The Public Broadcast Laboratory, an autonomous unit of N.E.T. separately funded by the Ford Foundation, has further demonstrated over the 1967 and 1968 television seasons the various programming projects which can be available to educational stations on a simultaneous basis.

While supporting the network concept of interconnection, N.E.T. is fully aware of the importance of local station independence in the development of a strong system. N.E.T. President John F. White states that the "objective of N.E.T. even with these additional resources about which we have just spoken, is not to create a monopoly, it is not to usurp the important function of the local ETV station."<sup>42</sup> Nevertheless, while trying not to dominate the system, N.E.T. sees that "it is a network headquarter's responsibility to lead its affiliated stations . . . and to encourage better

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<sup>41</sup>Broadcasting, December 5, 1966, p. 44; and Broadcasting, June 3, 1968, p. 41.

<sup>42</sup>Senate Committee on Commerce, Space Communications Hearings, p. 223.

local programing."<sup>43</sup> Such leadership can only be effective if the central organization is responsive to the member's needs and opinions. A seven member Affiliates Committee, elected by station managers to reflect the station's views, works with the N.E.T. Board of Directors on policy determinations. The administration of an interconnected network, whether by N.E.T. or another agency, will of necessity follow a similar pattern. Interconnection, as does N.E.T. depends on the close working relationship between the local stations and the national organization. Gerald Appy, Vice-President of Network Affairs, summarizes this relationship as:

If the family is to survive and prosper, it will be because the stations need NET for programming and for national leadership and image as much as NET needs affiliates to air its programs and to surround them with local originations worthy of community pride and support.<sup>44</sup>

The same can be said for interconnections.

#### Local Station Safeguards

While generally supporting the concept of a nationwide network, the personnel involved in operating the local Educational stations are restrained in their enthusiasm, and many are fearful of being submerged by a dominant system. A study of Educational Television conducted by Television

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<sup>43</sup>Gerald Appy, "N.E.T. and Affiliate Relationships," in The Farther Vision: Educational Television Today, ed. by Allen Koenig and Ruane Hill, op. cit., p. 103.

<sup>44</sup>Ibid., p. 104.

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Magazine in its July 1968 issue finds that "many ETV station men are in bitter disagreement" with the concept of central vs. local development.<sup>45</sup> They hesitate to openly criticize the Ford Foundation, for as one station manager who refused to be identified states, "The Foundation is powerful, it pulls a lot of people along with it."<sup>46</sup> Some managers object to the Foundation's choice of priorities, while others "don't see networking and overnight promotion as the way to force development of ETV."<sup>47</sup>

The main fear of the station manager, however, is that they may become subjected to network control, as the commercial network affiliates often are; Jack McBride, general manager of the Nebraska network flatly states that:

No educational broadcast licensee will tolerate intervention within his own local authority or with his program schedule. We do not permit it now; we cannot permit it in the future.<sup>48</sup>

Jack Kaimer, president of station WNDT New York, agrees that "we do not intend to become passive pumping stations for a central source."<sup>49</sup> Rather, that stations want a choice of programs available, "so that," in the words of a station

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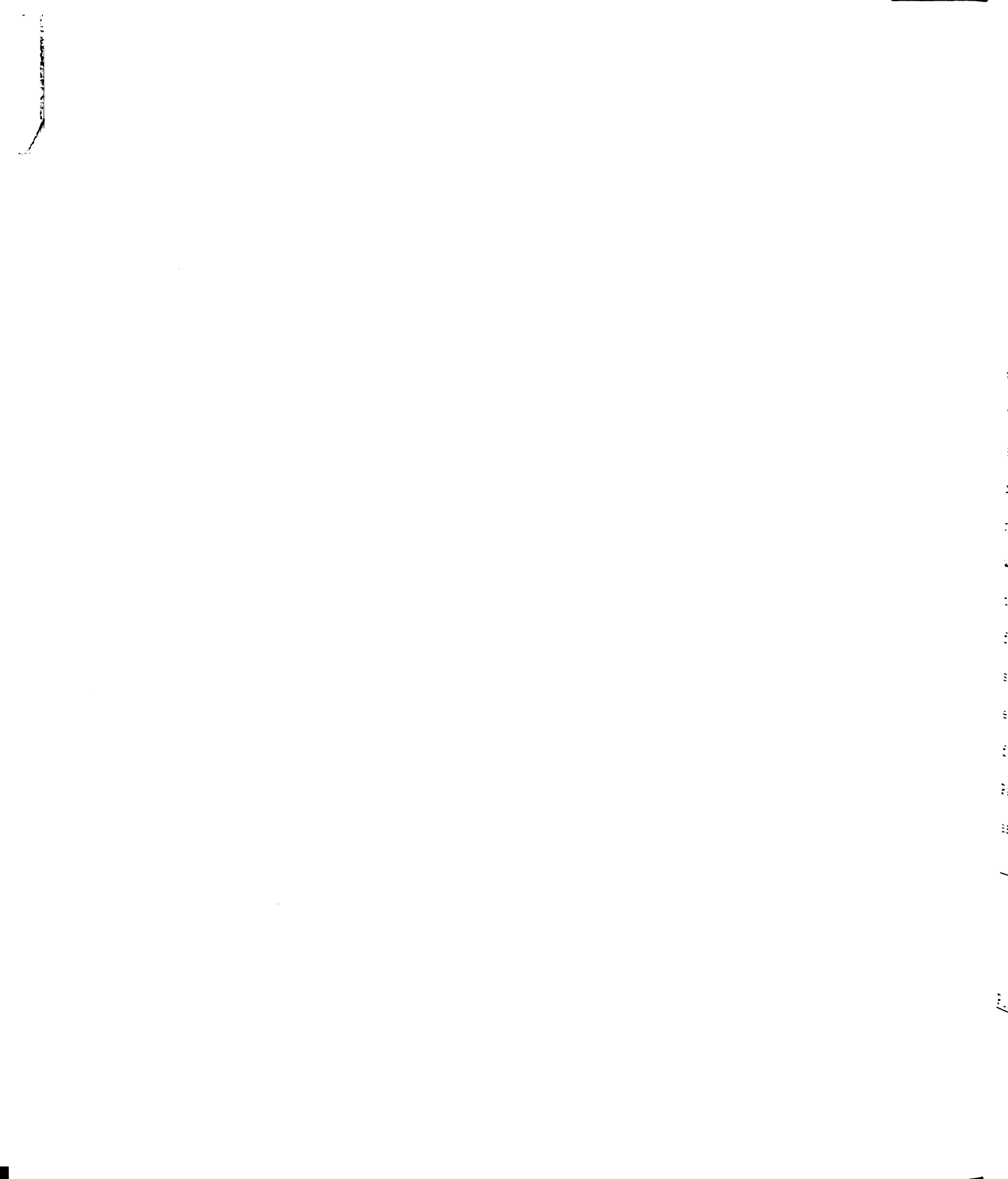
<sup>45</sup> John Gardinar, "The Scramble for Status in Non-commercial TV," Television, July 1968, p. 58.

<sup>46</sup> Ibid.

<sup>47</sup> Ibid.

<sup>48</sup> House Committee on Interstate and Foreign Commerce, Public Broadcast Hearings, p. 459.

<sup>49</sup> Ibid., p. 344.



manager, "rejection of programs by the stations is a practical, not a theoretical one [choice]." <sup>50</sup>

Apparently, the operators of networks already are aware of the hesitancy on the part of many station managers towards interconnection. Av Weston, executive producer of the Public Broadcast Laboratory, the only regularly scheduled nationwide interconnection to date, envisions "a network that does not believe that it is the male plug--and all the stations are so many female plugs." <sup>51</sup> Jack Kaimer, who also serves as President of the Eastern Educational Network, realizes that "the Corporation for Public Broadcasting will not be very effective if it acts in a high handed fashion which ends in its broadcasts not being carried anywhere in the country." <sup>52</sup> Frank Pace, Chairman of the new C.P.B., feels that programing "emphasis will lie with the local ETV station, though not to the exclusion of national programing efforts." <sup>53</sup> The Corporation, however, has not reached any formal decisions on the handling of interconnections, and Pace has not formed any definite conclusions on the subject as of this date.

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<sup>50</sup> Ibid., p. 483.

<sup>51</sup> Broadcasting, April 24, 1967, p. 47.

<sup>52</sup> House Committee on Interstate and Foreign Commerce, Public Broadcast Hearings, p. 349.

<sup>53</sup> Gardinar, "Scramble for Status," p. 63.

The exact relationship between the network and stations, of course, cannot be determined until the actual operation of the system. Nevertheless, it is clear that the local stations will have to have a voice in network operations if the network or any interconnection system, is to be successful. The Eastern Educational Network operates through a Board of Trustees composed of the general managers of all the affiliated stations.<sup>54</sup> Affairs of the network are conducted at periodic board meetings, as well as at regular meetings of program managers, school service directors, and business managers.<sup>55</sup> The National Association of Educational Broadcasters suggests that the interconnection system be administered by such a "mutual authority, including representatives of stations and program suppliers, and operating on a daily basis with these daily problems independent of the Corporation, except for its continuing support and surveillance."<sup>56</sup> Station representatives in the operation of any interconnection facility will be an absolute necessity. James Kobin of N.E.T. suggests that the administration of a system be a

Cooperative arrangement, where representatives from public television stations around the country--working with NET and elected representatives--would plan the cooperative use of the interconnection system in which, ultimately,

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<sup>54</sup>Quayle, "The Regional Network," p. 110.

<sup>55</sup>Ibid., p. 119.

<sup>56</sup>House Committee on Interstate and Foreign Commerce, Public Broadcast Hearings, p. 521.

public broadcasters from local, regional and national program sources would allocate network line time to those who are interested in using those lines.<sup>57</sup>

The present experience of N.E.T., E.E.N. and other operating networks demonstrate that such a joint cooperative effort is not only desirable, but feasible as well.

It is apparent then, that the final organization and administration of interconnection for Educational Television will have to include representation from the local stations to be served. The nature of the interconnection will likewise have to be responsive to the needs felt by local station managers. A total, full-time network, distributing programs on a simultaneous basis on the level that the commercial networks do now will certainly be resisted by many local television stations. Nevertheless, the need is felt by many for live interconnection which goes beyond the mere distribution of programming now accomplished by the mails. Interconnection will have to combine these two uses, networking and distribution, to fully serve the local stations, and to gain sufficient support for its adoption. The general consensus of Educational Television Station division of the N.A.E.B. is that "conventional means for ground interconnection must be encouraged immediately for both networking and distribution for all stations."<sup>58</sup>

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<sup>57</sup>Kobin, "National or Local Power," p. 42.

<sup>58</sup>Warren Wade and Serena Wade, The Long Range Financing of Educational Television Stations (Washington: National Association of Educational Broadcasters, 1967), p. 4.



## CHAPTER III

### THE NETWORKS TODAY

Although a full time, national interconnected system has not yet been established, more than a score of local and regional networks have developed in all sections of the country. Generally, where state legislatures have been willing to appropriate money, or neighboring stations have been willing to work cooperatively, interconnection has resulted. This haphazard growth, however, has resulted in a wide disparity of coverage. The vast majority of the networks are East of the Mississippi River, as are the majority of Educational Television stations. Nine Eastern states have full statewide networks, while only five Western states have developed networks.<sup>1</sup> This haphazard growth has also resulted in little uniformity among the various networks as to operating methods and procedures. Nevertheless, an examination of these networks, because of their very diversity, is useful to the planning of a nationwide system.

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<sup>1</sup>States East of the Mississippi with developed networks are Maine, Vermont, New Hampshire, Connecticut, New York, North Carolina, South Carolina, Georgia and Alabama. Those West of the Mississippi are Minnesota, South Dakota, Nebraska, Oklahoma and Oregon. Hawaii, off the mainland in the Pacific, also has its own network.



Not only is the environment, in which a national interconnection will be placed, important, but many of the existing networks can serve as working models of network prototypes.

In our study of the existing networks, it will be convenient to divide them into groups of similar network types. As our primary concern with the networks is determining how they handle distribution of programs, it will be most useful to arrange our groups according to program distribution policies. Program distribution is handled primarily by interconnection of stations. We shall first look at those interconnected networks that are centralized in nature. Generally, these networks have common program schedules among all affiliates, with programing also originating from a central source. Decentralized networks are those that share some common programing, but each affiliate is programed separately. Finally, there are a few networks that still distribute their programs through the mails.

### Interconnected Networks

The vast majority of Educational Television networks are of the interconnected variety. While some 51 of the 130 Educational Television stations were interconnected with at least one other station in May 1967, they were involved in seventeen different networks.<sup>2</sup> The average network, therefore, was limited to three affiliates. A year later some

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<sup>2</sup>"Curriculum Vitae," NAEB Newsletter, XXXII (May 1967), 3.

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thirty additional stations have completed interconnection or plan to do so in the near future. Despite this rapid growth, the networks remain small and isolated from each other. While the largest network has 24 affiliates, and several have more than seven, only two of the networks cross state lines. Several of the networks consist of only two stations.

#### Centralized programing networks

Thirteen network systems, including most of the larger ones, have a common programing schedule among their respective affiliates. All these networks are limited to a single state, and all are operated by, and individual stations licensed to, state agencies. In six states, Alabama, Connecticut, Hawaii, Nebraska, Oklahoma, and South Carolina, the operating agent is a special state ETV Commission or Council. State Universities are operating agents in Maine, New Hampshire, North Carolina, South Dakota and Vermont. Responsibility for Educational Television is delegated to the Department of Education in Georgia and Oregon. Those areas with active state participation are areas where state participation in education is high. The television stations provide almost complete coverage of their state's population.

South Carolina.--The South Carolina Network, composed of five stations, is perhaps the most centralized of any of the state networks. All network operations are under the control of the state appointed South Carolina Educational



Television Commission. Programs originate from a single center in Columbia, and are broadcast by all five stations. Administrative headquarters are combined with this production center to form a single statewide Educational Television complex. In addition to the five open-circuit stations, a six-channel closed circuit microwave network is available throughout the state at over two hundred fifty schools, hospitals and police stations. This closed circuit system, though used mainly for instructional programs, is an integral part of the South Carolina network. The five television stations almost completely cover the state and translators are planned to provide coverage to those areas with only fringe reception. While each transmitter has its own film chain, there is no indication that this is used for more than station breaks. There are no plans at present to upgrade the transmitters to originating stations for local programs.

Hawaii.--The Hawaii Educational Television Network is quite similar in operation to that of South Carolina. Under the control of the three man state appointed Hawaii Educational Television Council, the network presently consists of two transmitters, with six additional transmitters to cover over 90 per cent of the state's population planned. All stations broadcast a common program schedule. Stations are licensed and operated by the University of Hawaii, working in cooperation with the ETV Council. As in South Carolina, future expansion of the network envisions a





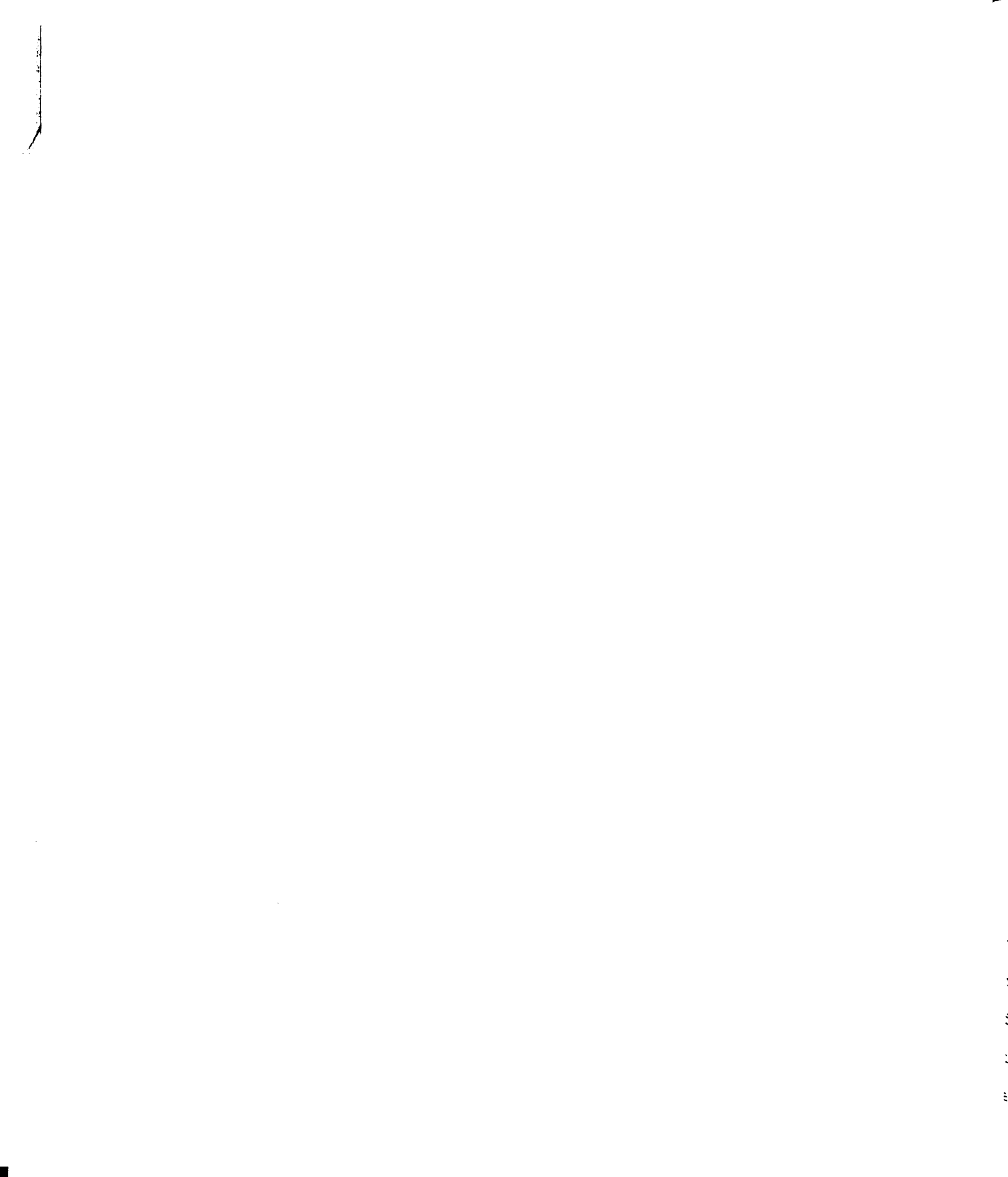
statewide closed circuit system, eventually with multi-channel capacity. Separated from the mainland by both distance and time differential, Hawaii will undoubtedly be one of the last areas of the United States to be interconnected for nationwide simultaneous broadcasting. Perhaps the use of communications satellites can economically provide a link to mainland Educational Television for the Hawaii Network. For the present, and near future, it will probably have to continue to rely on mail shipment of taped programs from N.E.T., E.T.S. and the Western Educational Network.

Hawaii and South Carolina are highly centralized systems in that both utilize central program originations as well as common programing. A much more usual practice, and a further step toward a true network, are systems which use a variety of program origination points. These may consist of multiple studios scattered across the state, or from another network. While these networks are also run by state agencies, these are usually state universities or Boards of Education that have a greater independence than state appointed Councils and Commissions. The larger number of production facilities provides easier access to potential programing resources throughout the state. In addition, the increased number of potential programing sources can allow for greater programing flexibility than if the network must rely on the output of a single production facility.



Alabama.--The Alabama Educational Television Network is probably the best example of the use of multi-sources within a commonly programmed network. The Alabama Educational Television Commission owns and operates seven television channels which cover the state. The production facilities, however, are scattered across the state, and are operated by five different agencies. Auburn University, the University of Alabama, the Huntsville City School system, and State Board of Education, and the Birmingham Area Educational Television Association, an organization of school systems, each operate a production center. Programs originate at each center and are broadcast simultaneously by all the network stations. The University of Alabama and Auburn University each are the source of some 35 per cent of the network programs. Both supplement local productions with programs from N.E.T. The Birmingham schools produce about 23 per cent of the network broadcasts, with the remaining 7 per cent from Huntsville and the State Board of Education in Montgomery. The latter two only provide a few programs a week. Thus the Alabama network operates as an association of the five production centers. Each center has a representative on a Network Program Board. Though under a state commission, there is a division between the operation of the network, and the operation of the production centers.

North Carolina.--The University of North Carolina operates a five station network that covers most of the population centers of the state. A sixth station, operated



by the Charlotte-Mekelenburgh school district, is not part of the network and is programed separately. Three production centers, located at units of the University at Chapel Hill, Greensboro and Raleigh, provide the programs, with the bulk originating from network headquarters at Chapel Hill. A fourth production center is planned for the University Center at Charlotte. These four production centers will draw on the resources of all the major population centers of the state, although they all are located in the central region of the state.

Nebraska.--The Nebraska Educational Television Network is composed of seven stations throughout the state, though only six are licensed to the Nebraska Educational Television Commission. The seventh station, the network base, is owned and operated by the University of Nebraska. The executives of the University station serve as the operating agents of the entire network. While most local production, as well as N.E.T. programs originate from the University of Nebraska station, additional studios at the University of Omaha also originate some local programing. While these two production facilities are within fifty miles of each other at the extreme Eastern portion of the state, they draw resources from the only two major population centers in Nebraska. In addition to these two production facilities, the Nebraska Network has also recently completed interconnection arrangements with the South Dakota network, and can draw on programs from that source. Extension of

this interconnection to Minnesota will soon be completed, further increasing program resources.

South Dakota.--The South Dakota Network has its first three stations operating with two additional stations planned. Seven stations will eventually comprise the network. The base station, at the University of South Dakota at Vermillion, provides the major portion of the network programs. Through interconnection with the Nebraska Network, South Dakota is to be provided with eighteen hours of programs a week. Joint production between the two networks is also planned. Interconnection between the Vermillion station and an independently operating station at South Dakota State University at Brookings is to be completed by September 1968, and extend the network. A planned interconnection of the Brookings station with the educational television station in Appelton, Minnesota will bring programming from the Minnesota network to South Dakota.

Oregon.--The Oregon Educational Broadcasting Network, operated by the State Board of Higher Education, consists of only two stations, in Corvallis and Portland. Though the stations are within seventy miles of each other in the Northwest corner of the state, they can reach about half of the state's population. Both stations have studios from which to originate programs, though most of the programs originate from the Corvallis stations. The Oregon stations are relatively isolated from other Educational Television

networks, though the system does belong to the Western Educational Network, and receives programing from that source.

Oklahoma.--The Oklahoma Educational Television Authority operates two stations, in Tulsa and Oklahoma City. These two stations, with assistance from CATV systems cover over three-quarters of the state's population. Most of the evening programs for the network originate from the Authority's headquarters in Norman. Daytime programing, however, is produced with the cooperation of the Oklahoma City Public Schools, and most originate from the studios of the public school system's own television station. Several daytime programs, moreover, also originate from the Norman facility, and a single evening program is produced in Oklahoma City. This association between the state network and the city school system provides the network with access to increased production facilities. However, as Oklahoma City and Norman are contiguous, it does not provide access to additional programing resources. Production facilities in Tulsa, ninety miles from Oklahoma City, are not as yet part of the network master plan.

Georgia.--The Georgia Educational Television Network is similar to that of Oklahoma in that it too has a different originating point for in-school and evening programs. Nine stations make up the basic network, eight of which are owned by the State Board of Education. The ninth station, the origination point for all evening and weekend programs,

is operated by the University of Georgia. This station departs from the network schedule for half an hour each evening and broadcasts an instructional program. During this period, however, the station continues to feed the other eight network stations. Daytime programming generally originates from State Board of Education facilities in Atlanta. A tenth station, owned by the Atlanta Board of Education receives a small share of its programs from the network also. Thus, while most of the Georgia network merely rebroadcasts programs from a central source, the stations in Atlanta and Athens, with multi-sources and many programming options, are a good example of the close cooperation essential to the success of flexible networking.

Maine.--The Educational Television system of Maine, like that of Georgia, involves the rebroadcast of network programs by a station not part of the basic network. The Maine Educational Television Network, owned and operated by the University of Maine, consists of three stations. Programs originate from the studio of the University at Orno. The Maine Network is an affiliate of the Eastern Educational Network, and receives an average of over two hours of programs a day from that source. Maine also has available by interconnection programs from the Boston, Massachusetts Educational Television station. A fourth station in Maine, not part of the network, owned by the Colby-Bates-Bowdin ETV Corporation, is located in Augusta. This station rebroadcasts 90 per cent of the Maine Network evening programming,



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and is also interconnected with the E.E.N. and the Boston station. The Augusta station often substitutes its own programs, or those from Boston, for those broadcast on the Maine network. Generally, the Augusta station programs independently of the Maine Network for an hour each evening. During the daytime hours, the Augusta station duplicates much of the state networks in-school programs.

New Hampshire.--The New Hampshire Network, operated by the University of New Hampshire, consists of four stations which blanket the state. Local programing and network operations originate from network headquarters located at the University in Durham. A member of the Eastern Educational Network, the New Hampshire stations receive an average of two hours a day of programing through this interconnection. Additional programing is received through an interconnection with the Boston educational station. An average of one and a half hours each evening are programs from this source. The Boston station also provides about two hours of in-school programs to the New Hampshire Network each day.

Connecticut.--The Connecticut Educational Television Corporation operates a system very similar to that of New Hampshire and Maine. Three stations and a translator cover most of the state's population. Interconnections are completed with the Boston educational station, and the E.E.N. The Connecticut Network broadcasts the same E.E.N. programs as the others, though it relies much less on programs from the Boston station. An average of less than one program a

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day is received from the Boston interconnection. This selectivity of the Boston programming by Connecticut is an indication that interconnections need not force any station to accept programming during periods when it would rather originate programs itself. The integration of the two interconnected sources available to Maine, Connecticut and New Hampshire with local productions and taped programs is another indication of the compatibility of regional programming with the perceived local needs of the individual stations and networks.

Vermont.--The University of Vermont has recently completed a four station network that completely covers the state. Program origination is all done from network headquarters at the University, in Burlington. The network is interconnected with the Eastern Educational Network, and receives programs from that source. At the time of this study, the network had only begun program tests, and had not started its regular broadcast schedule.

The preceding thirteen networks, though all operated by a central organization, show much diversity in their structure of operating procedure. All broadcast single program service over several television channels simultaneously. The microwave interconnection of stations for simultaneous transmission is itself a network. Several systems are more complex, in that they have available multiple sources for live programming, being either several studio

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locations, or interconnections with other systems. All the stations subscribe to the tape service of the National Association of Educational Broadcasters--ETS division, and National Educational Television. In addition, several stations have access to other program services and networks, such as the tape library service of the E.E.N. The programming authority of each network, as of each station, must coordinate all these available programming sources into its final program schedule.

The availability of this programming via national interconnection, however, need not necessarily drastically change existing programming on the stations. Much of the efforts of the existing networks are the transmission of duplicate programming. A survey of twelve of the networks finds that at least eleven networks broadcast the same seven program series, and a majority the same eleven series each week.<sup>3</sup> This accounts for a total air time of eight and a half hours a week, more than a complete evening of broadcasting. Much of the programming that interconnection could bring to these networks, therefore, would be existing programming. Central origination could benefit these networks by freeing video tape machines and personnel time now occupied in this duplicative effort.

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<sup>3</sup>During the survey week, the Vermont Network was just beginning its program transmission tests, and did not broadcast a typical schedule. A list of the programs broadcast by the twelve networks is included in Appendix VIII.

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The development of centrally programmed networks is both a great aid, and a possible obstacle, to the establishment of nationwide interconnection. Certainly the establishment of local station outlets, covering vast portions of the population, is necessary before any system can be considered nationwide. The existing microwave facilities used by the state networks may serve national interconnection also. The utilization of the existing microwave facilities may also serve as a convenient method for the rapid interconnection of large areas of a nationwide system. Only three links are necessary to form a single regional network in the Southeast. The interconnection of the Georgia, Alabama, and North and South Carolina networks would result in a network with over 25 affiliates, the nation's largest Educational Television network in both geographic area served and number of affiliates. The recent interconnection of the Nebraska and South Dakota networks is another step toward the completion of a Midwest Television Network, and may serve as a base for national interconnection in that region.

Centralized networks, by the very central authority, are also a possible obstacle to development of further systems. As they control the operation of a number of stations, and necessary microwave facilities, these networks may feel that they should have a strong voice in the formation and operation of any interconnection in which they take part. The granting of a special position to certain networks or organizations, however, would only create antagonism among



those stations not so favored. The larger networks, because of their very size, will naturally be in a somewhat better bargaining position in regard to network operations than the single small station. The threat of non-participation and withdrawal of key stations and facilities, however, is enough to insure that all viewpoints will be taken into consideration in any network operations.

#### Decentralized networks

While the majority of existing network interconnections are among stations programed from a central source, it is perhaps more useful for future network planners to study those interconnections whose stations are individually owned and programed. Any large system involving over a hundred stations will have to deal with as many station managers and program boards. There are presently four major systems that involve the interconnection of several independent stations, and several instances of other stations sharing their broadcast programing.

Minnesota.--The Minnesota State Educational Network is comprised of four stations, which cover over three-quarters of the state's population. Five additional stations are in various stages of planning. Administrative headquarters are at the Twin Cities Educational Corporation in Minneapolis, which owns two television stations in that city, and has a half ownership in a third, in Appelon. Network programing originates from Minneapolis, and consists

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mainly of locally produced programs. Network affiliates select those programs they wish for simultaneous rebroadcast. The Duluth affiliate rebroadcasts about eight and a half hours of programming a week from the Minneapolis station, more than 25 per cent of its total evening schedule. Significantly, none of these programs are the current N.E.T. offerings, which were distributed on all the previously reported networks. While the Minnesota stations broadcast N.E.T. programs, very few are carried by the main Minneapolis station, and scheduling is left to the individual affiliates.

The Midwest Network.--The Midwest Educational Network is a loose organization designed to facilitate interconnection among Educational Television stations in six upper midwest states. The network does not produce its own programs, merely distributes programs of its affiliates. In practice, the network is an extension of the Minnesota Network, and of the Twin Cities Educational Corporation. Interconnection is only completed between the Minnesota Network and a station in North Dakota, with a construction of a link to the South Dakota Network contemplated. As the South Dakota and Nebraska Networks are already interconnected, the Midwest Network could have access to fifteen affiliates in four states. At present, however, the level of networking is very meager. The North Dakota station simultaneously broadcasts only one program a week from the Minnesota stations. Three additional programs are broadcast on a delayed basis,

comprising a total of two hours of programing a week obtained through the network. None of these programs are from N.E.T., and all are Minneapolis productions.

New York.--The New York Network, along with the Eastern Educational Network of which it is a part, is one of the most useful networks to study as a possible prototype for nationwide interconnection. The New York Network is composed of five stations, with three more under construction. When completed, the network will cover the entire state's population, some fifteen million people. Each station is owned and operated by an independent community non-profit association. Network operations headquarters are in Albany, and are under the auspices of the State University. Programing, however, is the responsibility of the stations themselves. All network programing is done by a committee of seven, a representative from each station and two non-voting members from the State University and Department of Education. A majority decision of the programing committee determines what programs will be carried by the network. The individual stations, of course, have the final decision as to what programing they will broadcast.

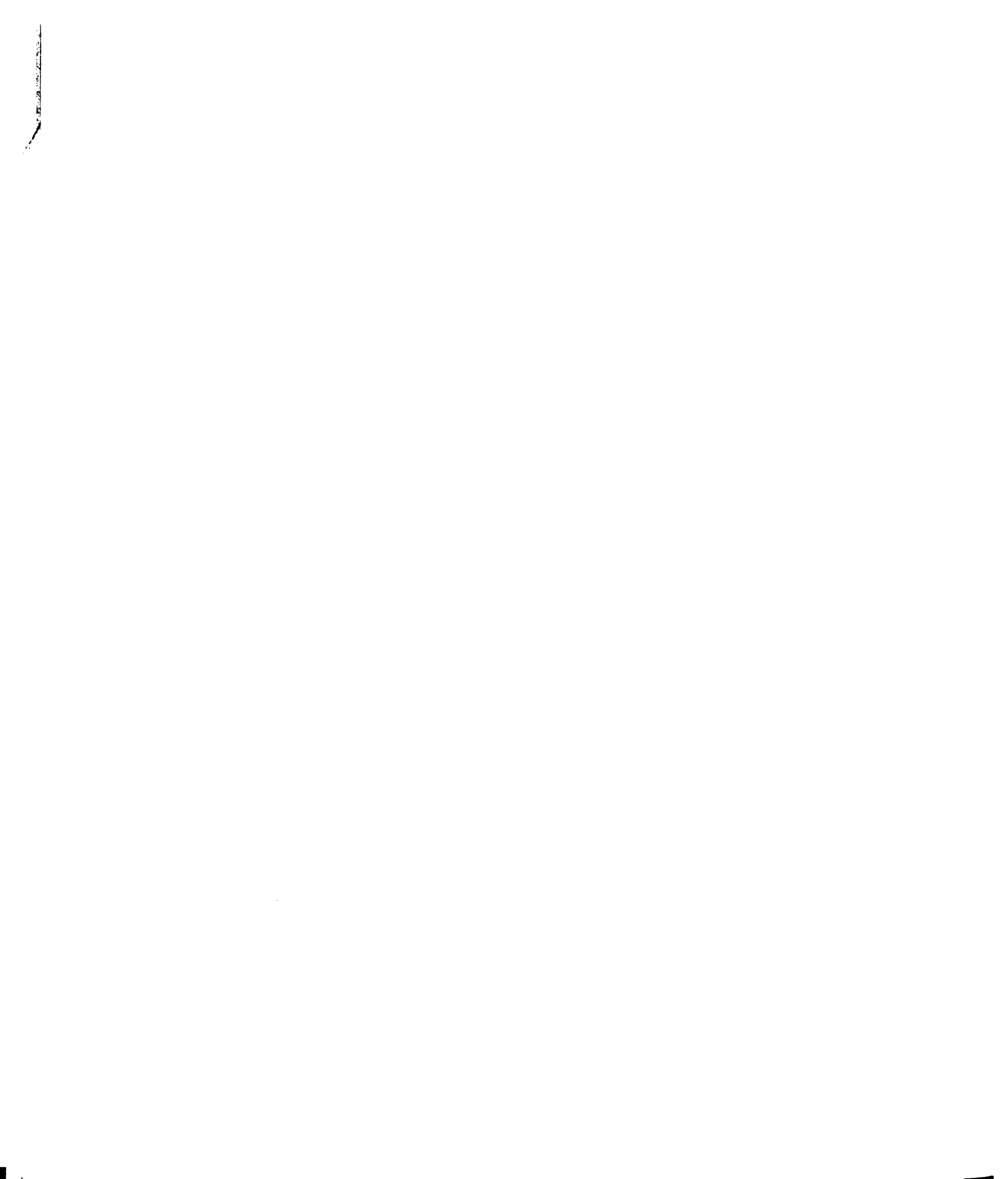
While the network microwave facilities are available from 9 A.M. to 11 P.M., the network only programs for a small portion of the day on a regular basis. During November 1967, the network itself only originated programs for an hour each weekday. This consisted of one-half hour in the noon period, and another in the early evening, devoted to

University courses and in-service training. Three stations carried both program blocks, while the others broadcast only the afternoon or evening block. The major effort of the New York Network is the broadcasting of a five course, University of the Air. This is broadcast for six and a half hours on Saturday, and is carried by all five stations. The network also distributes series of programs produced by the affiliated stations. A series produced by the New York City station was broadcast by three others in the network, though not simultaneously. Several in-school programs are also distributed by the network. Facilities of the network are used as part of the Eastern Education Network interconnection, and distribute programming offered by N.E.T. and the E.E.N.

One feature of the New York Network that adds to the flexibility of network operations is the capability of each station to originate network programs as well as receive them. All the previous networks have only had the capability of transmitting programs from a certain point to outlying stations. The two channel capacity of the New York Network, however, allows each station to receive one program, as well as originate another at the same time. This permits the programming of live productions originating from several stations. While these cooperative productions are not a regular part of the network's program schedule, they occur whenever the opportunity presents itself. The two channel capacity also permits any stations to originate programs for

adjacent stations. The Rochester and Syracuse stations, in addition to the network distribution, simultaneous broadcast an hour a day, and are joined by the Buffalo station in broadcasting a few additional programs.

The flexibility of interconnections available in the New York Network demonstrates the variety of program sources that will be available to all stations once full interconnection is realized. Local, state and regional interconnection already brings in a large variety of programming to the New York stations. The station in Rochester, for example, obtains about two and a half hours of programming each evening, or 45 per cent of its evening schedule, through its interconnections. The majority of these programs, seven hours of thirteen hours from interconnection, are those same national programs carried by the other networks. Nevertheless, half of the simultaneous broadcasting is of programming of a state and regional nature. In addition, all Saturday daytime programs, and most of the Sunday programs are also obtained from interconnected sources. The availability of this large amount of programming, moreover, is a major reason why the station extended its broadcast schedule from five to seven days. Even with this additional amount of programming available through interconnections, the station in Rochester still has over 40 per cent of its evening and weekend time available for locally produced and selected programs.



The Boston Area.--The interconnections involving the Boston Educational Television station, WGBH, and those of the state networks in the surrounding area are not a separate network itself. Although now a part of the E.E.N., these interconnections actually precede that network, and still operate somewhat apart from the entire network. Nevertheless, these interconnections are even more important, in that they operate without formal organizations. The state networks of Maine, New Hampshire and Connecticut each re-broadcast some of the local productions of the Boston station, as well as receiving the E.E.N. programs from that source. Generally, the Boston originated productions account for about half an hour an evening throughout the three networks. While this is a rather small amount, it demonstrates that the programming facilities of the larger stations can easily be made available to surrounding stations with access to fewer resources, and with fewer funds and personnel to exploit those it does have available.

The Eastern Educational Network.--Certainly the largest and most complete network in operation, and the one which most nearly faces the problems which a national interconnection will encounter, is the Eastern Educational Network. The E.E.N. has some thirty affiliates in nine states, with an additional ten stations planned. At the time of this study, twenty-four of these stations were fully interconnected. These twenty-four stations reach a potential population of over thirty-five million people. In addition



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to these individual stations, the E.E.N. includes the state networks of Maine, New Hampshire, Connecticut, Vermont, and New York, as well as the interconnections around the Boston station. The E.E.N. must deal with all these stations and networks, as well as with four of the largest Educational Television stations in the country. Successful operation of the network, then, entails the cooperation of many different stations and networks, just as would be required for the success of a national system.

While the interconnection facilities of the E.E.N. are available on a full time basis, the network does not distribute programs throughout the complete evening broadcast period. During the thirty hour weekday evening period from 5 P.M. to 11 P.M., the network only distributed  $10\frac{1}{2}$  hours of different programming. However, much of this programming is rebroadcast throughout the week or the following weekend, so the E.E.N. actually distributed programs during 55 per cent of the weekday evening period. The individual stations, therefore, must program a good deal of their air time themselves. Much of the programming distributed by the E.E.N. consists of the same N.E.T. programming as carried by the other networks examined. Of the ten and a half hours of different programming broadcast by the E.E.N., seven and a half hours of programming is the same as included in the eight and a half hours of programs carried by a majority of the networks cited previously. The remaining programming by the E.E.N. consists of programs produced by network

affiliates, and of programs obtained from other sources. Of the four non-N.E.T. programs broadcast by the E.E.N., two originate live from network affiliates, and two are taped programs from non-interconnected affiliated stations. The live programs are concerned with news and public affairs. One program is a weekly review of the Washington scene, while the other is a daily summary and analysis of people and events in the news. Both are programs that cannot be easily distributed through the mails due to their timeliness.

In addition to these programs for simultaneous broadcast, the E.E.N. also has an extensive tape library of over 165 programs and series available to its members. These programs generally are productions first broadcast by affiliated stations, then made available to others. The network has also obtained several programs from foreign sources. Besides the regular affiliates, the network has program affiliation with Educational Television stations in Chicago, Los Angeles and San Francisco. These stations make use of network programs distributed by mail, and the network broadcasts programs produced at these three stations.

The interconnection facilities of the Eastern Educational Network, however, are used for more than just the distribution of regularly scheduled programs. As the facilities are always available, the E.E.N. can cover special events that are not broadcast by the commercial networks. The network also broadcasts special public affairs programs in addition to those in the normal schedule. These special

broadcasts often originate from several stations, each utilizing the resources of its own area. Funds for such special coverage have been donated by both the Ford Foundation and the Carnegie Foundation, which have each distributed over \$250,000 during the first half of 1968. Coverage by the network has included such varied events as a Drum and Bugle Corps tournament, an evening of ballet, the U. S. National Tennis Championships, and sessions of the American Association for the Advancement of Science. Such live coverage of events and programing involving several sources are two types of programs that could be made available to all Educational Television stations if a national interconnection system were completed.

The circumstances of the E.E.N. is very similar to that faced by any nationwide interconnection. The E.E.N. is an affiliation of literally dozens of organizations involved in Educational Television, ranging from N.E.T. and state networks, to the smallest local station. Such diversity is common throughout the American Educational Television system. Within the E.E.N. are examples of regional cooperation, various types of state networks, and cooperation among local stations. The presence of a larger organization such as the E.E.N. does not seem to inhibit any of these local projects, and indeed may foster local cooperation by its example. The stations integrate their own productions and locally selected programs with the network distributed programs into their own individual program schedules. The network itself selects

programs from many sources. The interconnection of the twenty-four stations in the Eastern Educational Network, then, may be significant in the development of any nationwide interconnection system. The E.E.N. now provides those services to almost 20 per cent of the Educational Television stations in the United States that could be available to all under full interconnection, and also provides a possible framework under which such a system could operate.

The organizational structure of the E.E.N. is designed to provide a maximum of participation by member stations. Each broadcast station chooses a member of the network Board of Trustees, who serve along with representatives from several other classes of membership. The Board of Trustees meets at least four times a year, and conducts the business of the network.<sup>4</sup> A seven man executive committee, composed of the officers and members elected at large, guide the affairs of the network between board meetings.<sup>5</sup> Programing for the network is contributed freely by the members, and made available on a free exchange basis. Modest program charges are sometimes made for programs acquired from sources outside the network. The actual operation of the network is in the hands of the network staff

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<sup>4</sup>Eastern Educational Network, "E.E.N. Factbook," June, 1967 (mimeographed), p. 10.

<sup>5</sup>Donald R. Quayle, "The Regional Network," in The Farther Vision, Allen Koenig and Ruane Hill, eds. (Madison, Wisconsin: University of Wisconsin Press, 1967), p. 111.

and station representatives. The program managers from interconnected stations meet during the start of every second month to discuss network operations, and all program managers meet throughout the year when the need arises.<sup>6</sup> In addition to meetings of program managers, the network holds regular meetings of station managers, school service directors, business managers, engineers, curriculum personnel and public relations directors to coordinate the various affairs of the network.<sup>7</sup> The philosophy of the Eastern Educational Network appears to be to involve all member stations as much as possible. As E.E.N. director Donald Quayle states:

The most important thing to remember is that the network is a creature of the members, intended to function solely for the benefit of the participating organizations and the people they serve. . . .

. . . . .  
As long as the basic administrative and operation costs for the network are provided by the members, and as long as the trustee's positions are occupied by the members the network will remain a creature of the stations and other organizations that support it.<sup>8</sup>

If a national interconnection system were developed, the Eastern Educational Network could provide the foundation for such a system in the Northeastern portion of the United States. Its facilities and organization are already in

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<sup>6</sup>Eastern Educational Network, op. cit., p. 25.

<sup>7</sup>Quayle, op. cit., p. 119.

<sup>8</sup>Ibid., pp. 110, 127.

successful operation. However, this does not necessarily mean that the E.E.N., or any similar system, would be taken over by any national organization. An attempted takeover would undoubtedly be resisted by the E.E.N. and its members. The E.E.N. could still operate as a regional network, distributing programs of a regional nature throughout the Northeast. As the E.E.N. does not now utilize its microwave facilities full time, it can distribute programming from a national system within the present framework of its schedule. The Eastern Educational Network, itself an affiliation of many members, should be able to develop a cooperative relationship with any national interconnection system that develops, based on its own internal working relationships.

#### Local Interconnections

Cooperation among stations is evident among the networks previously cited. However, the establishment of interconnections is not dependent on the existence of large-scale networks. There are at least four small interconnections involving only two adjacent stations presently operating. While these networks have little significance on the development of a nationwide interconnection, they further demonstrate the willingness of stations to work together for their common good.

Florida.--A community owned station in Jacksonville, and a university owned station in Gainesville are linked by microwave. The stations commonly present eight and a half

hours of programing in a typical week, or 34 per cent of the evening schedule. Of these programs, only one is from a source other than N.E.T. or E.T.S. None of the common programs are local productions, and all daytime school programs are separate.

Pennsylvania.--In Pennsylvania, as in Florida, a community station and a university owned station are micro-wave interconnected. Over 85 per cent of the stations' weekday evening schedules are commonly programed, as are all weekend programing. The programs are obtained from a variety of sources, including N.E.T., E.T.S. and E.E.N., which the stations are affiliated with, though not as yet interconnected with the network. Local productions from each station are carried on both stations, and one program even originates in part from each station's studios.

Ohio.--A university station in Columbus, and a school district station in Newark are linked by an off-air relay. While the Newark station originally was a satellite of the Columbus station, it now originates 17 per cent of its program schedule with local productions. The Newark station schedules its own programs to replace some of the outside programing distributed by the Columbus station. No Newark programing, however, is broadcast by the Columbus station.

California.--An off air link also connects two stations in California, a community station in Los Angeles and a university station in San Bernardino. Unlike the



others, however, this interconnection is only used for half an hour a day, carrying a news and stock program from the Los Angeles station. This program only comprises 6 per cent of the San Bernardino evening program schedule.

Such local networks are further examples of the demand for interconnection that exists among Educational Television management. It also demonstrates the need for interconnection among stations serving similar audiences. Unlike larger networks, administered by central state agencies, these are based on local initiative and cooperation. The stations work together to pool their programming resources, and to better serve the needs of their area. Undoubtedly other stations would engage in such local interconnections if facilities were readily available. Facilities constructed for nationwide interconnection, may, with proper planning, also be used for local or regional networks. Various local interconnections may be as important to the individual Educational Television stations as national interconnection itself.

#### Tape Networks

While those networks with interconnection will play the largest initial role in a nationwide system, there are several other "networks," not as yet interconnected, that will also be involved. These organizations are presently engaged in distributing taped programs by mail to their

members. Several other networks are in the process of formation, and have interconnection as their goal.

Western Educational Network.--The W.E.N. is a tape service among eleven stations in six far Western states. During a typical week, the network distributed two programs for one and a half hours of broadcast time. One program, also distributed to the E.E.N., was broadcast by all of the W.E.N. affiliates, while the other was carried by over half the stations. Programs distributed by the network are produced by affiliates in Los Angeles and San Francisco.

Central Education Network.--The C.E.N. is composed of twenty-one affiliated stations in nine Great Lakes and Midwestern states. The Initial program distribution in January 1968 was to provide four hours of programming a week to the member stations, selected from seventeen series available. Initial programs were all produced by network member stations. The C.E.N., however, plans to receive programming from some of the other regional networks as well. The Chicago station, which serves as network headquarters, is already a member of the E.E.N., and might serve as a liaison between the two networks.

Ohio Educational Television Network.--The eight Educational Television stations in Ohio are united in a state sponsored network, which distributed three program series a week during November 1967. Only one of the series distributed by the network was produced under its auspices. Two of the series were carried by at least six of the

stations, and the third by only two affiliates. Much of the network distribution, however, was to begin January 1968.

M5-03.--M5-03 is an informal organization made up of five Michigan and three Ohio stations, set up to exchange programs and to cooperate in joint program productions. It maintains no regular distribution schedule, and operates in a very informal manner, based on oral agreements.

Although these tape networks occupy a meager position in relation to the importance of the interconnected networks, they nonetheless are another facet of the many aspects of the American Educational Television system, and provide a useful service to their affiliates. In time, these organizations may become fully interconnected, thereby becoming an integral part of a nationwide system. Even if they do not become interconnected through their own efforts, the establishment of a nationwide system may provide the facilities necessary for this purpose. A nationwide system, therefore, will not only serve a national programming need, but may also encourage the establishment of regional systems as well.

#### Interconnections Under Development

While the tape networks are not primarily concerned with interconnection at present, there are several organizations with plans and construction under way to significantly enlarge the areas served by interconnections. These networks will increase the microwave facilities potentially

available to a nationwide system, and thereby reduce the number of additional relay stations necessary for completion of a nationwide system.

Kentucky.--The Kentucky State Board of Education has under construction a network of twelve television stations that will completely cover the state. The network will be highly centralized, and most programing will originate from central studios in Lexington. Subsidiary studios located at six units of the state university will also provide programing.<sup>9</sup>

Maryland.--The Maryland Educational-Cultural Broadcasting Commission has under construction the first stage of a projected six station network that will cover the state. All programing will originate from network headquarters, located at the first station constructed, serving Baltimore. The network will be affiliated with the Eastern Educational Network.

Pennsylvania.--The Pennsylvania Educational Television Network, first formed in 1967, has as its goal "the creation of a statewide network as soon as possible."<sup>10</sup> The network will also be interconnected with the E.E.N. One station of the network is already interconnected with

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<sup>9</sup>The Kentucky Educational Television Network began school broadcasts in September 1968, and was formally dedicated in May 1969.

<sup>10</sup>Broadcasting, May 22, 1967, p. 40.

the E.E.N., and two other stations are linked with each other.<sup>11</sup>

Southern Educational Communications Association.--

The formation of S.E.C.A. has as a goal the creation of a regional network consisting of forty-seven stations in thirteen Southern states. This would be the largest Educational Television network in terms of both number of affiliates and size of region covered. In addition to interconnection, S.E.C.A. intends to serve as a program coordination agency, handling program exchanges and providing each station two hours of programming each week.

West Virginia.--The West Virginia Educational Broadcasting Authority has under construction a three station network that will cover 80 per cent of the state's population. Two stations will be owned and operated by the State Authority, while the third will be owned by West Virginia University. The three stations will be independently programmed, though microwave interconnection is planned to allow network transmissions. The stations in West Virginia will be affiliated with both the E.E.N. and S.E.C.A.

Upon completion of these projects, there will be nineteen statewide networks, three regional networks, and four tape networks in addition to the two national tape services of N.E.T. and E.T.S. However, even this does not

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<sup>11</sup>The Pennsylvania Public Television Network started limited service May 1, 1969 operating on an eight hour day, seven day week basis.

fully demonstrate the widespread support that interconnection has, nor the full plans underway for its development. The Federal Communications Commission has on file plans for state networks from no less than thirty-nine states, which certainly approaches nationwide coverage.<sup>12</sup> While some of these plans are still years away from completion, they are indicative of the support given to interconnection by all concerned in Educational Television. The establishment of a nationwide system will undoubtedly assist many of the states without an interconnected network at present to proceed with their formulated plans. The nationwide network then will facilitate the establishment of local, state and even regional networks.

### Summary

From this survey of the existing interconnection systems, several important conclusions may be drawn that have significant implications for a national system of interconnection.

1. The principle of interconnection is fully supported by management of Educational Television stations, and state Educational Television agencies. The very existence of over eighty interconnected stations in twenty-two states is sufficient evidence to demonstrate the widespread support

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<sup>12</sup>Federal Communications Commission, 33rd Annual Report (Washington: Supt. of Documents, 1968), p. 46.

given to interconnection, and illustrates the desire for interconnection on the part of station managers.

2. The desire for interconnection is for interconnection at many levels, local, state and regional, to bring in programs from as many sources as possible. Adjacent stations have attempted joint broadcasts using off-air relays, the facilities of larger networks when possible, or constructing their own microwave facilities. State networks have banded together to form such regional networks as the Eastern Educational Network, the Midwest Educational Network, and the newly formed Southern Educational Network.

3. Much practical experience has been gained in the daily operations of various types of network systems. Over half of the local stations already come into constant contact with some form of network system. The problems and techniques of operating various network types have been worked out and refined.

4. Educational broadcasters on all levels are cooperating with each other to achieve common goals. Individual stations, producing agencies, state networks, universities and national broadcasting organizations all work together in each separate interconnection arrangement to insure the success of that project.

5. All the systems surveyed utilize interconnection facilities for the simultaneous broadcast of programs by several stations, on a regularly scheduled basis. The use

of the interconnection facilities for mere program distribution, while it does occur, is a minor function. While there is a preponderance of centrally owned and operated networks, even those networks made up of individually owned stations use interconnections primarily for simultaneous broadcasts.

6. While each network produces programs suited to its own coverage area, all the networks broadcast a good deal of the same programs. Programs from National Educational Television, and the Educational Television Station Program Service (E.T.S.) form a core of the schedule of all networks, with the same series being distributed by all but a few of the interconnections.

7. Local stations can successfully integrate network programs into their own program schedule without being dominated by a larger network. Networks serving individually owned stations do not present a complete schedule of programs as do the commercial networks. The local station has great opportunity to broadcast its own productions, programs from other networks, or those obtained from a videotape library.

8. Existing networks can provide microwave facilities to serve as a foundation for a national system in large portions of the country. Rapid interconnection can be facilitated by the interconnection of existing networks headquarters. If the proper microwave facilities are in operation, as in the New York Network and some of the E.E.N. with two channel capacity, then any central station can serve as an origination point for network programs.



A survey of the existing interconnections fully supports the concept of a nationwide Educational Television network. Such systems as the New York Network, the Eastern Educational Network, the Midwest Network and the Southern Educational Network may serve as prototypes for national service, as they unite independent stations and networks into viable, and successful organizations serving Educational Television.

## CHAPTER IV

### NATIONAL PROGRAMING PRACTICES

#### Introduction

Although the general consensus appears to be that interconnection should be used for both networking and program distribution, it is impossible to predict just what the relative importance of each will be until actual implementation of the system. Nevertheless, the utilization of the new system will be somewhat dependent on present practices followed by the various individual stations. Programing and operational traditions have been established in each of the operating Educational Television stations that will impede the introduction and acceptance of a new national interconnection. Furthermore, the tradition of independent operation of each station has been firmly established. As has been stressed by station managers, the stations will resist overt domination by any central agency. Therefore, any programs distributed over an interconnection system will of necessity have to be compatible with existing program policies. It is then prudent that the planning of an interconnection system include a study of the programing presently broadcast by the various Educational Television stations.

While several studies of Educational Television programing have been conducted, they have been of the most general nature. In 1959, Edgar Crane and Malcolm McLean Jr. studied the program schedules of thirty-one stations. They found that they could classify the thirty-one Educational Television stations into five groups, according to the types of programs that they broadcast. The Crane-McLean groupings of stations were: those stations following the basic program profile for ETV, or "typical" stations; art and public affairs stations; science stations; civic-minded men stations; science-minded men stations.<sup>1</sup> Crane and McLean, however, did not look at specific programs. Barton Griffith of the University of Missouri surveyed the program schedules of twenty-three stations in 1965. His research was directed at program categories, rather than station categories. Griffith found that the Educational Television stations broadcast five general program categories, with the heaviest concentration of general adult programs in the evening, and children's programs during the day and early evening.<sup>2</sup> A more detailed study of programing is One Week of Educational Television, a publication of the National Center for School and College Television and

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<sup>1</sup>Edgar Crane and Malcolm S. McLean, Jr., "There Are 5 Types of ETV Station," N.A.E.B. Journal, XXI (May-June 1962), 29-36.

<sup>2</sup>Barton Griffith, "Types of Programs Carried by 23 University and College ETV Stations," N.A.E.B. Journal, XXIV (September-October 1965), 12.

Brandeis University.<sup>3</sup> This study, conducted biennially over the past eight years, presents a comprehensive summary of the various types of programing broadcast by Educational Television stations during their typical broadcast periods. While this information is doubtless of value in planning for a nationwide interconnection, it does not refer to specific programs, or to time of broadcast--both necessary information in the setting up of a program distribution schedule.

The present chapter, therefore, will survey the specific programing broadcast on Educational Television stations during a typical week, and attempt to discern the effect of present programing on a proposed schedule of an interconnection system. For this purpose, a study of the Educational Television station program guides for the week of November 12-19, 1967 was conducted. This study concentrated on those programs broadcast during the late afternoon and evenings, directed at general audiences. Daytime programing was not studied, as all the stations devote virtually all of their programing efforts toward school broadcasts when schools are in session. It is not anticipated, for our purposes, that any interconnection system will engaged in school broadcasts, for programs for school use are scheduled

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<sup>3</sup>The Morse Communications Research Center, Brandeis University and the National Center for School and College Television, One Week of Educational Television, No. 4, April 17-23, 1966 (Bloomington, Indiana: National Center for School and College Television, 1966).

in cooperation with local school districts, and the problem of scheduling school programs for nationwide use would be most difficult. Furthermore, local school districts are inclined to broadcast programming of their own selection for classroom use, and would resist any attempt at nationwide curriculum.

### The Programming Survey--Procedures

The sample consisted of all 124 Educational Television stations broadcasting as of January 1967. The ten month interval between January 1967 and the survey week of November 12-19, 1967 was a period of almost one full broadcast season, so that all stations in the survey had ample opportunity to determine what programming would best fulfill their local needs. Thus, the newer stations had an opportunity to settle into a standard broadcast schedule, and base their programming on their past experience, just as those stations broadcasting several years.

While many of the stations in the survey merely rebroadcast programs originating from a central network source, these 124 stations are all individually licensed by the Federal Communications Commission. Indeed, 25 stations, or 20 per cent of the total, rebroadcast all the programs distributed by a central network source, though more than one station in the network may originate the programs. There is no guarantee, however, that this situation will remain the same. With the relatively simple

addition of a film chain or videotape recorder, these stations can broadcast programs separately from their network. Indeed, several independently operating stations such as WGSF Newark, Ohio, or KWCM Appleton, Minnesota, began their operation as satellites of neighboring stations. All the stations, whether relying on a central network source, or independently programed, are available for national programming distributed by interconnection. Nevertheless, in our analysis of programming, indications will be made concerning the presence of large state networks, when appropriate, to place programming practices in their proper perspective.

Of the 124 stations in the original survey, program guides were obtained from 103, or 82 per cent of the stations, for the sample week. These 103 stations are a representative cross sample of the total number of Educational Television stations in the country. As seen in Table 1, the representation of types of licensee of the respondents is proportionate to that of the total number of stations. Likewise, the geographical distribution of the respondents is also proportionate with that of the total 124 stations. As seen in Table 2, the distribution of stations by time zones across the country, in both the total universe and the sample, are almost identical.

TABLE 1  
DISTRIBUTION OF STATIONS BY TYPE OF LICENSEE

Licensee	124 Stations (%)	103 Respondents (%)
State Agency	20	21
University	30	30
School District	16	16
Community Corporation	34	35

TABLE 2  
DISTRIBUTION OF STATIONS BY GEOGRAPHICAL TIME ZONES

Time Zone	124 Stations (%)	103 Respondents (%)
Eastern	47	49
Central	32	31
Mountain	7	6
Pacific	12	11
Hawaii	2	2

Although the sample is closely representative in terms of type of licensee and geographical distribution, it is impossible to determine the degree of representation of the respondents with regard to station size. It is difficult to determine accurately the relative sizes of the stations

involved. One possible indicator of station size would be the stations operating budget. Educational Television stations, however, are reluctant to release detailed financial information. Another possible indicator of station size might be the number of locally produced programs. However, it is difficult to compare the output of various stations, as some stations concentrate their local productions for in-school use during the daytime hours, while others produce their programs for the adult evening audience. Perhaps the best indicator of the relative station size, is the number of hours actually broadcast. The total station's resources is directed toward that end. The amount of broadcast time available is also a factor in determining the number of program series broadcast by the station. It is impossible, however, to determine the amount of broadcast time, or other information either, from those stations which did not furnish any response to the survey. While it may be safe to assume that the responses from the stations who did provide information may be somewhat overrepresented by the larger stations, the large size of the respondents themselves, 82 per cent of the universe, would indicate that such deviation would be small. It should also be noted that information was received from eleven of the twenty-two stations that did not provide program guides for the survey week of November 12-19, 1967. All eleven stations broadcast what can be considered a typical schedule.



Of the 103 respondents, nine stations were discarded from further consideration due to unusual conditions. Six stations only broadcast during school hours, and so had no evening programming schedules. The two Hawaiian stations were also removed from the program analysis, due to the great physical obstacles to interconnection of time differential and distance. The "Public Broadcast Laboratory," the only educational television program shown live throughout the United States during this period, is broadcast, for example, "just two days later" in Hawaii than on the mainland.<sup>4</sup> A ninth station, WMSB Lansing, Michigan was also withdrawn from further consideration as its broadcast day, consisting of sharing its channel with a commercial station, is limited to half an hour each weekday evening, along with restricted daytime and weekend broadcast periods.

The removal of these nine stations from the sample will not change in any way the composition of the respondents, just its size. As seen from Tables 3 and 4, the composition of the 94 stations is still proportionally representative of the total 124 stations. These remaining 94 stations all broadcast regularly during the evening though some only broadcast for a few evening hours. Nevertheless, all 94 stations are now broadcasting in the evenings, and would be available to an interconnected system.

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<sup>4</sup>Hawaii Educational Television, "Network Program Guide," November 1967, p. 8.

TABLE 3

## DISTRIBUTION OF STATIONS BY TYPE OF LICENSEE--REVISED

Licensee	124 Stations (%)	94 Respondents (%)
State Agency	20	22
University	30	29
School District	16	13
Community Corporation	34	36

TABLE 4

## DISTRIBUTION OF STATIONS BY GEOGRAPHICAL TIME ZONES--REVISED

Time Zone	124 Stations (%)	94 Respondents (%)
Eastern	47	48
Central	32	34
Mountain	7	5
Pacific	12	12

The Programing Survey--An Overview

The study of programing conducted by Brandeis University in 1966 found that 49 per cent of the total evening programing was supplied from the National Educational Television service.<sup>5</sup> Of the 94 stations that comprise the useful survey

<sup>5</sup>Morse Communications Center, op. cit., p. 69.

sample, 90 are affiliated with N.E.T. The four stations not so affiliated all serve areas already served by N.E.T. affiliates. Three of these four stations, as well as all the other stations, also receive programs from the Educational Television Station/Program Service of the National Association of Educational Broadcasters. The E.T.S., after N.E.T., is the largest nationwide Educational Television programming service. E.T.S. estimates that the typical station carried about 1½ hours of its programming a week during the fall of 1967.<sup>6</sup>

Our study of the program guides of the 94 respondent stations finds that there are twenty-two program series regularly broadcast by at least 20 per cent of the nation's Educational Television stations. Of these 22 series, over 75 per cent of them are supplied to the stations by either N.E.T. or E.T.S. (see Table 5). In addition to these twenty-two program series, the "Public Broadcast Laboratory" is broadcast by at least 75 per cent of the stations. However, as the "P.B.L." only started the week previous to the sample week, many of the program guides had undoubtedly been printed before final interconnection arrangements had been made. Indeed, all 119 N.E.T. affiliates were scheduled to

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<sup>6</sup>Letter to author from E.T.S. director, David Lennard, January 4, 1968.

TABLE 5

NATIONALLY BROADCAST EDUCATIONAL TELEVISION PROGRAMS<sup>a</sup>

Program	Stations (No.)	Broad- casting (%)	Distribution Agency		
			N.E.T.	E.T.S.	E.E.N.
"French Chef"	87	92	N.E.T.		
"NET Journal"	87	92	N.E.T.		
"NET Playhouse"	87	92	N.E.T.		
"Public Affairs" <sup>b</sup>	86	91	N.E.T.		
"Creative Person"	82	87	N.E.T.		
"The Dissenters"	79	84	N.E.T.		
"What's New"	78	83	N.E.T.		
"Smart Sewing"	54	57	N.E.T.		
"Business Roundtable"	40	42		E.T.S.	
"The Friendly Giant"	38	40	N.E.T.		
"Misterogers Neighborhood"	37	39	N.E.T.	E.T.S.	E.E.N.
"Experiment"	37	39	N.E.T.		
"Speaking Freely"	36	38			E.E.N.
"Folk Guitar"	34	36		E.T.S.	
"Playing the Guitar"	30	32		E.T.S.	E.E.N.
"Spectrum"	28	30	N.E.T.		
"TV Kindergarten"	28	30		E.T.S.	
			<u>Other</u>		
"Antiques"	25	27		E.T.S.	E.E.N.
"Book Beat"	24	25	C.E.N.	E.T.S.	E.E.N.
"Museum Open House"	23	24		E.T.S.	E.E.N.
"Washington Week in Review"	22	23			E.E.N.
"World Press Review"	19	20	W.E.N.		E.E.N.

<sup>a</sup>Programs broadcast on at least 20 per cent of the stations.

<sup>b</sup>"Public Affairs" is a weekly series rotating among three regular programs, which, because of tape bicycling, causes different stations to broadcast different programs during the same week. The three series rotated are, "New in Perspective," "International Journal," and "Your Dollar's Worth."

carry "P.B.L.," according to press reports, though several Southern stations canceled the first program due to its racial theme.<sup>7</sup>

The twenty-two series show a wide range of the degree of station broadcasts. Seven series were carried on more than 80 per cent of the stations. These are all N.E.T. programs, five of which are the new programs which form the base of the N.E.T. program service. These five programs, "NET Playhouse," "NET Journal," "The Dissenters," "Creative Person," and the weekly public affairs program, are the major programming efforts of N.E.T. The other two programs, "French Chef," and "What's New," have been broadcast continuously since they were first released, and are now standard broadcast fare on Educational Television stations.

The only other program series to appear on a majority of stations, "Smart Sewing," is also an N.E.T. production. While the other series of new productions are of a continuing nature, or designed to be replaced with other planned series, "Smart Sewing" is a special ten part series underwritten by a commercial corporation. As it only runs for ten weeks, it is reasonable to assume that those stations not broadcasting the series during the survey period, might do so at a later time. The original plans for the

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<sup>7</sup>Bettelou Peterson, "PBL, A Qualified Success," Detroit Free Press, November 7, 1967.

series were for it to be broadcast by at least 105 N.E.T. stations.<sup>8</sup>

A similar situation exists with the two N.E.T. science series, "Experiment" and "Spectrum." "Experiment" was an eight part series, and during the week under study, the "Experiment" series was nearing an end, and the "Spectrum" series was being introduced as its replacement. As the series are bicycled through the mails, several stations were ending one series, while others were beginning the other. Although each series was broadcast on at least 30 per cent of the stations, no station broadcast both series during the sample week. Therefore, the two series may be combined into a single N.E.T. science series for our purposes, that was broadcast by 75 per cent of the stations.

In contrast with the N.E.T. programs, none of the programs supplied by the E.T.S. was being broadcast by a majority of the respondent stations. However, the finding of a single week's survey is deceptive, for the E.T.S. program service has several handicaps which lessen its national impact. The financial resources of E.T.S. is much less than that of N.E.T. In 1967, the Ford Foundation alone donated six million dollars to N.E.T. for its activities. The E.T.S., however, only has a \$344,000 grant from the Kellogg Foundation for support during a six year period. E.T.S. is

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<sup>8</sup>Broadcasting, September 18, 1967, p. 68.



to become fully self supporting from fees charged for its services to the member stations.<sup>9</sup> It is therefore obvious that E.T.S. cannot provide as wide a service as N.E.T. simply due to financial limitations. Such financial limitations account in part for the restricted use made of E.T.S. programs.

A second factor concerning the E.T.S. programs is the relatively short duration of the series it distributes. Programs distributed by E.T.S. are mainly productions of the individual member stations. As they are local productions, the number of programs in each series is rarely sufficient for an entire year's run. Of some forty-three program series available from the E.T.S. as of January 1968, fully 70 per cent of the program series consisted of twenty programs or less. Only three series would normally run for more than thirty-one weeks.<sup>10</sup> Therefore, Educational Television stations, unlike commercial television, must constantly revise their program schedules to reflect the addition and loss of various program series. For example, WILL Urbana, Illinois, during the three month period of December 1967 to February 1968, began broadcasting eleven new series, while finishing seven others. This is an average of four program changes a month, or one every week.

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<sup>9</sup>E.T.S., "Policies and Procedures," April 10, 1967, revised (mimeographed), p. 12.

<sup>10</sup>E.T.S., "Programs Available for Booking," January, 1968 (mimeographed).



The series "Smart Sewing" was followed, after the Christmas recess, by "Antiques."

Thus it can be seen that the stations must, of necessity, broadcast a great number of series to fill their year round schedule. Therefore, a survey of a single week's programing is not completely indicative of the programing that is carried by stations throughout the country. Such a true sampling would necessitate the sampling of all stations, on a year long basis. There are at least a dozen additional series, besides the twenty-two cited in Table 5, that probably would be found on at least 20 per cent of the stations if the survey were conducted over a full year's programing. The series "Nine to Go," for example, was broadcast by eighteen stations during the survey week, and a nineteenth station began the series the week later. Furthermore, a study of a full year's programing would undoubtedly show that the programs already cited were broadcast on considerably more stations than just on those during the survey week. The figures in Table 5, then, should only be considered as a minimum reflection of the total year's programing.

The two series cited with the least exposure, "Washington Week in Review" and "World Press Review," are both distributed by regional networks. "Washington Week in Review" is carried by the Eastern Educational Network, including its affiliates not as yet interconnected, while "World Press Review" is distributed by the E.E.N. and the Western Educational Network. Though only on 23 per cent of

the total number of Educational Television stations, "Washington Week in Review" is broadcast by all of the E.E.N. station, on thirteen interconnected stations, and nine stations by mailed tapes. The "World Press Review" is broadcast by 68 per cent of the combined E.E.N. and W.E.N. stations, only ten of which are by interconnection. Because of the high broadcast rate for both these series, it is reasonable to assume that if they were made available for national distribution, as interconnection would do, they would be broadcast by a substantial number of stations. Many stations now broadcast these series, even though they are only available via bicycled tapes.

It can therefore be seen that sufficient programing already exists nationally to serve as a basis for an interconnected network. While many of the programs cited in Table 5 were only broadcast by a small segment of the total stations, conditions of program availability indicate that these series would be broadcast by substantially more stations if the programs themselves were readily available. Interconnection naturally would immediately make the programs easily accessible to all those stations desiring it. The twenty-two program series in Table 5 provide a potential of 13 3/4 hours of broadcasting that Educational Television stations could now have available as a weekday evening service if interconnection were completed. This compares with the approximately twenty hours of weekday prime time evening programing distributed by the commercial networks. While it

is certainly not intended, or even implied, that any station broadcasts all the programs distributed by an educational network, even if a station elected to broadcast all twenty-two series, it would still have sufficient air time available for local or other productions. The 13 3/4 hours of programing will provide less than three hours of programing each weekday evening. Only five educational stations program less than three hours each weekday evening, and four of these stations are second services in their area.<sup>11</sup>

There is then little possibility that the stations will be overtaken by national production, and not have an opportunity for local production. Indeed, with the easy availability of national programing, each station can concentrate its efforts on strengthening both the quantity and quality of its local productions.

As noted in the previous chapter, the method of distribution of these programs has troubled many individuals and organizations. The general consensus was that the interconnection facilities be used for both distribution and networking. While it is generally understood that networking should be used for coverage of live events, and other timely programs, the desirability of simultaneous broadcasts

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<sup>11</sup>KTCI Minneapolis, WCVW Richmond, Virginia, WXXW Chicago, are all second stations operated in conjunction with another major ETV channel. KTEH San Mateo serves an area served by the San Francisco station, KQED. WFPK Louisville, Kentucky is owned by a school board and only broadcasts two hours an evening.

of regular program series, or even the possibility of simultaneous broadcasts through evening distribution, is unclear. The transmission of programs to stations at times other than during the evening hours would preclude simultaneous broadcasting, while evening distribution would invite immediate rebroadcast by those stations desiring it. While the former would absolutely guarantee the autonomy of the local station, the latter use, distribution during the evening hours, can still be compatible with individual station independence.

The use of interconnection facilities for program distribution primarily during time periods when immediate simultaneous broadcasting would be impossible would negate much of the benefits and convenience that interconnection would offer. The distribution of programs to the stations during non-prime time hours would necessitate the recording of the program by all the stations desiring to broadcast it. This would entail the use of a video tape recorder and related personnel devoted primarily to the recording of programs for later use. The expenditure of time and money now involved at the tape duplication center N.E.T. operates in Ann Arbor, Michigan would then be placed on the individual station. Indeed, it would be more costly nationally for each station to use a videotape recorder and crew to tape a program than for N.E.T. to duplicate them in batches of ten copies at a time. It has been suggested that distribution take place during the early morning hours, such as midnight to 6:00 A.M., when American Telephone and Telegraph

has offered educational broadcasters reduced line rates. The additional personnel and station operations necessary, however, would negate much of the savings generated by the reduced interconnection charges.

Even if the interconnection were to be used for program distribution during non-prime time hours, there would still be the need for use of the interconnection facilities during prime evening hours to carry such timely programs as the half-hour daily news analysis program proposed by N.E.T.<sup>12</sup> The present weekly public affairs programs of N.E.T., such as "NET Journal" and "News in Perspective," would also benefit from immediate distribution because of their timeliness and impact. Programing using the facilities of several stations is only possible with interconnection. Furthermore, interconnection, to really serve Educational Television, must be available for the immediate coverage of breaking events. Therefore, interconnection of the nation's educational stations during the prime evening hours will be necessary, whether or not the majority of programs are distributed during that time.

Moreover, it should also be noted that the distribution of programing by interconnection facilities, for use on a delayed basis, is really of little more benefit to the stations than the present bicycled tape system. As most of

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<sup>12</sup>Broadcasting, June 3, 1968, p. 41.

the program series are not timely, and national network promotion would not be undertaken in such a system, it matters little when each station broadcasts a particular program. Therefore, with the exception of those few regularly scheduled programs dealing with timely issues, the mailed videotape system is adequate, if the stations persist in scheduling programs at their own discretion with no regard to the actions of other stations. However, it should be noted that even if the bicycled tape system is adequate for the stations, as the number of Educational Television stations increase, the expense and difficulty of supplying all the stations with programs also increases. If, however, the stations do work in concert in the scheduling of some programs, then the interconnection facilities could distribute the programs at the time most convenient to all. As we shall see, certain scheduling patterns already are present in the programming schedules of the stations, which could encourage the distribution of programming during those time periods when they would most likely be immediately rebroadcast by the stations.

#### The Programming Survey--Broadcast Patterns

The scheduling patterns most evident in an examination of the program guides for the survey week concerns three N.E.T. distributed programs, "NET Journal," "NET Playhouse" and the weekly "Public Affairs" program. These three series are the major new programming efforts of N.E.T., and

are broadcast by approximately 92 per cent of the stations. All three are distinguished from the other series, in that broadcasts for each series are scheduled for a single weekday evening. Such a concentration of scheduling is part of the first effort of N.E.T. to encourage a national image for Educational Television. All the stations broadcasting "NET Journal" first broadcast the program on Monday night. The weekly "Public Affairs" program is broadcast on Wednesday evening by 90 per cent of the stations.<sup>13</sup> All the stations broadcast "NET Playhouse" on Friday evening. In addition to these broadcasts, many of the stations rebroadcast these programs at other times during the week. The first broadcast of these programs, however, is on the weekday when it is nationally scheduled.

While these three series are broadcast by the stations on their respective evenings, this does not mean that all the stations broadcast the same program during any given week. Indeed, there are several programs of the series, that, because of the bicycling arrangement, are broadcast during a single week. N.E.T. must resort to bicycling tapes among the affiliated stations, as does E.T.S., because it does not have sufficient copies of a program for all

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<sup>13</sup>The six station Alabama network, and WTVI Charlotte, North Carolina first broadcast this series on Thursday evening. However, for purposes of comparison of broadcast times, they will be considered as broadcasting on Wednesday.

stations. As Fred Friendly lamented concerning the bicycling system,

Copies were made, ten at a time until 40 or 80 were made, and shipped out to television stations. If they were news programs, they got there in two days. If they were not, they went via parcel post and got there in four or five days, and in some stations a week later.<sup>14</sup>

During the survey week, two programs in the series "NET Journal" were broadcast by the N.E.T. stations. Of 70 stations specifically identifying their programming, 51 stations, or 73 per cent, reported carrying the program "World Turned Upside Down" while only 19 stations, or 27 per cent of the stations broadcast "Cuba Today."

The division among the organizations broadcasting the various programs, however, is even greater than the above figures indicate. By regarding multi-station interconnected networks as a single program source, we find that 58 per cent originated the former program, while 42 per cent broadcast the latter. As many stations rebroadcast "NET Journal" during the week, the program seen on the majority of stations is not seen on the minority stations until two weeks after it is first shown. Furthermore, a study of the nineteen stations where the program is shown two weeks late finds that all these stations serve small, isolated markets. Only one network, a part-time interconnection of two stations,

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<sup>14</sup>Fred Friendly, "World Without Distance," N.A.E.B. Journal, XXVI (January-February 1967), 4.



receives "NET Journal" late.<sup>15</sup> Thus, interconnection would not only provide all the stations with equal programing, but would also aid the smaller stations by removing any disparity between their programing, and that programing which is given some limited national publicity and broadcast by the larger stations.

The situation concerning "NET Playhouse" is similar to that of "NET Journal" but even more programs are involved. During the survey week, at least four programs were broadcast by stations as part of the "NET Playhouse." Three of these programs were of an eight part "Tales of Genjii" series, the fourth was the play "Enemy of the People." Of 74 stations identifying that week's particular "NET Playhouse" selection, 23, or 30 per cent of the stations, broadcast "Enemy of the People." Twenty-one per cent broadcast part two of "Tales of Genjii," 9 per cent carried part five, and 24 per cent indicated that part eight was the week's selection. Ten per cent of those broadcasting "Tales of Genjii" did identify the specific episode. Again, regarding the networks as a single source of programing finds a much

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<sup>15</sup> Stations broadcasting the Cuba program, two weeks after the larger stations broadcast it were: KETS Little Rock; WFSU Tallahassee; WUFT and WJGT Jacksonville and Gainesville, Florida; WEDU Tampa; KDPS Des Moines; KUID Moscow, Idaho; KTWU Topeka; KCSD Kansas City; WUCM Bay City, Michigan; KPEC Lakewood Center, Washington; KUSU Logan, Utah; KWSC Pullman, Washington; WCVE Richmond; WVIA Scranton, Pennsylvania; KVCR San Bernardino; WDSE Duluth; KFME Fargo, North Dakota; and WFPK Louisville.

closer division in the programs broadcast. Of 48 different originating points, 27 per cent broadcast "Enemy of the People," 16 per cent part two, 10 per cent part five, and 25 per cent part eight of the Genjii series, with 21 per cent broadcasting unidentified programs of the series. The bicycle arrangement of "NET Playhouse" is even more spread out than that of "NET Journal." As many stations also broadcast each program in the "NET Playhouse" series twice in the week, or in many cases repeat the program during the succeeding week, a three week interval occurs between the different stages of the bicycle. Therefore, a station presently broadcasting the second episode of the Genjii series would not broadcast "Enemy of the People" until two months later. This great variation of programing could be immediately remedied with the interconnection of the stations, thereby supplying the same programs to all the stations, and allowing national promotion, and greater impact on the American public.

Unlike the "NET Journal," and "NET Playhouse," the same Wednesday "Public Affairs" program series seems to be broadcast on all the stations during the survey week.<sup>16</sup>

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<sup>16</sup>Information on their program schedules indicate that WNDT, WCNY, WXXI, WNED, all New York State, WCBB Maine, and WHYI Philadelphia scheduled the program "International Magazine" rather than "News in Perspective" which was broadcast by the other stations. However, as these stations receive the program through the E.E.N. interconnection, it appears that they received the wrong advance information, and is probable that they broadcast the "News in Perspective" that was carried by the other members of the E.E.N.

In the week under study, a semi-monthly news analysis program "News in Perspective," conducted by members of the New York Times, was broadcast. The timeliness of this program is undoubtedly the reason that it is made available to all N.E.T. affiliates during the same week. As Fred Friendly previously noted, N.E.T. can distribute programs within two days if events warrant it.<sup>17</sup> The added expense involved in quick duplication and distribution is only justified by the timely nature of the program material. To do this for all N.E.T. series is beyond the present financial and physical capabilities of the organization.

Despite the broadcasting of different programming in a series by various stations, the common broadcasting of that series on a single evening is the important fact to be noted. If a pattern of broadcasting any series during one evening exists, then such a situation will provide a natural basis for programming broadcast simultaneously.

Any consideration of national broadcasting must involve the widespread area of the United States, divided into four main time zones. As some 80 per cent of the Educational Television stations are presently located in the Eastern and Central time zones, a major consideration in the scheduling of programming will be the broadcast times in those two areas. Programming for the Mountain and Pacific

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<sup>17</sup>Fred Friendly, op. cit., p. 4.

zones must either be broadcast at inconvenient times, taped for delayed broadcast by the stations, or distributed in a standard broadcast sequential pattern. In this respect, educational broadcasters face the same problem as commercial broadcasters.

As can be seen in Table 6, a clear pattern exists in the broadcasting of "NET Journal." A majority of stations in both the Eastern and Central time zones carry the program at 9 P.M. (For convenience of comparison, time in the accompanying tables is expressed as Eastern Standard Time.)

TABLE 6  
BROADCAST PATTERNS OF "NET JOURNAL"

Starting Time of Program (EST)	Number of Stations	
	Central Zone	Eastern Zone
7:00 P.M.	..	1
7:30	..	8
8:00	2	5
8:30	1	4
9:00	15	22
9:30	1	..
10:00	10	1
10:30	..	1

It is therefore obvious that if "NET Journal" were to be distributed by nationwide interconnection with the possibility of simultaneous broadcasting, a transmission of 9 P.M. EST would be most convenient for most of the stations concerned.

A similar pattern though not as clear, occurs in the scheduling of the Wednesday "Public Affairs" programs. As seen in Table 7, a majority of stations in the Central Time Zone broadcast this series at 9 P.M. EST, while those in the Eastern Zone favor both 8 P.M. and 9 P.M.

TABLE 7

## BROADCAST PATTERNS OF WEDNESDAY "PUBLIC AFFAIRS" PROGRAMS

Starting Time of Program (EST)	Number of Stations	
	Central Zone	Eastern Zone
7:00 P.M.	..	1
7:30	..	3
8:00	3	18
8:30	1	3
9:00	16 <sup>a</sup>	15 <sup>b</sup>
9:30	2	2
10:00	6	1

<sup>a</sup>Includes one six-station network broadcasting series on Thursday.

<sup>b</sup>Includes one station broadcasting series on Thursday.

Again, the most natural time for simultaneous distribution of this series would be 9 P.M. EST, as almost half of the stations already broadcast the Wednesday "Public Affairs" programs during this time period.

Unlike the two previous series, the broadcasting of "NET Playhouse" does not appear in a pattern. The most common time of broadcast in the Eastern Zone is 8:30 P.M., while in the Central Zone it is 9:30 EST (Table 8). Thus, the most favorable time for the Eastern Zone, 8:30 P.M. is clearly unfavorable to the stations in the Central Zone, as none now program "NET Playhouse" in that time period. Likewise, the distribution of "NET Playhouse" at 9:30 P.M., to favor the Central Time Zone, would upset the schedules of 90 per cent of the Eastern affiliates. The distribution of "NET Playhouse" at both 8:30 P.M. and 9:30 P.M. EST would seem the most reasonable solution to this scheduling problem, except that the dramas presented often run for more than an hour.

There are several possible alternatives to the problem involved with "NET Playhouse," to resolve the conflict between present scheduling practices and the desire to make a series available for the convenience of the individual stations. One means by which "NET Playhouse" could be distributed at times convenient for both the Eastern and Central Time Zones would be the utilization of a two channel system, each carrying a different transmission. A less expensive alternative would be to have separate originations for each

TABLE 8  
BROADCAST PATTERNS OF "NET PLAYHOUSE"

Starting Time of Program (EST)	Number of Stations	
	Central Zone	Eastern Zone
8:00 P.M.	1	5
8:30	..	17
9:00	1	15
9:30	13	4
10:00	6	4
10:30	1	..
11:00	2	..
11:30	5	..

time zone when conditions warrant, similar to the standard broadcast sequential delay pattern. However, if a single transmission for "NET Playhouse" were desired, then a compromise, such as distribution at 9 P.M. EST would have to be worked out. By distributing "NET Playhouse" at 9 P.M. the stations would only have to alter their programming schedule by half an hour, which could be done with little difficulty, especially if done at the start of a new Fall television season.

While there are many stations where national distribution can easily be accommodated with their existing program schedule, half the stations broadcast these programs at

times that do not fit into the general pattern. Many stations, using their own criteria, seem to arrive at different times when they feel it appropriate to broadcast a particular series, as seen in Tables 6, 7, and 8. Nevertheless, many stations may well voluntarily change their time of broadcast to coincide with that of the interconnection system, especially if the programs were to receive national promotion. Others may choose to videotape the program for broadcast later that evening, or for rebroadcast later that week. Stations desiring to broadcast a program before it is distributed by the interconnection system could possibly be supplied by mailed tapes, if proper arrangements could be made. While still requiring the duplication of some tapes by N.E.T., the number would only be a fraction of those now needed. For example, only fourteen of the forty-three separate originations of "NET Journal" presently occur prior to 9 P.M. EST Monday, the most common broadcast time. Even if none of these fourteen stations changed their time of broadcast, N.E.T. would only have to distribute fourteen tapes, rather than the tapes required to serve the full nationwide system. Such an arrangement would insure that all stations broadcast the same program each week.

Arrangements for the fourteen stations in the Mountain and Pacific Time Zones can be similar to that of the Eastern and Central stations. These stations could tape the transmission from the East, and broadcast the program later



in the evening at a more suitable time. However, such a practice may be beyond the capability of many of the stations. The "Public Broadcast Laboratory," for example, is broadcast live at 5:30 P.M. or 6:30 P.M. local time by the Mountain and Pacific stations. Only one station KQED, one of the largest on the West Coast, tapes the program for broadcast at the more suitable time of 8:30 P.M., when it will attract a larger audience.

A more practical arrangement is the second transmission of the program for use by the Western stations. While such a transmission could originate from the East Coast late in the evening, beginning at 11 P.M. EST, it would be less of a financial burden to split the national interconnection into a separate Western division for serving those stations in the Mountain and Pacific Time Zones. A Western center for origination, such as KQED Los Angeles, would reduce the line charges for an interconnection system by reducing both the time, and the distance utilized to distribute the programs. Under normal circumstances, programs for the two Western time zones could originate on the West Coast. The entire system could go "live" for origination of programming from several stations, or of transmission of on going events. In this respect, the educational interconnection would operate similar to the commercial networks.

One aspect of Educational Television not shared with commercial broadcasting is the frequent rebroadcasting of programs of special interest during the same week for greater

audience exposure. Not only does a second broadcast allow the audience a second opportunity to view a program, but it also provides the television station with readily available programing. Programs obtained from N.E.T. Scheduled Service, or from tape libraries as the N.E.T. Flexible Service, E.T.S. Program Service or regional networks, are available to member stations for only a modest service charge. Rebroadcasts are allowed during a seven day period without additional charge. Working on limited budgets, this provision is an incentive to the stations to rebroadcast programing. Many stations, therefore, repeat many of their programs during the week following their initial broadcast. "NET Journal" is repeated by forty-two stations, almost half of the number broadcasting the program. About thirty stations, over a third of those carrying the series, rebroadcast "NET Playhouse" and as many repeat the Wednesday "Public Affairs" programs.

The pattern of the repeat broadcasts, naturally, is not as definite as those of the initial broadcasts. Many stations schedule the rebroadcasts during the same general time period as the initial broadcast, so those who did not have an opportunity the first time to view the program may do so later. Other stations feel that scheduling the rebroadcast at a completely different time from the initial broadcast, so that a completely different audience may be reached, is the best use of the repeat. Stations may repeat a program during the week, or on weekends, when broadcast

periods for the general public are generally longer than the weekdays. As a result, the scheduling of repeat broadcasts, of any program, will show much less of a pattern than the initial broadcasts do.

"NET Journal" is rebroadcast by forty-two stations, half of which schedule the repeat on the succeeding Sunday. Repeats during the week are broadcast without any definite pattern, although 20 per cent of the stations schedule the program on Tuesday evening, the day after the initial broadcast. The major concentration of "NET Journal's" repeats is on Sunday, at 5:00 P.M. EST (Table 9).

TABLE 9  
SUNDAY REPEATS OF "NET JOURNAL"

Starting Time of Program (EST)	Number of Stations
2:00 P.M.	1
4:00	1
5:00	10
6:30	1
7:00	4
7:30	3

This 5:00 P.M. concentration, however, is due to the distribution of the series by the Eastern Educational Network, and the broadcasting of "NET Journal" at that time by eight of the E.E.N.'s interconnected affiliates. Compensating for the influence of the E.E.N. would remove the pattern of broadcasts, and would only have left the trend of scheduling the program late Sunday afternoon, or early Sunday evening. Transmission of "NET Journal" at 5:00 P.M., however, would allow those stations wishing to broadcast it later in the evening to tape the program at that time. Only 10 per cent of the Sunday rebroadcasts are earlier than 5:00 P.M.

While the repeats of "NET Journal" are broadcast almost a week after the series is first broadcast, repeats of the Wednesday Public Affairs programs generally are scheduled the very next evening. Of the thirty stations rebroadcasting the program, twenty schedule a repeat on Thursday night. This is probably due to the fact that, while "NET Journal" is concerned with long range matters, several of the programs in the Wednesday series are reviews of the months news, which may become out of date quickly. Only seven stations broadcast their repeats the following Sunday.

Although the stations concentrate their repeats on Thursday evening, there is no definite trend as to the time of the rebroadcast (Table 10). As the times of broadcast are spread throughout the evening, the stations wishing to

TABLE 10

## THURSDAY REPEATS OF "PUBLIC AFFAIRS" BLOCK

Starting Time of Program (EST)	Number of Stations
4:00 P.M.	1
5:30	1
6:00	3
7:00	1
7:45	1
8:00	1
9:00	4
10:00	2
11:00	1
11:30	5

repeat this series will probably have to videotape the Wednesday evening broadcast, unless enough stations are also willing to schedule the program at any one time on Thursday night.

The situation regarding the rebroadcasts of "NET Playhouse" is similar to that of the Wednesday "Public Affairs" series. Half the stations repeating "NET Playhouse" do so on Sundays, just two days after the initial broadcast. Of the thirty-two stations rebroadcasting "NET Playhouse," seventeen do so on Sunday. While there is a concentration on Sunday of rebroadcasts, there is no pattern as to the

time of broadcast. As "NET Playhouse" often runs for more than an hour, and always varies in length, there is a tendency on the part of the stations to schedule it late in the evening, or early in the afternoon where it will not disrupt other major programming. Another factor involved in the scheduling of "NET Playhouse" is that stations in the East program the two hour "Public Broadcast Laboratory" in the prime evening hours, while those in the West broadcast "P.B.L." late in the afternoon. The rebroadcasts of "NET Playhouse" are indicated in Table 11.

TABLE 11  
SUNDAY REPEATS OF "NET PLAYHOUSE"

Starting Time of Program (EST)	Number of Stations
1:30 P.M.	1
3:00	1
4:00	4
5:00	1
5:30	1
6:30	1
7:00	1
10:00	1
11:00	3
11:30	3

As the repeats are spread throughout the day, the stations wishing to repeat this series will probably have to videotape the Friday evening broadcast for their own rebroadcast, unless the stations can agree on a time convenient for all for a Sunday rebroadcast.

The three series, "NET Journal," the "Public Affairs" block of programs, and "NET Playhouse" are all broadcast in clearly defined patterns by the individual stations in their initial exposures. All three programs are serious studies in their area, aimed at adults, and are the major offerings of N.E.T. They are therefore scheduled in prime evening time periods, around 9 P.M. Being hour programs, the stations are somewhat limited in the time periods that they can schedule the programs. Furthermore, as the stations are "encouraged" by N.E.T. to broadcast each series on a particular evening, they are further restricted in their scheduling options.

No such restrictions exist for the scheduling of the other series broadcast by the stations. Most of the remaining series carried by a significant number of stations (Table 5) are only a half-hour in length, and can be inserted anywhere in the weekly schedule. With the exception of the three children's series carried five days a week, none of the series are restricted to any single night for broadcast. Nevertheless, each series shows a general pattern of broadcast which will aid its inclusion in a nationwide interconnection or network.

To discern patterns of broadcast, however, it is necessary to disregard the evening of broadcast, and combine the five weekday evenings into a composite evening. In general, these series are broadcast throughout the five evenings, although they are broadcast more frequently on Tuesday and Thursday evenings, as the three major N.E.T. programs are not scheduled those evenings. If any of the series to be discussed were to be distributed over interconnection with the anticipation that they would be simultaneously rebroadcast, then many stations would have to change the evening they presently broadcast that particular program. However, as noted previously the station schedules are already in a constant state of revision due to the high rate of series turnovers. The rearranging of certain programs within the broadcast schedule would not create any hardship on the station, especially if done at the beginning of a new television season.

One of the programs broadcast on almost every N.E.T. affiliated station, and one that has become a classic of Educational Television, is Julia Child's "French Chef." Not only is this program carried on 92 per cent of all Educational Television stations, but half the stations rebroadcast each program again the same week. "French Chef" had 125 broadcasts during the Monday through Friday period during the survey week on the 87 stations, more broadcasts than any other series. As seen in Table 12, broadcasts of "French



TABLE 12

## "FRENCH CHEF"--WEEKDAY DISTRIBUTION

Weekday	Number of Stations	Per Cent of Stations
Monday	26	21
Tuesday	30	24
Wednesday	21	17
Thursday	37	30
Friday	11	9

"Chef" are spread throughout the weekday evenings, with concentration on Tuesday and Thursday nights. As this table includes repeats of broadcasts, it would indicate that two transmissions of "French Chef" by a central network would serve the majority of stations, with transmissions on Tuesday and Thursday, when more than half of the stations presently program the series. Two transmissions, though not absolutely necessary, could allow the stations to choose which night to schedule the series, broadcast both or tape the more convenient one for later broadcast.

Due to the nature of the program, informal instruction, and its intended audience of housewives, there is a definite pattern to the time of broadcast also. As seen in Table 13, there is a great concentration of scheduling "French Chef" by stations in the Eastern and Central Time Zones during the period 8:00 P.M. to 9:30 P.M. EST.

TABLE 13

**"FRENCH CHEF"--BROADCAST PATTERNS**

Time Period (EST)	Number of Stations	Per Cent of Stations
<u>Initial Broadcast:</u>		
3:00 P.M. to 8:00 P.M.	8	12
8:00 P.M. to 9:30 P.M.	46	70
9:30 P.M. to 11:00 P.M.	14	21
<u>Repeat Broadcast:</u>		
3:00 P.M. to 6:00 P.M.	15	50
6:00 P.M. to 8:00 P.M.	5	16
8:00 P.M. to 9:00 P.M.	3	10
9:00 P.M. to 11:00 P.M.	7	23

Over two-thirds of the stations present the initial broadcast of "French Chef" during this time period. Repeat broadcasts, however are generally broadcast in the late afternoon, or early evening, with half the rebroadcasts before 6:00 P.M. EST. In addition to these repeats on weekday evenings, 19 stations rebroadcast "French Chef" on Sundays. However, no pattern emerges from these Sunday broadcasts, as no more than three stations broadcast the program during any one half-hour period.

The great popularity of "French Chef," then, may present some problems in its scheduling on a nationwide network.

Certainly, it would be preferable to have two transmissions, one on Tuesday, perhaps at 8:30 P.M. EST, and the other on Thursday, perhaps at 8:00 P.M. EST, to best fit into the present programming schedules. Perhaps two transmissions will also allow those stations rebroadcasting the program in the late afternoon or Sunday to videotape their own copy. If not, then a late afternoon transmission, or even one on Sunday, may also be worked out to serve all stations. Those stations wishing to broadcast the program before it is distributed by interconnection may be supplied by mail, as there are many copies of "French Chef" available, and the series will undoubtedly be carried in the future.

The series "Smart Sewing," a ten-part informal instructional program on sewing sponsored by the McCall Pattern Corporation, was broadcast by fifty of the stations during the survey week, forty-two of which were in the two Eastern time zones. However, it was expected that all of the N.E.T. stations would broadcast the program, and it is probable that the funds only provided that half the stations broadcast the series during the same period. Twenty stations, 48 per cent of those in the Eastern time zones, repeated the program during the same week. As seen in Table 14, half of these stations scheduled the initial broadcast during the hour of 7:30 P.M. and 8:30 P.M. EST, and almost two-thirds in the hour and a half between 7:30 and 9:00 P.M. This corresponds closely with the scheduling of "French Chef"

TABLE 14

"SMART SEWING"--BROADCAST PATTERNS

Time Period (EST)	Number of Stations	Per Cent of Stations
<u>Initial Broadcast:</u>		
6:00 P.M. to 7:30 P.M.	5	12
7:30 P.M. to 8:30 P.M.	21	50
8:30 P.M. to 9:00 P.M.	5	12
9:00 P.M. to 10:00 P.M.	6	14
10:00 P.M. to 11:00 P.M.	4	10
<u>Repeat Broadcast:</u>		
3:00 P.M. to 6:00 P.M.	19	95
6:00 P.M. to 11:00 P.M.	1	5

which is a similar type how-to-do-it program. Almost all of the repeats of "Smart Sewing" were scheduled before 6:00 P.M.

Examining the day of broadcast of "Smart Sewing" (Table 15) finds that the series is fairly evenly distributed throughout the week, once the larger networks are regarded as a single source.

Therefore, there is a slight edge on Tuesday night broadcasts, with Monday and Thursday close behind. Distribution by interconnection on Tuesdays would permit those stations desiring the videotape the program to broadcast it anytime later that same week. A second transmission late Thursday afternoon, if desired, would permit those desiring

TABLE 15

## "SMART SEWING"--WEEKDAY DISTRIBUTION

Weekday	Number of Stations	Number of Program Sources <sup>a</sup>
Monday	8	8
Tuesday	19	9
Wednesday	5	5
Thursday	8	8
Friday	18	7

<sup>a</sup>Multi-station networks have been considered as a single program origination point, along with other single stations.

a Thursday broadcast to tape the program, and also allow those wishing to broadcast a late afternoon repeat of the program a chance to do so. Ninety-five per cent of the repeats were broadcast during the late afternoon.

A second broadcast of "Smart Sewing," or of "French Chef" either, is not absolutely necessary for the stations to benefit from the presence of the interconnection system. A second transmission would be an added convenience to the stations involved, as they could select whichever transmission fits into their operations schedule for videotaping for later broadcast, or simultaneous broadcast. As long as the interconnection facilities are available, they can provide a service to the individual Educational Television stations.

Two additional series of an informal instructional nature are "Folk Guitar" and "Playing the Guitar." Each series is broadcast by one-third of the stations in the survey and of the sixty stations broadcasting these series, only four broadcast both series. As both series are available to all the stations through the E.T.S. program service, the division of stations broadcasting a particular series is either due to the limitation of available tape copies, or the feeling by station management that one series is superior to the other. Both series are concerned with learning of guitar playing technique, both are half-hour in length, and both have a substantial number of episodes, 39 programs in "Folk Guitar" and 26 programs in "Playing the Guitar."

Because of the great similarity in program format, it is not surprising that the scheduling of each series is almost identical (Table 16). Both series are broadcast by about two-thirds of the stations in the Eastern and Central time zone in the hour and a half period 7:30 P.M. to 9:00 P.M. EST. Repeats, as with the two preceding series of informal instruction programs, are broadcast in the late afternoon, or early evening. Eighteen stations nationwide repeat either one of the guitar series during the week, and over half broadcast the repeats before 7:30 P.M.

The evening of broadcast for both series is very similar. Definite concentration of initial broadcasts for both series occur on Monday night (Table 17).

TABLE 16

## "FOLK GUITAR" AND "PLAYING THE GUITAR"--BROADCAST PATTERNS

Broadcast Period (EST) (PM)	"Folk Guitar"		"Playing the Guitar"	
	Number of Stations	Per Cent of Stations	Number of Stations	Per Cent of Stations
3:00 to 7:30	3	13	4	18
7:30 to 9:00	16	73	17	77
9:00 to 11:00	3	13	1	5

TABLE 17

"FOLK GUITAR" AND "PLAYING THE GUITAR"  
WEEKDAY DISTRIBUTION

Weekday	Number of Stations	
	"Folk Guitar"	"Playing the Guitar"
Monday	8	10
Tuesday	5	3
Wednesday	6	2
Thursday	2	1
Friday	4	7

Broadcasts then decrease until Thursday, and come up a bit on Friday. As programs from the E.T.S. Program Service are programed at the discretion of the individual station at any time throughout the week, the similar patterns of broadcast

for both series as to day of broadcast is coincidence. As the series are very similar in format, it should not be surprising that the individual stations should program the two series in similar manner. The distribution of the series, then, by interconnection would be most convenient on Monday evening, perhaps one at 7:30 P.M. EST, the other at 8:30 P.M., if both series were to be distributed for station selection. The stations then could have a choice of selecting which series they prefer. Because of the great similarity of the series, few stations would want to program both series during the same broadcast season. Repeat broadcasts are scattered throughout the week, and eighteen stations also rebroadcast programs from both series on the weekends, but again there is no scheduling pattern.

A fifth series of an informal instructional nature is a 26 part series concerning "Antiques." This series was broadcast by just over 27 per cent of the responding stations, and is another series available from E.T.S. As with the other informal instructional series already mentioned, "Antiques" is generally broadcast in the early evening in the Central and Eastern Time Zones (Table 18). Only two stations in the Pacific and Mountain zones carried the series. Half the stations broadcast "Antiques" in the hour period from 8:00 P.M. to 9:00 P.M. EST. Only five stations repeat the series during the week, with another eight rebroadcasting on Sunday. No pattern is discernible in any of these repeats. As is evident from Table 19, there is a



definite pattern in the broadcasting of "Antiques" on Thursday evening. A transmission of "Antiques" on Thursday would be convenient to many stations, also allowing an opportunity for taping for those wishing to repeat the program during the weekend, or early the next week.

TABLE 18  
"ANTIQUES"--BROADCAST PATTERNS

Broadcast Period (EST)	Number of Stations	Per Cent of Stations
5:30 P.M. to 8:00 P.M.	8	31
8:00 P.M. to 9:00 P.M.	13	50
9:00 P.M. to 12:00 A.M.	5	29

TABLE 19  
"ANTIQUES"--WEEKDAY DISTRIBUTION

Weekday	Number of Stations	Per Cent of Stations
Monday	7	27
Tuesday	2	8
Wednesday	4	15
Thursday	11	42
Friday	2	8

11-11-11

Five of the series included in the list of national programming in Table 5 involve interview program formats. These are mainly concerned with discussions with individuals involved in the arts, though one is also concerned with political matters, and another is business oriented. However, as the format of each is similar, each is in a serious vein, and the intended audience of adults is similar for each of the five programs, we can consider these series as a group, as we have previously considered the five informal instruction programs.

The program series "Creative Person," a half-hour show, is one of the continuing offerings of N.E.T. It was broadcast by almost 90 per cent of the stations responding to the survey. Seventy-six stations broadcast this series nationwide during the weekdays, and 22 stations offer repeats. Six stations broadcast this series only on the weekends, with twenty-two stations also repeating the series on weekends. However, the weekend broadcasts follow no evident pattern. Over half the stations, however, rebroadcast the series at least once during the week following the initial broadcast. Over half the stations in the Eastern and Central zones broadcast "Creative Person" in the hour and a half between 8:30 P.M. and 10:00 P.M. EST (Table 20). Repeats, however, are concentrated in the hours before 7:30 P.M.

In looking at the evening of broadcast, a definite pattern emerges, with a full third of the initial broadcasts

of "Creative Person" appearing on Tuesday night (Table 21). Tuesday night distribution, perhaps at 9:00 P.M. EST then would be a time convenient for many stations, and allow other stations to tape the program for later broadcasts.

TABLE 20

## "CREATIVE PERSON"--BROADCAST PATTERNS

Broadcast Period (EST)	Number of Stations	Per Cent of Stations
7:00 P.M. to 8:30 P.M.	7	10
8:30 P.M. to 10:00 P.M.	38	59
10:00 P.M. to 11:30 P.M.	20	30

TABLE 21

## "CREATIVE PERSON"--WEEKDAY DISTRIBUTION

Weekday	Number of Stations	Per Cent of Stations
Monday	5	8
Tuesday	24	37
Wednesday	14	22
Thursday	13	20
Friday	7	11

Another of the new programming distributed by N.E.T. during the survey period was a six part, half-hour series concerning editors of political magazines, "The Dissenters." This series was broadcast by 84 per cent of the nation's Educational Television stations responding to the survey. Seventy-one stations broadcast the program during the week, and eleven also repeated the program on a weekday. Only eight stations restricted broadcast to the weekend, and seven others repeated the program on Saturday or Sunday. As weekend broadcasts were so few, there is no pattern to their scheduling.

The broadcast pattern of "The Dissenters," both throughout the week, and during time periods, is one of the more flexible of the series under discussion. Comprised only of six programs, each only half an hour in length, "The Dissenters" is a series that can be used throughout a station's program schedule. While the format of the program, a simple discussion, is the same as those of programs generally programmed later in the evening, the content, a political discussion is of sufficient general interest to be broadcast almost anytime during the evening. Indeed, as seen in Table 22, the range of scheduling of "The Dissenters" is greater than that of the series previously discussed.

Likewise, the distribution of the program over the weekdays is also scattered close to random distribution, although with an emphasis on Tuesday evening (Table 23).

TABLE 22

## "THE DISSENTERS"--BROADCAST PATTERNS

Broadcast Period (EST)	Number of Stations	Per Cent of Stations
3:00 P.M. to 7:30 P.M.	3	5
7:30 P.M. to 9:00 P.M.	23	41
9:00 P.M. to 10:00 P.M.	12	21
10:00 P.M. to 11:00 P.M.	18	32

TABLE 23

## "THE DISSENTERS"--WEEKDAY DISTRIBUTION

Weekday	Number of Stations	Per Cent of Stations
Monday	8	14
Tuesday	18	32
Wednesday	11	20
Thursday	10	18
Friday	9	16

Because of this widespread distribution of the day of broadcast, a single transmission on Tuesday evening may not be sufficient to supply all the stations. Therefore, a second distribution transmission may be necessary on Thursday evening, to allow the stations to simultaneously broadcast, or tape for later broadcast. An 8:00 P.M. EST

transmission on Tuesday, during the peak of the broadcast period, and a second transmission on Thursday, perhaps at 7:30 P.M. EST, would then serve the Educational Television stations.

The only program on the list of Table 5 obtained from commercial sources, "Speaking Freely," is a one hour discussion produced by WNBC, and hosted by NBC newsman, Edwin Newman. As it is a full hour serious discussion, it is generally scheduled late in the evening, or relegated to a Sunday afternoon. Of the 36 stations that broadcast the series, 12 stations carry the program on Sunday. Significantly, none of the stations broadcast the program more than once during the week, probably due to broadcast clearance rights. As it is produced by a commercial organization, the clearance rights are probably more restrictive than those programs produced by educational organizations. Normally, programs distributed by the educational networks and libraries are allowed unlimited broadcasts within a time period. This is not the normal practice of commercial broadcasters.

As seen by Tables 24 and 25, there is a definite pattern as to the time of broadcast of "Speaking Freely," at 10 P.M. EST, and a third of the stations broadcast the series on Thursday evening. While twelve of the thirty-six stations broadcast the series on Sunday, no pattern emerges as the stations all broadcast the series at different times.

TABLE 24

## "SPEAKING FREELY"--BROADCAST PATTERNS

Broadcast Period (EST)	Number of Stations
3:00 P.M. to 8:00 P.M.	1
8:00 P.M. to 10:00 P.M.	3
10:00 P.M. to 11:00 P.M.	15
11:00 P.M. to 12:00 A.M.	1

TABLE 25

## "SPEAKING FREELY"--WEEKDAY DISTRIBUTION

Weekday	Number of Stations	Per Cent of Stations
Monday	4	20
Tuesday	3	15
Wednesday	2	10
Thursday	7	35
Friday	4	20

The most convenient time for distribution over inter-connection would therefore be at 10:00 P.M. EST on Thursday, allowing those stations wishing to broadcast on Sunday to videotape the series.



The series, "Book Beat" a half-hour discussion with an author concerning his current book, is only carried by twenty-four stations. These stations are mostly affiliated with the E.E.N. or the Central Educational Network, both of which distribute "Book Beat." It is, however, also available from the E.T.S. Program Service, though only two stations in the two Western time zones carry the series. Five stations repeat their program during the week, and seven also broadcast the program during the weekend. As seen in Tables 26 and 27, there are definite broadcast patterns both as to the day, and time of broadcast of "Book Beat."

TABLE 26

## "BOOK BEAT"--BROADCAST PATTERNS

Broadcast Period (EST)	Number of Stations	Per Cent of Stations
3:00 P.M. to 7:30 P.M.	1	5
7:30 P.M. to 8:00 P.M.	5	23
8:00 P.M. to 10:30 P.M.	7	32
10:30 P.M. to 11:00 P.M.	8	36
11:00 P.M. to 12:00 A.M.	1	5

TABLE 27

## "BOOK BEAT"--WEEKDAY DISTRIBUTION

Weekday	Number of Stations	Per Cent of Stations
Monday	3	14
Tuesday	2	9
Wednesday	12	55
Thursday	2	9
Friday	3	14

The trends indicated in Tables 26 and 27, however, are created by the influence of such a small number of stations, by the stations of the Eastern Educational Network. Of 11 interconnected stations of the E.E.N nine broadcast "Book Beat" on Wednesday, when the network distributed it. These broadcasts, based on network distributions, occur in two time periods, five stations broadcasting at 7:30 P.M., and four stations at 10:30 P.M. These two blocks, therefore, actually create the patterns shown. However, it must be noted that, of the eleven interconnected E.E.N. stations broadcasting the series, two do not carry it on Wednesday. Furthermore, those that do carry Wednesday broadcasts, are divided into two distinct time groups. This division of stations is not merely a geographic division. Three upstate New York stations, and the Washington, D.C. station broadcast "Book Beat" at 10:30 P.M., while four Maine stations,

and the New York City station, which helps link the Washington and three New York stations, carry the earlier broadcast. The Philadelphia station situated between New York and Washington, on the E.E.N. interconnection link, chooses to broadcast the program on Thursday evening. Therefore, the stations of the E.E.N., even if they have "Book Beat" available to them by interconnection, do not all follow the schedule of the interconnection distribution.

Despite the influence of the Eastern Educational Network, the information in Tables 26 and 27 is still useful. Even without the influence of the nine E.E.N. stations, Wednesday evening is the most common broadcast evening, and 10:30 P.M. the single most common broadcast time. The distribution of "Book Beat" at 7:30 P.M. EST will allow station to broadcast the program at that time, or to tape the program for broadcast later that evening at 10:30 P.M. A second transmission at 10:30, of course, would be desirable, if network facilities were available.

Another program series distributed by the E.T.S. Program Service is the discussion program "Business Roundtable." This half-hour series is a discussion of business problems with top corporation management. The series is broadcast by forty stations nationwide, twelve of which also repeat the series during the week. Only four stations broadcast the series on weekends, and one station schedules a weekend repeat.

As this series is directed at businessmen, it would be expected that it would be broadcast later in the evening, when adults control their television sets, and when serious discussion programs are normally broadcast. However, as seen in Table 28, only half the stations in the two Eastern time zones broadcast "Business Roundtable" after 10:00 P.M.

TABLE 28

## "BUSINESS ROUNDTABLE"--BROADCAST PATTERNS

Broadcast Period (EST)	Number of Stations	Per Cent of Stations
3:00 P.M. to 7:00 P.M.	2	7
7:00 P.M. to 8:00 P.M.	4	14
8:00 P.M. to 9:00 P.M.	3	11
9:00 P.M. to 10:00 P.M.	5	18
10:00 P.M. to 11:00 P.M.	7	25
11:00 P.M. to 12:00 A.M.	7	25

Weekday distribution of the series, Table 29, shows that a third of the stations broadcast "Business Roundtable" on Wednesday evening. Transmission of "Business Roundtable" at 10:00 P.M. EST on Wednesday evening, would allow the stations to broadcast it live, or tape for later broadcast. The repeats of the series are all carried in the late afternoon, and no pattern exists.

TABLE 29

## "BUSINESS ROUNDTABLE"--WEEKDAY DISTRIBUTION

Weekday	Number of Stations	Per Cent of Stations
Monday	6	21
Tuesday	3	11
Wednesday	10	36
Thursday	8	28
Friday	1	4

The two N.E.T. science series "Experiment" and "Spectrum," can be considered for this analysis as one series. As previously noted, none of the sixty-five stations broadcasting either series carried both, for N.E.T. was phasing in "Spectrum" as the replacement for the six part "Experiment" series. Both series are half-hour programs, both have the same format of film documentary, both concern science topics, and both are directed at the general audience. Most important, the stations merely replaced "Experiment" with the "Spectrum" series in their program schedules.

Of the stations broadcasting the combined science series, twenty-one repeated the program during the week, and fifteen also repeated the series on the weekends. No station restricted its broadcast to the weekend. While there

is no pattern among the repeats, there are patterns among the initial broadcasts by the fifty-five stations in the Eastern and Central time zones. As seen in Table 30, half the initial broadcasts occur before 9:00 P.M. EST, and over a third in the hour period, 8:00 P.M. to 9:00 P.M. EST.

TABLE 30  
SCIENCE SERIES--BROADCAST PATTERNS

Broadcast Period (EST)	Number of Stations	Per Cent of Stations
6:30 P.M. to 8:00 P.M.	7	13
8:00 P.M. to 9:00 P.M.	20	36
9:00 P.M. to 10:00 P.M.	14	25
10:00 P.M. to 11:00 P.M.	13	24
11:00 P.M. to 12:00 A.M.	1	2

The broadcasts of the science series, then, do not follow any conclusive pattern, but rather are spread throughout the evening. Likewise, as seen in Table 31, broadcasts for these two series are also spread through the week, though most common towards the end of the week. The two N.E.T. science series are programed by stations throughout their broadcast schedules. Both series are only half an hour in length, and are unlike the previous programs discussed, in that they are neither how-to-do-it, nor discussion type programs.

TABLE 31  
SCIENCE SERIES--WEEKDAY DISTRIBUTION

Weekday	Number of Stations	Per Cent of Stations
Monday	9	16
Tuesday	6	11
Wednesday	14	25
Thursday	15	28
Friday	11	20

The science programs, then, are flexible enough to fit almost anywhere in the broadcast schedule. Obviously, because of the widespread nature of the broadcasts, no single network transmission can adequately serve all the stations. A transmission on Wednesday evening, perhaps at 8:00 P.M. EST would fit into the general pattern, and make the program available for those who wish to record it for later broadcast.

The series "Museum Open House," distributed by the E.T.S., is a half-hour program devoted to the examination of exhibits in museums in the Boston area. The program is broadcast by only twenty-three stations, only five of which repeat the program during the week, with one network repeating on the weekends. Only two of the twenty-three stations are in the two Western time zones.

As this series is somewhat similar to that of the N.E.T. science series, it might be expected to follow the same general broadcast pattern--that is, of fairly even distribution throughout the broadcast schedule. Indeed, "Museum Open House" is the series that demonstrates the greatest diversity of distribution throughout a broadcast evening. Regarding multi-station networks as a single source because of the influence they have in this case on such a small number of stations, we see in Table 32 that no one hour period in the Eastern and Central time zones include more than 30 per cent of the broadcasts. The only definite trend that develops is that 70 per cent of the program sources broadcast "Museum Open House" before 9:00 P.M. EST. Weekday distribution, Table 33, shows a definite trend

TABLE 32

## "MUSEUM OPEN HOUSE"--BROADCAST PATTERNS

Broadcast Period (EST)	Number of Program Sources	Per Cent of Program Sources
6:00 P.M. to 7:00 P.M.	2	20
7:00 P.M. to 8:00 P.M.	2	20
8:00 P.M. to 9:00 P.M.	3	30
9:00 P.M. to 10:00 P.M.	1	10
10:00 P.M. to 11:00 P.M.	2	20



TABLE 33

## "MUSEUM OPEN HOUSE"--WEEKDAY DISTRIBUTION

Weekday	Number of Program Sources	Per Cent of Program Sources
Monday	..	..
Tuesday	3	30
Wednesday	2	20
Thursday	1	10
Friday	4	40

towards broadcasting the series towards the end of the week, with 40 per cent of the program sources carrying the series on Friday, and no Monday broadcasts. Transmission on Friday would then serve the greatest number of program sources, though it would not allow the other stations to videotape the program for broadcast that same week. Nevertheless, a Friday transmission, perhaps at 8:00 P.M. EST would make the series available to those who desired it, on a night when network transmission would otherwise be providing few programs.

The two series with the lowest broadcast rate in Table 5 are both concerned with reviews of public affairs, and are both distributed by regional networks, with most of the stations belonging to the Eastern Educational Network. The E.E.N. is the only network to distribute "Washington Week in Review," while the series "World Press Review" is

distributed by both the E.E.N. and the Western Educational Network, one of whose stations is the producing agency.

As the E.E.N. is the major distributor, the stations that use the live broadcasts supplied by interconnections naturally dominate any resulting broadcast patterns. Twelve of the thirteen stations involved in E.E.N. interconnection broadcast "Washington Week in Review," live at 8:00 P.M. EST Thursday evening. The other ten stations broadcast the series the next day, or the following weekend, after tapes of the program arrive. Stations in the East carried the program on Friday, the one in the Midwest on Sunday evening, and the stations on the West Coast did not broadcast the series until Monday evening. Clearly, the day of broadcast is closely related to the speed of the mails.

The influence of the E.E.N. is also great in the scheduling of "World Press Review." Half of the stations of the E.E.N. carrying "World Press Review" broadcast it at 7:30 P.M. EST Friday, when the network distributed the program, the other half at 6:30 P.M. on Sunday, when the interconnection again distributed the series. The other eight stations broadcasting "World Press Review" are all part of the Western Educational Network, with no more than three stations broadcasting the series on any one night, Thursday. However, this hardly indicates a broadcast pattern. Because these two series are mainly broadcast by the E.E.N., no implication for the whole nationwide system can be drawn.

The schedule of a single system cannot set a pattern for the whole nationwide system until the other stations have been consulted.

Four series listed in Table 5 are children's programs. Broadcast five days a week, these programs do not present the problem of determining which day is the most convenient for transmission so as to be compatible with station schedules. Three of the series are half-hours, while the fourth is only 15 minutes, which itself presents some scheduling problems.

The series "Misterogers Neighborhood" is a very popular program for pre-school children. Limited by funds to only forty N.E.T. stations, the series has had the financial support of the Sears Foundation, as well as the participating stations themselves. Some 65 new programs are planned, to cost almost \$350,000. Of the thirty-seven responding stations broadcasting "Misterogers Neighborhood," only three stations are in the two Western time zones. Such a successful series would certainly be available to more stations under full interconnection.

In Table 34, we can see that there is a definite concentration of broadcasts of "Misterogers Neighborhood" at 5:00 P.M. EST. This great concentration, however, is due in part to the distribution of the series by the interconnection facilities of the Eastern Educational Network. By regarding the E.E.N. and several other large networks as single programming sources, however, we still see that

TABLE 34

## "MISTEROGERS NEIGHBORHOOD"--BROADCAST PATTERNS

Start of Broadcast (EST)	Number of Stations	Number of Program Sources
4:30 P.M.	1	1
5:00 P.M.	18	4
5:30 P.M.	8	4
6:00 P.M.	7	3

one-third of the originations take place at 5:00 P.M. EST, and the others immediately after. Therefore, a network transmission of "Misterogers Neighborhood" at 5:00 P.M. EST would not only serve those stations presently broadcasting the series at that time, including the E.E.N., but would enable other stations to tape the program for rebroadcast soon thereafter.

"TV Kindergarten" is a children's series distributed by the E.T.S., aimed at pre-school children. Distribution of broadcasts shows a definite pattern, in Table 35, that the great majority of stations in the two Eastern time zones broadcast the program at 5:30 P.M. EST. Only six stations in the two Western zones carry this series. Significantly, none of the E.E.N. stations broadcast "TV Kindergarten."

"TV Kindergarten," like "Misterogers Neighborhood" is directed at pre-school children, and so it is no surprise that they are both programed together in the late afternoon.

TABLE 35

## "TV KINDERGARTEN"--BROADCAST PATTERNS

Start of Broadcast (EST)	Number of Stations	Per Cent of Stations
5:00 P.M.	2	9
5:30 P.M.	16	72
6:00 P.M.	3	14
7:00 P.M.	1	5

Network transmission of "TV Kindergarten" would be most convenient at 5:30 P.M. EST.

The most popular children's series is "What's New," broadcast on 83 per cent of the responding stations. "What's New" is a filmed N.E.T. series, directed at the eight to twelve year old group, that takes children on trips to interesting places. As it is directed at an older age group than the two previous series, we would expect that it would be broadcast later in the evening. Of the sixty-seven stations in the Eastern and Central time zones, a full third broadcast "What's New" during the hour between 6:00 P.M. and 7:00 P.M., and over 40 per cent carry it between 7:00 P.M. and 8:00 P.M. EST (Table 36). Network transmission of "What's New" at 6:00 P.M. EST would enable over three-fourths of the stations to broadcast the program at that time, or tape it for broadcast later that same evening.

TABLE 36  
 "WHAT'S NEW"--BROADCAST PATTERNS

Broadcast Period (EST)	Number of Stations	Per Cent of Stations
4:00 P.M. to 5:00 P.M.	1	1
5:00 P.M. to 6:00 P.M.	14	21
6:00 P.M. to 7:00 P.M.	22	33
7:00 P.M. to 8:00 P.M.	29	43
8:00 P.M. to 9:00 P.M.	1	1

"The Friendly Giant," another series for the pre-school child, is the only series under consideration that is only 15 minutes in length. In general, this series is paired with another quarter hour program, either of local origin, or from outside sources. While broadcast by thirty-eight stations, only nine stations are in the Central time zone, and five more in the two Western time zones. There is no pattern to the broadcasts by the fourteen stations outside the Eastern time zone, nor is there any real pattern of broadcast by the twenty-four stations within the Eastern time zone (Table 37).

While it appears that there are two patterns of broadcast, one at 4:45 P.M., the other at 6:15 P.M., these patterns are the result of network programming. The seven station Georgia network broadcasts the series at 6:15 P.M.,

TABLE 37

## "THE FRIENDLY GIANT"--BROADCAST PATTERN

Start of Broadcast (EST)	Number of Stations	Per Cent of Stations
4:15 P.M.	1	4
4:45 P.M.	9	38
5:00 P.M.	1	4
5:15 P.M.	3	12
5:45 P.M.	1	4
6:00 P.M.	2	8
6:15 P.M.	7	29

and eight stations of the Eastern Educational Network utilize the program offered at 4:45 P.M. by that network.

While only 38 per cent of the stations broadcast the series at 4:45 P.M. EST, the distribution of "The Friendly Giant" at this time would allow stations to tape the program for later rebroadcast if they wish. At that time, it could also serve to lead into the following hour of pre-school programming.

In our analysis of the scheduling of the preceding score of television programs, our major attention has been on the weekday broadcasts of the program, both the initial broadcast and repeats when significant. We have looked at programming patterns nationwide, though we have concentrated

most of our attention to the stations in the Eastern and Central time zones. Stations in the Mountain and Pacific time zones account for less than 20 per cent of the total Educational Television stations, and we have seen in many cases where only a few of these stations have broadcast series that received significant play in the two Eastern time zones. Our search for broadcast patterns, and subsequent recommendations, then, have been mainly concerned with the stations in the two Eastern time zones, realizing that other arrangements, even if just the normal broadcast delay pattern, will have to be made for those stations in the Mountain and Pacific time zones.

Weekend broadcasts have been mentioned when necessary, but until recently they have not been a major factor in Educational Television. The establishment of the "Public Broadcast Laboratory," with its two hour interconnected broadcasts on Sunday evening, encouraged many stations to initiate weekend programming. The survey of programming taken by Brandeis University in April, 1966, found that only forty-one stations broadcast on weekends.<sup>18</sup> However, during the survey week of November 1967, 65 of the responding stations indicated that they were broadcasting on Sunday, and Broadcasting magazine reported that 108 stations carried "PBL"

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<sup>18</sup>Morse Communications Center, op. cit., p. 72.



that Sunday.<sup>19</sup> Clearly, the growth of weekend broadcasting has been phenomenal.

Unfortunately, the programing available for Sunday broadcasts has not increased at the same rate as the demand for it. Therefore, many stations program a complete day of rebroadcasts for their Sunday schedule, with the exception of "PBL." Many series besides these previously mentioned are also rebroadcast on Sunday. As weekend broadcast days are longer than the weekday evenings, and having a different scheduling rationale, programing is spread over a longer period, working against the formation of scheduling patterns. Furthermore, as "PBL" is broadcast live for two hours, it appears at different times in various time zones, thus in effect creating separate broadcasting situations in each time zone. For these reasons, it is difficult to make specific recommendations for weekend transmission based on present program practices. As noted previously, the scheduling of only one transmission of "PBL" forces many stations to broadcast this important program at 5:30 P.M. and 6:30 P.M. which is not conducive to attracting large audiences. The broadcasting of "PBL" in delayed patterns would not only attract larger audiences, but would also enable the stations to establish patterns of broadcasting for other series as well, as their broadcast situations would be similar. The distributing of "PBL" at various times to correspond to the

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<sup>19</sup>Broadcasting, November 20, 1967, p. 62.

time zones, then, is a prerequisite for further common programming on Sunday.

While Sunday broadcasting has arrived with the assistance of "PBL," Saturday broadcasting has yet to become a common practice among the stations. Only 25 per cent of the stations broadcast on Saturday during the survey week, while almost half of the stations maintained a six day broadcast week. The remaining 28 per cent only listed five day week broadcasts, although as previously noted, some added Sunday transmissions with the advent of "PBL." Saturday schedules showed a high rate of repeats of plays, concerts, and discussions broadcast throughout the previous week. Naturally, no pattern of Saturday broadcasts has emerged, for Saturday broadcasting itself has not yet become the normal pattern.

### Summary

The preceding discussion has been concerned with the programming broadcast on Educational Television stations during a week in November 1967. The examination of programming was undertaken in the hope of finding whether or not sufficient programming exists to form a basis for a nationwide Educational Television network. More than twenty programs were found to be broadcast nationally by at least 20 per cent of the responding stations, and undoubtedly, these series are broadcast by many more stations during the course of the year. The programs in Table 5 comprise only 13 3/4 hours of programming a week, which would occupy only half the hours in a station's weekday evening broadcast schedule,

even if it chose to broadcast all the series, which no station did. Therefore, there is ample opportunity for the individual station to present programs of local origination to serve local problems, even if the station has access to a national network.

Furthermore, our study has shown that these series, all scheduled by local station managers and program directors, are not scheduled in a random or arbitrary fashion, but that there are common elements involved in the making of stations' schedules that encourage the scheduling of any series in a rational pattern. Table 38 summarizes the patterns of broadcasting, both day of week and time of broadcast, for the different series. The strength of patterns varies with different series, but each series has enough of a pattern to indicate that the distribution of the series during the evening hours by interconnection is warranted. While many stations, indeed, in many cases a majority of stations, do not broadcast the program at the exact time or on the same day that is indicated by the general pattern, there would be little significant change needed to conform with any live transmission based on the above information. Table 39 proposes a broadcast schedule for the distribution of programming by interconnection based on the preceding information. It is not intended that the schedule in Table 39 be a recommendation for such an interconnected network schedule. The final schedule can only be determined by the station managers working in consultation with each other.

TABLE 38  
BROADCAST PATTERNS --SUMMARY

Series	Per Cent of Stations Broadcasting	Common Day of Broadcast	Common Time of Broadcast (EST)	%
"NET Journal"	92	Monday	9:00 P.M.	100
"Public Affairs"	91	Wednesday	9:00 P.M.	92
"NET Playhouse"	92	Friday	9:00 P.M.	98
"French Chef"	92	Thursday	8:00-9:30 P.M.	30
"Smart Sewing"	57	Tuesday	7:30-8:30 P.M.	33
"Playing the Guitar"	32	Monday	7:30-9:00 P.M.	44
"Folk Guitar"	36	Monday	7:30-9:00 P.M.	32
"Antiques"	27	Thursday	8:00-9:00 P.M.	42
"Creative Person"	87	Tuesday	8:30-10:00 P.M.	37
"Dissenters"	84	Tuesday	7:30-9:00 P.M.	32
"Speaking Freely"	38	Thursday	10:00 P.M.	35
"Book Beat"	25	Wednesday	10:30 P.M.	55
"Business Roundtable"	42	Wednesday	10:00-12:00 A.M.	36
"NET Science Series"	69	Wednesday	8:00-9:00 P.M.	28
"Museum Open House"	24	Friday	8:00-9:00 P.M.	40
"Misterogers Neighborhood"	39	M-F	5:00 P.M.	53
"TV Kindergarten"	30	M-F	5:30 P.M.	73
"What's New"	83	M-F	7:00-8:00 P.M.	43
"Friendly Giant"	40	M-F	4:45 P.M.	37

TABLE 39  
 SAMPLE SCHEDULE OF TRANSMISSION BY AN INTERCONNECTED NETWORK

(EST)	Monday	Tuesday	Wednesday	Thursday	Friday
4:45	"Friendly Giant"	xx	xx	xx	xx
5:00	"Misterogers"	xx	xx	xx	xx
5:30	"TV Kindergarten"	xx	xx	xx	xx
6:00	"What's New"	xx	xx	xx	xx
6:30					
7:00					
7:30	"Folk Guitar"	"Smart Sewing"	"Book Beat"	"Dissenters" (R) *	
8:00		"Dissenters"	Science	"French Chef" (R) *	"Museum Open House"
8:30	"Playing Guitar"	"French Chef"		"Antiques"	
9:00	"NET Journal" (one hour)	"Creative Person"	"Public Affairs" (one hour)		"NET Playhouse" (one hour)
9:30					
10:00			"Business Roundtable"	"Speaking Freely" (one hour)	
10:30			"Book Beat" (R) *		

\*Some possible repeats of programs are indicated to illustrate how they might fit into the schedule.

The programs desired by the stations, and offered by the production agencies, during the coming or future television seasons, may not, indeed probably will not, be the same programming as broadcast during the Fall of 1967. All it is intended to show is that such a schedule is not only possible, but that it can be constructed out of existing broadcast patterns. Naturally, such a schedule will encourage stations to broadcast a program as they receive it from the network. However, in most cases, this only would mean a change from broadcasting the program at 8:30 P.M., to broadcasting it at 9:00 P.M., or from Wednesday to Thursday evening. The present schedules are themselves influenced by the limited availability of programming. Slight modifications of program schedules seem a reasonable price to pay for national promotion and a stature equal to that of the commercial networks, with increased audiences as the result.

Certainly the stations will still have the air time to broadcast as many local programs as they desire and can afford. Indeed, as national programs become easily available, the local station can concentrate all its efforts on local production. Programs distributed by a network, therefore, need not threaten the independence of the local station, but will aid the station in serving the community, both by distributing programs of significance to increased audiences, but also allowing the local station to concentrate on local productions.

## CHAPTER V

### NETWORK PROPOSALS

#### A Brief Review

The establishment of a nationwide interconnected system, or network, for Educational Television will of necessity take into consideration many of the factors that we have discussed in the previous portion of this study. Before examining some of the proposed types of interconnected networks, and making some recommendations concerning such networks, it is best that we briefly state some of the conclusions previously drawn, so that the subsequent discussion is placed in its proper perspective. From our previous consideration of factors involved in the formation of a nationwide interconnection, it is evident that several important concepts have a direct relevance on the future of Educational Television in the United States.

The first of these factors is simply the continual, widespread support for interconnection of Educational Television on all levels. The growing activity in statewide networks, enumerated in Chapter III, is proof of the interest for interconnection on the local and regional level by local stations. As long ago as 1961, the Educational Media

Study panel, an official advisory group of the U.S. Office of Education, endorsed as a guideline, that "the organization of state and regional educational television networks is therefore a desirable development, looking toward the ultimate establishment of a national 'live' interconnected network."<sup>1</sup> At a 1964 conference on the long range financing of Educational Television stations sponsored by the E.T.S. division of the N.A.E.B., representatives of the nation's educational stations recommended that "interconnection is vital to educational television stations and should be implemented first regionally, and then nationally."<sup>2</sup> A second E.T.S. conference on financing of Educational Television, held in 1967, found agreement that there was "need for immediate state, regional, and national interconnection of all stations."<sup>3</sup> The newly established Corporation for Public Broadcasting has encouraged interconnection through the financing of a limited nationwide interconnection of two hours a day, and by encouraging the use of this interconnection opportunity by the regional networks as well. There

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<sup>1</sup>Wilbur Schramm, Educational Television: The Next Ten Years (Stanford: Institute for Communications Research, 1962), p. 10.

<sup>2</sup>Frederick Breitenfeld, Jr., The Financing of Educational Television Stations (Washington: National Association of Educational Broadcasters, 1965), p. 91.

<sup>3</sup>Warren Wade and Serena Wade, The Long Range Financing of Educational Television Stations (Washington: National Association of Educational Broadcasters, 1967), p. 36.



can be no question as to the widespread support that exists for interconnection of Educational Television.

A second important fact that is apparent from our previous study is the foundation which has already been built for a nationwide interconnection system. Network facilities are operational in over twenty states. Much of the hardware necessary for the interconnection of the over 150 Educational Television stations throughout the United States has been constructed and is in use. Through the use of existing statewide and regional networks, a nationwide system could be set up with much less construction and operating costs, and sooner, than would be possible when establishing a completely new system. Furthermore, much of the operating procedures that are utilized by the various state networks can be adapted for use in a nationwide system.

Just as a foundation for the hardware for a national network has been built through the establishment of state networks, so too has the software for a national network developed through the programming practices of the various Educational Television stations. The twenty-two series, examined in Chapter IV, broadcast by at least 20 per cent of the stations surveyed, demonstrate that a significant amount of national programming, in fact, already exists. While these programs are not broadcast simultaneously throughout the nation, as they could be through interconnection, we have found that there is a great deal of similarity among each program's broadcast circumstances. Furthermore,

there is good reason to believe that, due to limited videotape copies, the 13½ hours of programming represented by these twenty-two series is a minimum of potential national programming that is presently available.

As important as the existence of a basis for nationwide programming, is the fact of the diverse origins of that programming. The twenty-two program series discussed reflect a great diversity of production organizations. Half the series are produced and distributed by National Educational Television, while the other half are produced by individual television stations, and distributed by E.T.S. or various regional networks. Many national Educational Television leaders and station personnel have stressed the need for diversity in program production. At the 1964 E.T.S. financing conference, station managers recommended that, in addition to N.E.T., "new [production] agencies should be developed as appropriate and required. Different approaches to programming concepts are necessary."<sup>4</sup> At the second conference on financing, in 1967, station managers reaffirmed that

If more than one [national production center] is established, they should be complimentary rather than competitive; they should be operated under different philosophies, be geographically diverse,<sup>5</sup> and be addressed to different service priorities.

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<sup>4</sup>Breitenfeld, op. cit., p. 90.

<sup>5</sup>Wade, op. cit., p. 26.

The Carnegie Commission on Educational Television, throughout its report Public Television--A Program for Action, speaks of diversity of programming sources. The Commission recommended at least two national production centers, as well as perhaps as many as twenty local stations equipped for major productions for national distribution.<sup>6</sup> The Public Broadcasting Act of 1967 sets out the primary purpose of the Corporation for Public Broadcasting as "(a) to facilitate the full development of educational broadcasting in which programs of high quality, obtained from diverse sources, will be made available to noncommercial educational television."<sup>7</sup>

The great stress on program diversity stems in part from the greatly varying conditions and problems facing the different communities which individual stations serve. Program diversity would aid the task of the local station in providing programming that would serve the unique local needs of the area. Diversity of programming sources would also insure that no one production center would come to dominate programming offered to the individual stations. Such dominance by single network sources has led to little program diversification among commercial television. Finally, the

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<sup>6</sup>Carnegie Commission on Educational Television, Public Television: A Program for Action (New York: Bantam Books, 1967), pp. 42-49.

<sup>7</sup>U.S. Congress, Public Broadcasting Act of 1967, Pub. L. 90-129, 90th Congress, 1st sess., 1967, p. 6 (emphasis added).

insistance, especially by the larger Educational Television stations, on programing from diverse sources helps insure that funds from national sources will be made available to the local stations for production of programs for national distribution. This not only increases the station's income, but also serves to attract and keep high quality production personnel. While the present programing discussed in Chapter IV, reflects its origins from diverse production organizations, the diversity of future program offerings will be an important consideration among local station managers.

A fifth important factor relating to a nationwide interconnection system is the necessity of local station independence. As noted in Chapter II, Educational Television station managers are quite concerned about any encroachment on their independence by national organizations, and stoutly defend their freedom to operate their stations. This fear of domination has led to the guarantee in the Public Broadcasting Act that the Corporation for Public Broadcasting must distribute programing "so that all non-commercial educational television or radio broadcast stations that wish may broadcast the programs at times chosen by the stations."<sup>8</sup> Thus, the stations will never be placed in a position of having to accept a particular program they don't wish to broadcast, or broadcast a program at a time not of their own choosing.

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<sup>8</sup>Ibid.

A final conclusion that can be drawn from our previous studies, and one that is most important to any national network, is the feasibility of cooperation among the many diverse organizations that are involved in Educational Television. Local stations, state and regional networks, national production units and distribution libraries have proven that mutually beneficial cooperation, so necessary for the success of a national network, is practical. Furthermore, in the past months, a limited national interconnection, financed by the Corporation for Public Broadcasting, has been available to most of the nation's educational stations. The cooperation evident in this and other national Educational Television projects are a sign that such cooperation may well be present for the success of a national network.

Each of the preceding six factors will to some degree influence the development of any nationwide Educational Television network in the sense that they provide the existing framework around which a larger system may be built. Yet, this framework provides a great deal of latitude within which a national network may develop. They refer to general philosophical approaches and limitations of an Educational Television network, not to the more difficult problems of translating this philosophy into operational procedures. Much of the previous discussion among station personnel, as we have seen in Chapter II, was a reflection on the philosophy of networking and interconnections, and little on the

actual methods of implementation of these systems. Nevertheless, several leading educational broadcasters, individuals and organizations, have given serious thought to what form and procedures would be appropriate for a national network operation. A review of several of these suggestions at this point will contribute a further perspective on the problems of organizing a national system, and provide additional information on which to base any network proposals.

### Network Proposals

One of the early proposals concerning a nationwide system of Educational Television was made by John White, president of the National Educational Television and Radio Center (as it was then known). Writing in the book, Educational Television: The Next Ten Years, White foresaw that "a nationwide interconnection of ETV stations will become operative. General programing and certain instructional materials, when local demand justifies it, will be distributed by this device."<sup>9</sup> The key word here is "distributed." At this time, White envisioned that interconnection would be used primarily as a distribution device. In a speech to the 1962 N.A.E.B. convention, White elaborated on this.

Some of this programing will be transmitted to the affiliated stations by telephone company long lines. But long lines will be for us essentially a distribution device. Our present system

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<sup>9</sup> John F. White, "Organization and Financing of ETV in the Next Ten Years," in Wilbur Schramm, op. cit., p. 164.

of distribution, which even now is cumbersome, would in ten years be wholly inadequate. We plan to use these telephone lines during off-hours. The stations would record the programs as we transmit them and have them available for broadcast the next day, or whenever they choose to fit them into their schedules.<sup>10</sup>

However, several years later, White felt that network interconnection was the first of three most urgent needs of Educational Television on the national level, "for it will make possible a much more effective program service."<sup>11</sup> N.E.T. then proposed a network connecting the affiliated stations for an eight hour day, from 3 P.M. to 11 P.M., which would be used for both networking and distribution.<sup>12</sup> It appears that White's original proposal that interconnection be utilized solely for distribution has been replaced by the concept of simultaneous broadcasting, at least on a limited basis.

One of the most comprehensive proposals regarding a national Educational Television network was presented to the 1964 conference on financing by Hartford Gunn, General Manager of WGBH, Boston and instrumental in the formation of the Eastern Educational Network. Gunn envisioned several essential steps for strengthening the educational broadcasting

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<sup>10</sup>John F. White, "ETV and the Next Ten Years," N.A.E.B. Journal, XXII (May 1963), 62.

<sup>11</sup>John F. White, "National Educational Television as the Fourth Network," in Allen Koenig and Ruane Hill, eds., The Farther Vision, ETV Today (Madison, Wisconsin: University of Wisconsin Press, 1967), p. 95.

<sup>12</sup>Broadcasting, December 5, 1966, p. 44.

system by providing the individual stations with access to programing resources.

The first of these steps is the strengthening of N.E.T. by the establishment of a live, full time, independent interconnected network, centrally administered by a private board of trustees. Gunn saw several advantages for a live network, besides the usual ones of distribution and immediacy.

More important, the system forces local program decision-making. Instead of being concerned about having a sufficient number of programs, active program selection will be necessary. Quantity and quality of programing would improve.<sup>13</sup>

Gunn realized that there were problems inherent in a centralized interconnection system, so he proposed several restrictions and conditions on the operation of the Educational Television network.

The disadvantages of centralized control can be offset by spreading production of NET programs over 8-10 station production centers, thereby strengthening local stations as well as providing access to greater range of program sources; by strengthening regional networks; by making network membership optional, and by permitting no network option time.<sup>14</sup>

N.E.T. itself would become concerned solely with programing of a national nature; National and International Affairs, Cultural Programing, and Children's Programing. Instructional

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<sup>13</sup>Hartford N. Gunn, Jr., "The Future of Educational Television--Analysis and Recommendations," in Breitenfeld, op. cit., p. 130.

<sup>14</sup>Ibid.



programs would be turned over to another agency, as would technical operations of the network. Thus, Gunn believes, N.E.T. would be

an independent organization, free of local pressures and interests having access to the range of national and international resources. It could bring to broadcasting depth of coverage of crucial issues rarely touched at present.<sup>15</sup>

Gunn's second proposal would be the establishment of a series of regional networks to increase the diversity of programming, and "most important, provide the stimulus of competition of region vs. region, and regions vs. NET, reducing stagnation of ideas and monopoly in programs."<sup>16</sup> As we have seen, such regional networks are in the early stages of operations in many sections of the country.

The third proposal advanced by Gunn is a National Instructional Television Library to serve as a central acquisition, storage and distribution agency of instructional programming. The Library would be an independent agency, governed by a separate board of educators and broadcasters, and financially self-supporting from rental fees. Such a library has since been established and operated successfully in Bloomington, Indiana.

The fourth, and most significant proposal by Hartford Gunn was for the establishment of an Educational Broadcasting Board. This would be a non-profit corporation representing

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<sup>15</sup>Ibid., p. 131.

<sup>16</sup>Ibid.

various Educational Television organizations, networks, foundations and the public, to be located in Washington. The E.B.B. would oversee the operations of the network already proposed.

The essential purpose of the EBB is to place control of the television and radio network system in the hands of a neutral body which has the responsibility of operating an economical and efficient interconnection system of high quality and allocating use of the facilities. The backbone of the system would be a two-way interconnection between regional production centers, and one-way distribution to stations in the regional networks.<sup>17</sup>

The Educational Broadcasting Board Gunn proposed would operate in three general areas: operating the interconnection on behalf of regional and national networks, aiding the advancement of Educational Television stations and networks, and making grants for the improvement of regional and local programs. This Board, first proposed by Gunn in 1964, has much the same function as the subsequent Corporation for Public Broadcasting, created by Congress in 1967. The Instructional Library, and regional networks likewise have developed and grown.

Another individual who has expressed much concern over the development of a national network, and who has also offered several suggestions regarding its organization is Donald R. Quayle. Like Hartford Gunn, Quayle has been involved with the Eastern Educational Network, serving as its

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<sup>17</sup>Ibid., p. 132.

director from 1964 to 1968. Writing from the perspective of three years of regional network operations (though with limited experience with actual interconnections, as the E.E.N. could not yet afford them) Quayle's 1967 proposal follows the path advanced by Gunn three years earlier.

Where Gunn proposed a single channel interconnection, Quayle proposes a national system composed of many channels. Quayle realizes that there are many different kinds of Educational Television stations, which have, to some degree, different purposes and priorities. A single channel, even with a time sharing plan among different program sources, could not serve these various interests. A multi-channel network could mean great diversity of programming available to the local station, and "the strength of the individual station will have to depend a great deal on the range of choices it has to select from."<sup>18</sup> This range of programming could be increased by having "multiple national sources for programming in both the general and instructional areas. . One of these could result from a consortium of regional networks."<sup>19</sup>

It is clearly the regional network which forms the basis of Quayle's national system. Quayle feels that there are eight regions of the United States that are based on political and social attitudes, and each region should have

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<sup>18</sup> Donald R. Quayle, "The Regional Network," in Koenig and Hill, op. cit., p. 124.

<sup>19</sup> Ibid., p. 125.

its own regional television network.<sup>20</sup> These regional networks, Quayle believes, could well be patterned after the structure of the Eastern Educational Network, which has successfully formed such an organization. The networks would then control interstate interconnections, feeding every intrastate system within the region. The regional networks would work together to determine national interconnection policy.

We therefore propose that all member stations in each region be interconnected in a regional network pattern with a ground based station. Each network headquarters would control the basic regional system which may or may not be via a grouping of state systems. The network headquarters performance must acquire a master control facility with switching and, at least, film and videotape origination capability. . . .

We would propose that an organization of regional networks would enable the network directors and program directors to meet monthly to solve administrative and programming matters.<sup>21</sup>

Looking beyond present technology, Quayle foresees the use of synchronous satellites as a means of interconnections between regional networks, and as providing still greater programming resources. Each regional network headquarters would be equipped to serve as a sending and receiving point, linking a communications satellite with the stations in its region. Programs from one region could then be transmitted via satellite to all other regions. If an eight

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<sup>20</sup>Ibid. Quayle speaks of the Northeast, Southeast, South, Midwest, Plains, Southwest, Northwest and the Far West as regions that could support regional networks.

<sup>21</sup>Ibid., p. 126.

channel satellite were available, there would, theoretically, be no need for a national scheduling board. With an eight channel satellite

the regional networks would beam their entire service to the satellite constantly and could select to receive from the satellite any of the programs being transmitted by other regions. This would be a truly grass roots network since national origination could come, conceivably, from any station in the country.<sup>22</sup>

Operating from within a regional network, Quayle sees the growth of Educational Television along regional lines. The regional network he proposes, patterned after the E.E.N., would be under the direct control of a Board of Trustees composed of the station managers of every member station, along with representatives from other related organizations. (A more detailed description of the E.E.N. operational structure is included in the section concerning the E.E.N. in Chapter III.) Nevertheless, Quayle realizes the importance for true national interconnection as well. Indeed, he feels strongly that "interconnection of all ETV stations on a state, regional and national basis is an absolute necessity."<sup>23</sup> Such a network would perform a needed service in both simultaneous transmission and program distribution to the local stations. Quayle believes that the regional network fits between the state and national network, and that all are important for the future of Educational

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<sup>22</sup>Ibid., p. 127.

<sup>23</sup>Ibid., p. 120.

Television. Quayle has since taken a leave of absence from the Eastern Educational Network, and has joined the Corporation for Public Broadcasting as a special consultant for networking.

The type of service that a national Educational Television network intends to provide will determine, to some extent, the internal organizational set up and operational procedures of that network. Once programming objectives have been established, the structure of the network must be designed to adequately provide the service that the stations desire. Therefore, attitude toward programming is just as important a determination in planning for national interconnection as is attitude toward organizational structure. During the summer of 1967, the E.T.S. Program Service of the N.A.E.B. conducted its annual Program Interest Survey. A portion of this survey concerned station attitudes towards E.T.S.'s use of interconnection, and types of programs that E.T.S. should distribute by network facilities, once they become available. While the survey was intended to serve as a guide for future E.T.S. programming, the results, in fact, reflect the local stations' interests in programming provided from national sources. As the number of national programming sources are limited, the stations are more concerned with obtaining programming that will serve their local needs, than what organization is the distribution agency. As seen in Table 5 in Chapter IV, the type of evening programming distributed by each agency is quite similar in concept, whether

that agency is N.E.T., E.T.S. or the regional networks. Station attitudes towards programing, as reflected in the E.T.S. survey, or in the N.E.T. survey to be discussed later in this chapter, can be considered as applying to programing from many national and regional sources.

Eighty-six responses were obtained from the E.T.S. survey, which represented the management of 123 separate stations. Several respondents offered more than one reply. The stations were asked:

What types of programs would you like to see ETS/PS distribute by interconnection (should it become possible)?<sup>24</sup>

None, stay with tape and film distribution . . .	10
Only dated programs (such as news analysis) . .	23
Be selective, let the Program Committee decide .	47
All color programs . . . . .	23
Anything and everything . . . . .	8

It can be seen that only a small minority, 9 per cent, feel that no distribution should be done by interconnection, and an equally small minority feel such distribution should be almost unlimited. Half the respondents feel that the same procedures as used by E.T.S. for tape distribution be used for selection of programing for interconnected distribution--the reliance on a representative Program

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<sup>24</sup>E.T.S. Program Service, "Program Interest Survey," September 1967, p. 2 (mimeographed).

Committee. E.T.S. programing has been selected by a committee of six station programers, who rely on their judgment and consult previous station surveys.<sup>25</sup> The responding stations feel that such a representative body should also determine the programs to be carried on interconnection. Many stations felt that interconnected distribution should only be utilized for timely programs, and a substantial number of respondents suggested that the programs distributed should be in color.

The E.T.S. Program Interest Survey also asked the stations the relative importance they placed on the distribution of several different types of programs. A score of program categories were ranked with regard to interconnection, as least important, important and most important. Of the twenty program categories, a majority of responses felt that interconnection was most important for only one type of program, news analysis.<sup>26</sup> Over half the respondents, however, felt that interconnection was important or most important in several other program areas: series about politics; community affairs; performance--dance; performance--drama; performance--music; and sports events. Other program categories, such as children's programing, how-to-do-it programs, and series about art, music and literature were

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<sup>25</sup>Ibid., p. 1.

<sup>26</sup>Ibid., p. 10.



ranked as least important for interconnection by a majority of the survey respondents.

In summing up the station's attitudes towards interconnection, the E.T.S. report offers some generalized statements regarding selection criteria for interconnection and distribution of programming. The report concludes:

The factors which seemed to influence the stations in their choice are:

1. Timely programs, such as news analysis, need immediate distribution to keep from going out of date before they can be aired.
2. Major performance programs (dance, drama, and music) can benefit from simultaneous distribution--primarily because they can be more adequately promoted to the public.
3. Other programs, those not of a timely nature and those which can be successfully promoted locally, are best utilized by stations when they schedule them through tape distribution--thus broadcasting them when the station needs them.<sup>27</sup>

The 1967 E.T.S. Program Interest Survey provides several guidelines as to the type of programming for distribution by interconnection by local Educational Television stations, and methods desired for their selection. Any national network, truly designed to serve the needs of the individual stations, will have to seriously consider the recommendation that

Most stations are primarily interested in receiving color programs, dated programs, and major performance programs by interconnection--with

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<sup>27</sup>Ibid., p. 11.

other programs remaining in tape distribution. The stations are also willing to have the program committee make specific determinations on inter-connected program distribution.<sup>28</sup>

During the same period that the E.T.S. was conducting its survey, an additional study of station attitudes toward network interconnection was being conducted by the Affiliates Committee of N.E.T. In January 1967, a special Network Allocations Council, a subcommittee of the Affiliates Committee, was appointed to study the problems and impact that interconnection would have in N.E.T. affairs. This Council, composed of five program directors, each from a different geographical region, and two members of the Affiliates Committee, proceeded to seek the reactions of the local station managers to several proposals concerning the operation of a national interconnected network. Responses were elicited on a regional basis, and responses ranged from 75 per cent in one region downward to 30 per cent in the lowest response region.<sup>29</sup> The actual number of responses, or national return percentage, unfortunately, was not disclosed by the Network Allocations Committee in their final report.

At the 1967 Fall meeting of N.E.T. Affiliates, the Network Allocations Council reported on the responses to

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<sup>28</sup>Ibid., p. 13.

<sup>29</sup>National Educational Television, "Report of the Network Allocations Council--A Subcommittee of the Affiliates Committee of NET," November 1967, p. 2 (mimeographed).

their proposals. These proposals dealt with specific aspects of network operations, and the station responses to these proposals are an important indicator as to local station attitudes toward a nationwide network. The stations responded to eleven different statements submitted by the Network Allocations Council. Because of the importance of these responses, and for the sake of brevity, we have taken the Council's summaries of the stations' responses from the written report. In all cases, it was to be assumed that the interconnection would be available for an eight hour period. The Council report summarized the station responses:

1. The 4-12 midnight EST or 3-11 CST and the two hour delay for the Mountain and Western zones was looked upon with favor. The Midwest group raised the question whether or not the 8 hour per day period had to be the same, that is, from 4:00 p.m. to midnight EST each day of the week. From the group came suggestions that on the weekend a Saturday morning (in one case Sunday morning) a feed of quality children's programs would definitely be desirable.
2. PA-1 ["NET Journal"] and PA-2 [the Wednesday Public Affairs block] would be taken on the line at 9:00 p.m. EST with the recommendation that PA-2 be designed for more immediacy than is now possible under the present distribution schedule. Stations on the West Coast would prefer a straight through feed of prime time programs at the original feed time, that is PA-1 feed 9:00 p.m. EST would then hit the West Coast at 6:00 p.m. PST, allowing the West tape and play at 9:00 p.m. PST if NET could not arrange four delay times accommodating each of the time zones. There was a strong endorsement of the first hour feed by several of the Midwest stations and stations from the West Coast. Also some West Coast opposition expressed to PA-1 and PA-2 at the 8:00 p.m. time (a normal feed time for the West Coast) since there are patterns of out-of-door recreation which suggest that an audience is just not at home until after dark

and available to view programs fed at that hour. The early hour feed would permit tape recording and a tape delay broadcast and thereby answer most of the objections on this point.

It should also be noted in this connection that some stations do preview all shows sent to them by NET, but this was not an overwhelming requirement. Therefore, it was recognized that immediacy was an important ingredient and an important characteristic of network capability. Further, NET's track record of providing acceptable programming relieved the stations of the anxiety in the acceptance of shows without preview since they were no longer gun shy about content and approach that NET might take in its offerings.

3. Would the stations like to see CA-1 ["NET Playhouse"] on Sunday night rather than on Friday? Here, the responses were pretty evenly divided. The negative response came mainly because of the present PBL commitment in the Sunday night slot. Those who indicated "yes" response assumed of course that the feed of CA-1 would either precede or follow the PBL commitment and therefore, would be sustained as a part of the Sunday night schedule for their community.
4. Use of the network lines for a strictly distribution function. Stations felt there were advantages in use of lines for distribution purposes. Suggested were the following as examples: CA-3 ["Experiment" and "Spectrum"] might be fed at 7:30 and 10:30 on Monday, PA-3 ["Dissenters"] fed at 7:30 and 10:30 on Tuesday. In either instance the station may opt to record the materials for a later broadcast or, if schedule permitted on-the-air origination at the time the program was distributed, either 7:30 or 10:30.

For some stations, however, there was a preference suggested that instead of programs of this kind from NET's regular strips other program sources might well be fed on the line or NET might use the lines for other purposes. For example, several stations suggested that it might be a good idea for NET to provide strictly informational or promotional type feeds down the line and on a regular basis. There were others who suggested sufficient flexibility to accommodate a break-up of the network for regional feeds

and scheduling this possibility by breaking up the block of time to make this possible.

5. The principle of preemption [of national programming by the network for other programming] was acceptable to stations in the several regions but there was an insistence that a mechanism be set up to make the preempted program available by feeding this program down the line earlier in the day so that the station could, if desired, record and play the same day or at a rescheduled time. An alternative would be a NET reschedule at a later date on a total interconnect basis with the option at that point for the station to broadcast or record for later playback.
6. Should prime time be made available on the network for programs of National interest where these programs are produced by a regional network. It was recommended that a study be made of the rate and tariff problems and any other factors for purposes of providing information on a split network configuration. It would seem feasible then that the separate regions would have the possibility not only to originate programs and offer them for the National network, but it would be possible for them to offer cooperative programming within the region. This might be set up then on a regular schedule so that not only a certain number of hours each week, but a certain period of time each week would be devoted exclusively to regional intra-regional interconnect.
7. With regard to the question of ways other organizations or program services might use the network, the Council invited a representative of ETS to respond. Other national regional groups will have an opportunity to respond to the Council and provide information with respect to the organization's or group's interest in the matter.  
The ETS reply was as follows:
  1. It would be useful to have available to ETS the total interconnection potential for the very heavily scheduled series for which they now have insufficient copies to provide an adequate service to the stations desiring to use this series.

2. Interconnection would make it possible for ETS to increase distribution of more topical series.
3. The interconnection would permit distribution of ETS programs that might be available in color.
8. Would repeats and variety of other program sources fed on Saturday help initiate Saturday's service? Here the reaction ranged from (1) agree with the principle, but it would have no priority, (2) yes, Saturday feed is a good idea, but it should be in the area of children's programming and particularly, a new concept in children's programming to give up something to offer against the commercial network fare of cartoons.

It seemed quite obvious from the responses that there was reflected in the response some notion of whether or not the station was now presently broadcasting on Saturday. Those who are broadcasting felt that they were individualizing their service in such a way that they would prefer to stay with the present program schedule offering not only specialized programs of special interest, but educational and other selected types available to audience that's only available on Saturday morning.

9. On the matter of children's program distribution by shipment rather than interconnection, the regions were divided on the matter. For example, the East, without qualification, said, "no we want children's programs sent to us by an interconnected network"; the West felt that programs (children's) via interconnection would have a low priority; the Mountain region indicated that interconnection would make seasonable programming and specials possible and encouraged interconnection for this reason. This was similar to the Midwest where several of the stations felt strongly about the matter of children's programming and the potential that was possible through interconnection.
10. There was general agreement that flexible program service distribution by interconnection had low priority.

11. Generally speaking, the stations felt that "if time permits" extra networking possibilities such as special distribution for local press previews, for local preview of controversial programs, or for station reactions to programs under consideration would be an acceptable idea. At the same time stations were quick to recognize, however, that even in an 8 hour day it will not be possible to do everything that has been suggested. Several stations in the Midwest responding to No. 11 suggested that distribution of promotional spots should have a high priority in relation to the other four items.<sup>30</sup>

The results of the N.E.T. Network Allocations Committee's survey of N.E.T. members has a great deal of significance for the programming of a national Educational Television network. This survey is perhaps the most comprehensive ever taken regarding the local station's attitudes toward the service to be provided by a national network. Many suggestions were advanced which would insure that a national network would provide the highest level of service as possible. The stations, however, are jealous in guarding their independence of operations, and brought up several positions which stress the flexibility of service desired, so they would have several options available for their own programming. The stations agreed to preemption of regular programming where necessary, but insisted that they have access to the preempted program, so as not to be dependent on the network.

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<sup>30</sup> Ibid., pp. 2-5.

In general then, the N.E.T. stations looked upon networking as a means of strengthening their existing service, rather than something that would drastically alter Educational Television as it has developed. In this sense, the national network must fit into the status quo of Educational Television. With regard to the status quo, it should be noted that several of the N.E.T. survey suggestions as to programing reflect the common programing practices, as we have discovered in our previous study. The stations suggested that the N.E.T. PA-1, "NET Journal" and PA-2 program, the Wednesday evening Public Affairs block of programs, be taken on the line at 9:00 P.M. EST. The sample transmission schedule, Table 39 of Chapter IV, based on present programing practices already show that the stations tend to program these series during this time period. Likewise, the stations suggested that the CA-3 program "Spectrum" be scheduled at 7:30 P.M. and 10:30 P.M. Table 30 shows that 36 per cent of the stations program this series between 8:30 P.M. and 9:00 P.M. and Table 39 has assigned it to an 8:00 P.M. time period. The coorelation between the results of the N.E.T. Network Allocations Committee survey, and the present study, illustrate that the stations themselves are aware to some extent of their programing practices, and that common programing does indeed exist, even without general nationwide planning.

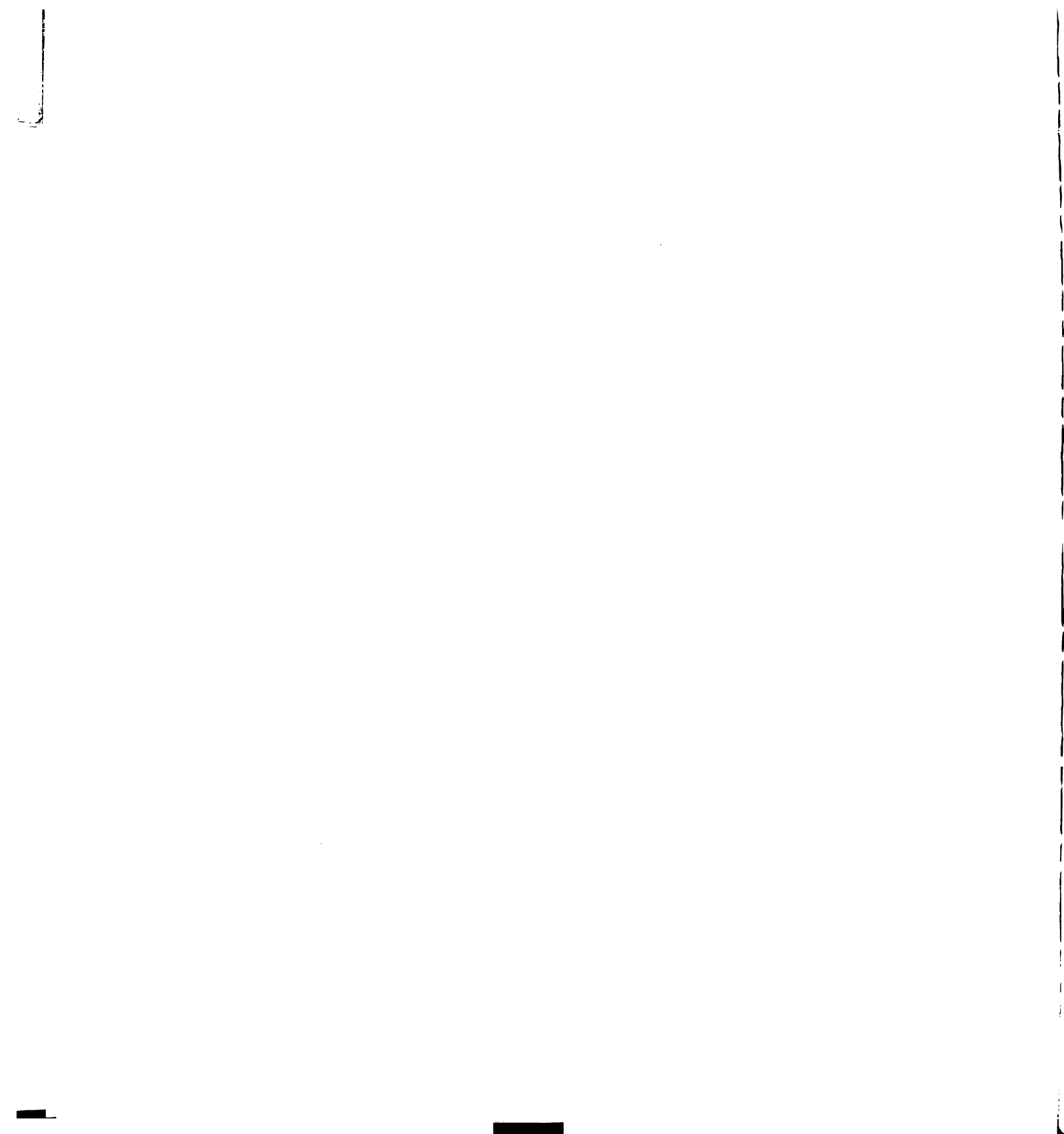


The suggestions advanced by these five individuals and organizations provide many specific proposals for the actual operation and utilization of a national educational network. They help fill out some of the framework that has been developed throughout this study, and summarized at the beginning of this chapter. Several of these suggestions, no doubt, are somewhat contradictory. Nevertheless, they all exhibit the careful thought of those involved in Educational Television in the United States, and could, along with material gained from this study, serve as the basis for some recommendations concerning the future of educational broadcasting. Utilizing the material gained from this study of programing practices and station attitudes, we may now turn towards some recommendations for future action.

#### Some Recommendations for Consideration

While the primary purpose of this study was not that of designing a model national Educational Television network, we would feel remiss if we concluded without taking the opportunity to make some recommendations regarding such a network's structure. These recommendations will not refer to a completely detailed network model, but rather to a clearly defined framework within which the activities of such a network can adequately operate.

1. The national network should utilize those existing interconnection facilities where possible. This would include regional and state networks and local interconnections.



2. The national network should give some compensation to the regional or state networks for the use of their facilities for networking. This compensation would be a portion of the savings that the national network realizes by using existing facilities. The money given to the state and regional networks would be used only for programming on a state or regional level, thereby strengthening local programming. Such compensation would also equalize the benefits that all regions of the country receive from the national network, whether or not a regional or state network is already established.

3. In those areas where there presently are no state or regional networks, the facilities of the national network can be utilized for their formation. However, it would be anticipated that the stations would form their own networks as well, as they would have access to the facilities on a full time basis, not just the hours that the national network is in operation.

4. The national network would be built on a tier system of distribution. The national network would feed the regional networks at their central point, which would in turn distribute the programs to the state networks. The state networks would then interconnect the individual local stations. This system would incorporate the existing systems and facilities, and readily allow for regional and state programming.

5. The national network should be able to be fed programing from all regional network headquarters. This will enable national distribution of regional programing, as well as live coverage of events nationwide. The regional networks in turn should have two way links with the headquarters of state networks, and major production centers for both regional, and national distribution. This would enable a diversity of programing sources.

6. A fully developed system could have three channels, one for origination for national distribution of programing by local stations, one for regular network transmission, the third for additional programing from regional or state networks, specialized programing for limited audiences, or distribution of programing to be preempted by special events. This would contribute toward the diversity of programing available to the local station, and make programing produced anywhere in the country available to all stations.

7. Every station should have a switching capability so it could record programs from the network while broadcasting separate programing, and not effect the reception of the network transmission by the next station on the line.

8. The network should operate as a single entity, with its own network identification, logos, and promotional spots for programs distributed nationally over its facilities. In this way, the network can achieve a stature in the public mind equal to that of its commercial competition.

9. The right of any station to broadcast, or refuse to broadcast, any program at its option would be guaranteed. This is the only way to insure the independence of the local stations.

10. The actual day-to-day operations of the network should be under the administration of N.E.T. The Corporation for Public Broadcasting is specifically prohibited from owning or operating any network or interconnection system. N.E.T. is the only Educational Television organization with experience in operating interconnections on a nationwide basis. It has the necessary staff, resources, and technical experience to handle such a nationwide operation. E.T.S., the only other national Educational Television program service, has operated mainly as a tape and film library. The establishment of a new and separate organization to handle the national network would be time consuming, expensive, and duplicative of much of what N.E.T. is presently doing. A separate network organization would also attract those personnel now engaged in other Educational Television activities. N.E.T. could handle the national network on a contractual basis, without it being identified as a N.E.T. network, if that were desirable.

11. Perhaps one of the most difficult decisions in the formation of a national network would be the composition of the group that would be responsible for the selection of programming. The programming of the network should be under the supervision of a Network Programming Committee. This

committee would be made up of representatives of the various national programing organizations, such as N.E.T., E.T.S. and C.P.B., along with representatives of the regional networks. These representatives should be the individuals responsible for that organization's program operation, plus a station manager selected by the organization membership. Thus both national organizations, and station managers, will participate in the determination of the network schedule.

12. The Network Programing Committee would allocate blocks of time on the network for programing by each production organization. Each organization would then determine what programing it would distribute on the network, after consultation with station representatives. This is similar to the procedures presently used by the producing organizations in the selection of their programing. The Network Programing Committee would also be responsible for the pre-emption of regular programing for the transmission of special broadcasts.

13. Regular time periods would be set aside on a daily basis, in the late afternoon or on weekends, for distribution of programing designed for non-simultaneous transmission. This would include previewing of new series and controversial programing, and also make possible distribution of programing to be preempted by anticipated special programing. Programs from film libraries could also be distributed during this time period, as well as informational and promotional programs.

14. Specific time periods would be reserved for use for distribution of regional and state network programming, when no national programming would be carried by the network.

15. Obviously, the only way that the network can be successful is to meet the changing demands placed upon it by the members. The time allocations determined by the Network Programming Committee will undoubtedly need continual revision, as the programming tastes of the stations, and programming capabilities of the national, regional and state production organizations change. The initial time allocations, then, will not be crucial. What will be much more important will be the station's and audience response to the programming, and the subsequent revisions of the network schedule.

We have throughout this study been concerned with the growth and development of the concept of a national interconnected network for Educational Television. We have traced the attitudes and practices regarding interconnection on the local, state, regional, and now national level. We have surveyed over 130 stations, countless national and regional organizations, and the available literature, in an attempt to place the problems raised by the establishment of an Educational Television network in their proper perspective. We hope that we have gathered in one place enough information to serve as background for use during the formative period of such a network. Realistically, the final organization of a national network will be determined

by the hard bargaining of those parties involved, and the circumstances and finances of the times. We hope, however, that some of the lessons from this study of the problems involved will be of some assistance.



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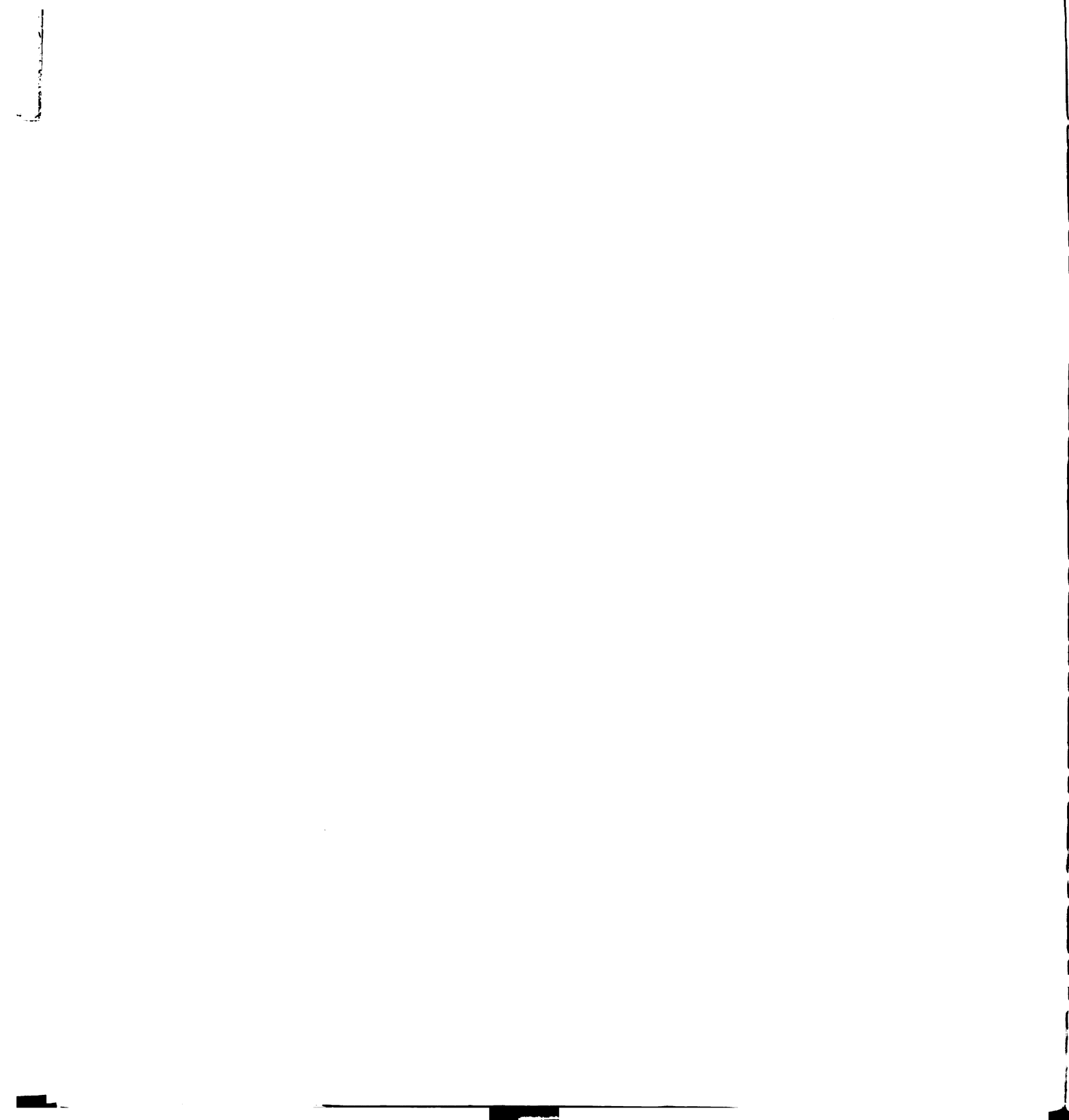
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## **APPENDICES**

APPENDIX I

EDUCATIONAL TELEVISION STATIONS  
BROADCASTING JANUARY 1967

Alabama

\*WBIQ Birmingham  
\*WCIQ Cheaha  
\*WDIQ Dozier  
\*WHIQ Huntsville  
\*WEIQ Mobile  
\*WAIQ Montgomery

Arizona

\*KAET Phoenix  
\*KUAT Tucson

Arkansas

\*KETS Conway

California

\*KCET Los Angeles  
KIXE Redding  
KVIE Sacramento  
\*KVCR San Bernardino  
\*KQED San Francisco  
\*KTEH San Jose  
\*KCSM San Mateo

Colorado

\*KRMA Denver

Connecticut

\*WEDH Hartford

Delaware

\*WHYY Wilmington

District of Columbia

\*WETA Washington

Florida

\*WUFT Gainesville  
\*WJCT Jacksonville  
\*WTHS Miami  
\*WSEC Miami  
\*WMFE Orlando  
\*WFSU Tallahassee  
\*WEDU Tampa  
\*WUSF Tampa

Georgia

\*WGTV Athens  
\*WETV Atlanta  
\*WCES Wrens  
\*WCLP Chatsworth  
\*WJSP Columbus  
\*WABW Pelham  
\*WVAN Savannah  
\*WXGA Waycross

Hawaii

\*KHET Honolulu  
\*KMEB Wailuku

Idaho

\*KUID Moscow

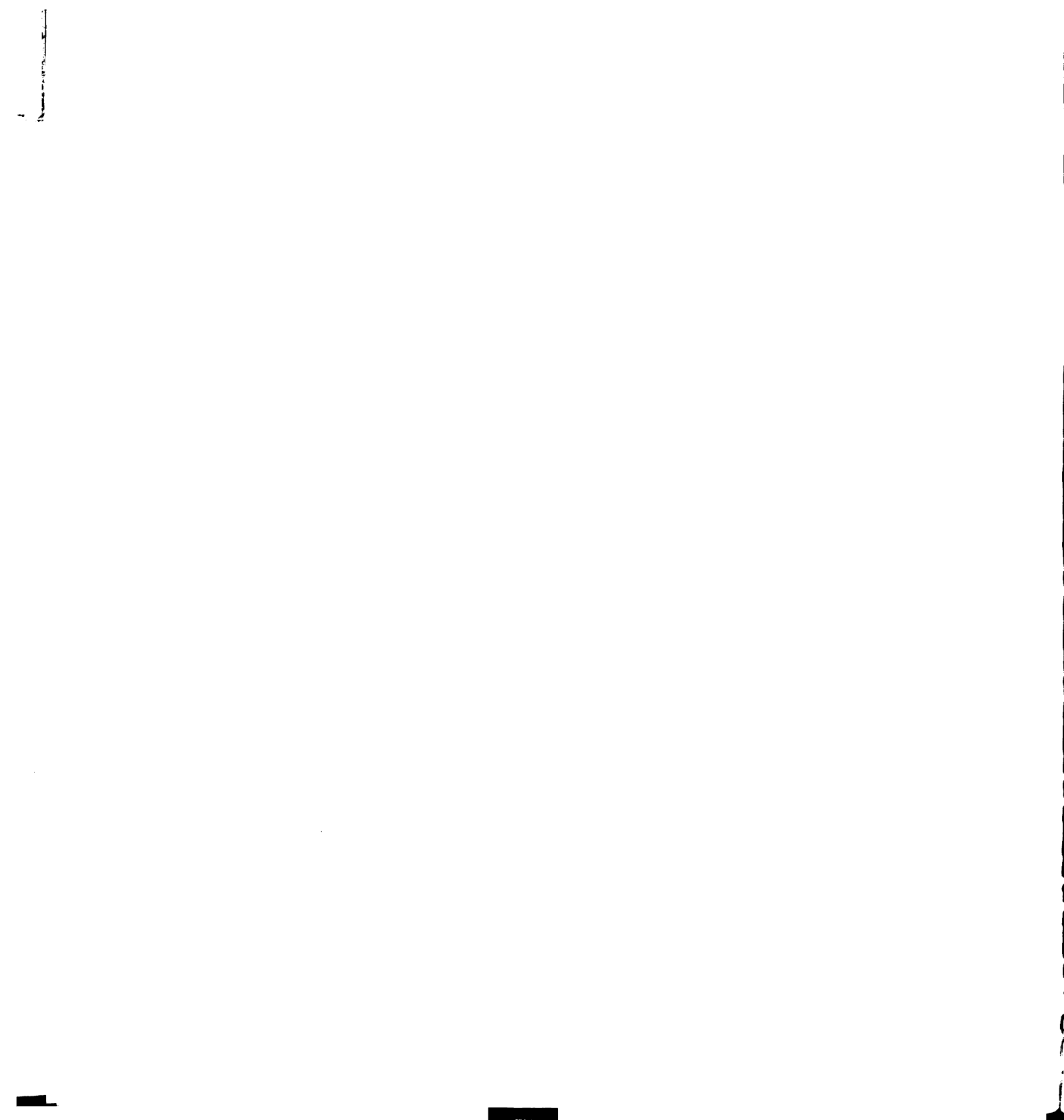
Illinois

WSIU Carbondale  
\*WTTW Chicago  
\*WXXW Chicago  
\*\*WILL Urbana

Iowa

\*KDPS Des Moines





Kansas

\*KTWU Topeka

Kentucky

\*WFPK Louisville

Louisiana

\*WYES New Orleans

Maine

\*WCBB Augusta

\*WMED Calais

\*WMEB Orono

\*WMEM Presque Isle

Massachusetts

\*WGBH Boston

Michigan

\*WTVS Detroit

WMSB East Lansing

\*WUCM University Center

Minnesota

KWCM Appleton

\*WDSE Duluth

\*KTCA Minneapolis-St. Paul

\*KTCI Minneapolis-St. Paul

Missouri

\*KCSD Kansas City

\*KETC St. Louis

Nebraska

\*KTNE Alliance

\*KLNE Lexington

\*KUON Lincoln

\*KYNE Omaha

\*KTNE North Platte

New Hampshire

\*WENH Durham

New Mexico

KNME Albuquerque

New York

\*WNED Buffalo

\*WNBT New York

\*WNYC New York

\*WXXI Rochester

\*\*WMHT Schenectady

\*WCNY Syracuse

North Carolina

\*\*WUNC Chapel Hill

\*WTVI Charlotte

\*\*WUND Columbia

North Dakota

\*KFME Fargo

Ohio

\*WOUB Athens

\*WBGU Bowling Green

\*WCET Cincinnati

\*WVIZ Cleveland

\*WOSU Columbus

\*\*WGSF Newark

\*WMUB Oxford

\*WGTE Toledo

Oklahoma

\*KETA Oklahoma City

\*KOED Tulsa

\*KOKH Oklahoma City

Oregon

\*KOAC Corvallis

\*KOAP Portland

Pennsylvania

\*WLVT Allentown

\*WITF Hershey

\*WUHY Philadelphia

\*WQED Pittsburgh

WQEX Pittsburgh

\*WVIA Scranton

\*WPSX University Park

South Carolina

\*\*WITV Charleston

\*\*WRLK Columbia

\*\*WNTV Greenville

South Dakota

\*\*KUSD Vermillion

Tennessee

\*WKNO Memphis

\*WDCN Nashville

Texas

\*KIRN Austin

\*\*KERA Dallas

\*KUHT Houston

KTXT Lubbock

\*KRET Richardson

APPENDIX II

POST JANUARY 1967 STATIONS PROVIDING INFORMATION  
CONCERNING PROGRAMING

Alabama

WFIQ Florence

Connecticut

WEDW Bridgeport

WEDN Norwich

Georgia

WACS Dawson

Massachusetts

WGBX Boston

Nebraska

KMNE Bassett

New Hampshire

WEDB Berlin

WHED Hanover

WEKW Keene

WLED Littleton

North Carolina

WUNF Asheville

WUNG Concord

WUNE Linville

South Carolina

WEBA Allendale

WJPM Greenville

South Dakota

KESD Brookings

Vermont

WETK Burlington

WVER Rutland

WVTB St. Johnsbury

WVTA Windson

APPENDIX III

EASTERN EDUCATIONAL TELEVISION NETWORK  
FALL, 1967

Interconnected Stations

Maine

WCBB Augusta Ch. 10  
WMEB Orono Ch. 12  
WMEM Presque Isle Ch. 10  
WMED Calais Ch. 13

New Hampshire

WENH Durham Ch. 11  
WEBD Berlin Ch. 40  
WLED Littleton Ch. 49  
WHED Hanover Ch. 15  
WEKW Keene Ch. 52

Vermont

WETK Burlington Ch. 33  
WVTB St. Johnsbury Ch. 20  
WVTA Windsor Ch. 41  
WVER Rutland Ch. 28

Massachusetts

WGBH Boston Ch. 2

Rhode Island

WSBE Providence Ch. 36

Connecticut

WEDH Hartford Ch. 24  
WEDN Norwich Ch. 53  
WEDB Bridgeport Ch. 49

New York

WNDT New York Ch. 13  
WMHT Schenectady Ch. 17  
WCNY Syracuse Ch. 24  
WXXI Rochester Ch. 21  
WNED Buffalo Ch. 17

Pennsylvania

WHYY Philadelphia Ch. 12

District of Columbia

WETA Ch. 26

Tape Distribution

Pennsylvania

WLVT Bethlehem Ch. 39  
WVIA Scranton Ch. 44  
WITF Hershey Ch. 33  
WPSX University Park Ch. 3  
WQED Pittsburgh Ch. 13

APPENDIX IV

CENTRAL EDUCATIONAL NETWORK  
FALL, 1967

Tape Distribution

Ohio

WOUB Athens Ch. 20  
WCET Cincinnati Ch. 48  
WVIZ Cleveland Ch. 25  
WOSU Columbus Ch. 34  
WGSF Newark Ch. 28  
WGTE Toledo Ch. 30

Michigan

WTVS Detroit Ch. 56  
WMSB East Lansing Ch. 10  
WUCM University Center  
Ch. 19

Indiana

WTIU Bloomington Ch. 30

Illinois

WSIU Carbondale Ch. 8  
WTTW Chicago Ch. 11  
WILL Urbana Ch. 12

Wisconsin

WHA Madison Ch. 21  
WMVS Milwaukee Ch. 10

Iowa

KDPS Des Moines Ch. 11

Missouri

KCSD Kansas City Ch. 19  
KETC St. Louis Ch. 9

North Dakota

KFME Fargo Ch. 13

South Dakota

KUSD Vermillion Ch. 2

Nebraska

KUON Lincoln Ch. 12

Nebraska ETV Network

KTNE Alliance Ch. 13  
KLNE Lexington Ch. 3  
KYNE Omaha Ch. 26  
KTNE North Platte Ch. 9  
KMNE Bassett Ch. 7

APPENDIX V

WESTERN EDUCATIONAL NETWORK  
FALL, 1967

Tape Distribution

Washington

KPEC Lakewood Center Ch. 56  
KWSC Pullman Ch. 10  
KSPS Spokane Ch. 7  
KTPS Tacoma Ch. 62

Oregon

KOAC Corvallis Ch. 7  
KOAP Portland Ch. 10

California

KCET Los Angeles Ch. 28  
KVIE Sacramento Ch. 6  
KVCR San Bernardino Ch. 24  
KQED San Francisco Ch. 9  
KEBS San Diego Ch. 15

Hawaii

KHET Honolulu Ch. 11  
KMEB Wailulu Ch. 10

Nevada

KL VX Las Vegas Ch. 10

Utah

KBYU provo Ch. 11  
KUED Salt Lake City Ch. 7

New Mexico

KNME Albuquerque Ch. 5

## APPENDIX VI

### SOUTHERN EDUCATIONAL NETWORK

During the Fall of 1967, the Southern Educational Communications Association was in the process of formal incorporation of their non-profit corporation. As a result, it had no formal membership or network activities.

As of March 1968, nine organizations had become members of SECA:

- WFPK Louisville, Ky.
- WEDU Tampa, Fla.
- KETS Conway, Ark.
- WDCN Nashville, Tenn.
- KLRN Austin, Tex.
- WFSU Tallahassee, Fla.
- South Carolina Network
  - WITV Charleston
  - WRLK Columbia
  - WNTV Greenville
  - WEBA Allendale
  - WJPM Greenville
- Kentucky ETV Authority
  - 12 stations under construction
- WKNO Memphis, Tenn.

In October 1968, the Southern Educational Network had twenty organizational members, representing thirty-five educational television stations.

Network activities of the Southern Educational Network began in January 1969.

APPENDIX VII

STATEWIDE NETWORKS --INTERCONNECTION  
JANUARY 1968

Alabama

WBIQ Birmingham  
WCIQ Cheaha  
WDIQ Dozier  
WFIQ Florence  
WHIQ Huntsville  
WEIQ Mobile  
WAIQ Montgomery

Connecticut

WEDW Bridgeport  
WEDH Hartford  
WEDN Norwich

Georgia

WGTV Athens  
WETV Atlanta  
WCES Wrens  
WCLP Chatsworth  
WJSP Columbus  
WABW Pelham  
WACS Dawson  
WVAN Savannah  
WXGA Waycross  
WDCO Cochran

Hawaii

WHET Honolulu  
KMEB Wailuku

Maine

WMED Calais  
WMEB Orno  
WMEM Presque Isle  
WCBB Augusta

Minnesota

KWCM Appleton  
KTCA Minneapolis-St. Paul  
WDSE Duluth

Nebraska

KTNE Alliance  
KLNE Lexington  
KUON Lincoln  
KYNE Omaha  
KTNE North Platte  
KMNE Bassett

New Hampshire

WENH Durham  
WEDB Berlin  
WHED Hanover  
WEKW Keene  
KLED Littleton

New York

WNED Buffalo  
WNDR New York  
WXXI Rochester  
WMHT Schenectady  
WCNY Syracuse

North Carolina

WUNC Chapel Hill  
WUND Columbia  
WUNF Asheville  
WUNG Concord  
WUNE Linville

Oklahoma

KETA Oklahoma City  
KOED Tulsa

Oregon

KOAC Corvallis  
KOAP Portland



South Carolina

WEBA Allendale  
WITV Charleston  
WRLK Columbia  
WJPM Florence  
WNTV Greenville

Vermont

WETK Burlington  
WVER Rutland  
WVTB St. Johnsbury  
WVTA Windsor

APPENDIX VIII

PROGRAMING ON STATE NETWORKS

NET Science Series ("Experiment" "Spectrum") 8 Networks

"Misterogers Neighborhood" 6 Networks

NET Public Affairs 12 Networks

"French Chef" 12 Networks

"Smart Sewing" 8 Networks

"Friendly Giant" 7 Networks

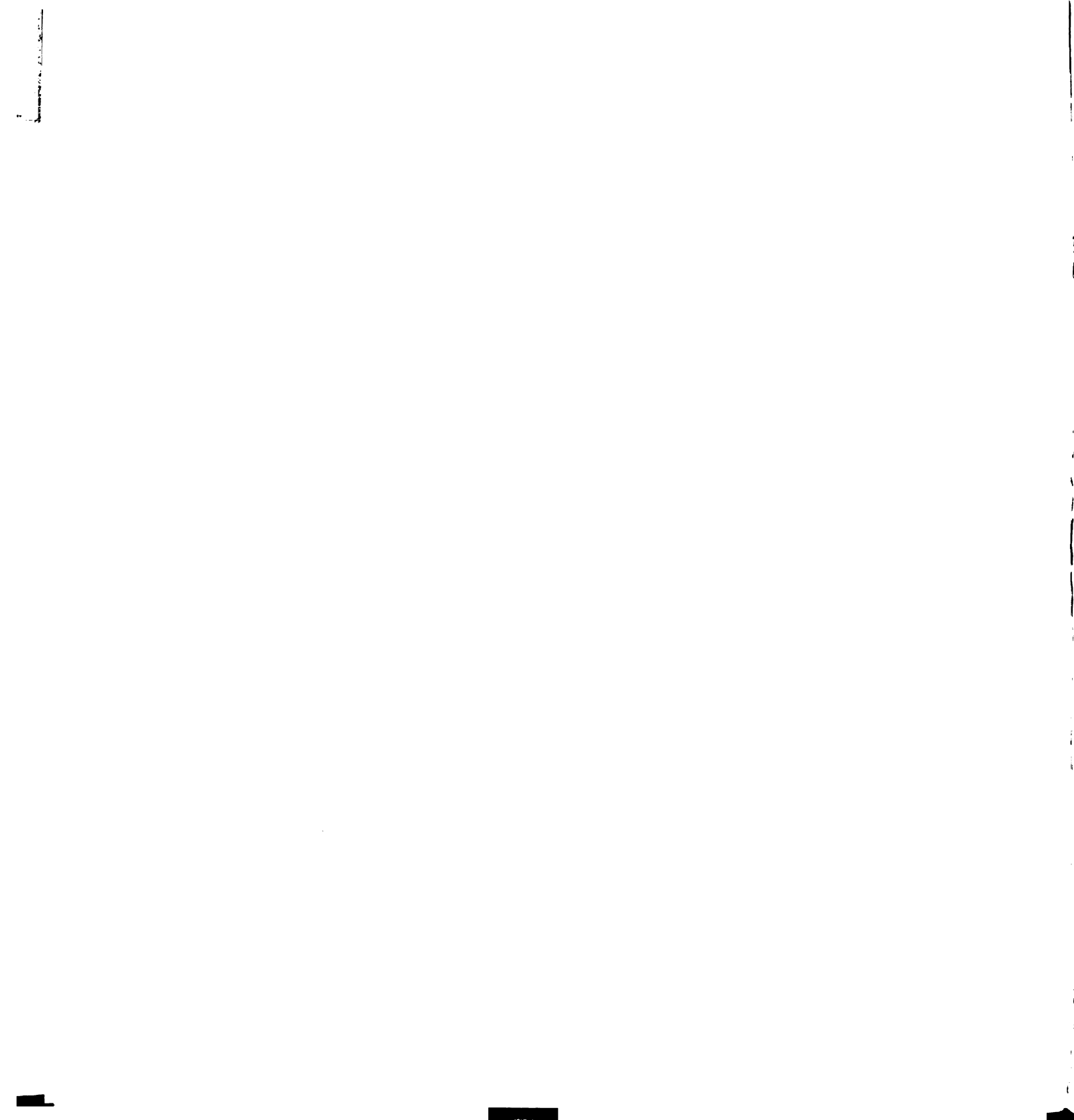
"Creative Person" 10 Networks

"What's New" 12 Networks

"PBL" 10 Networks

"NET Playhouse" 12 Networks

"NET Journal" 12 Networks



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